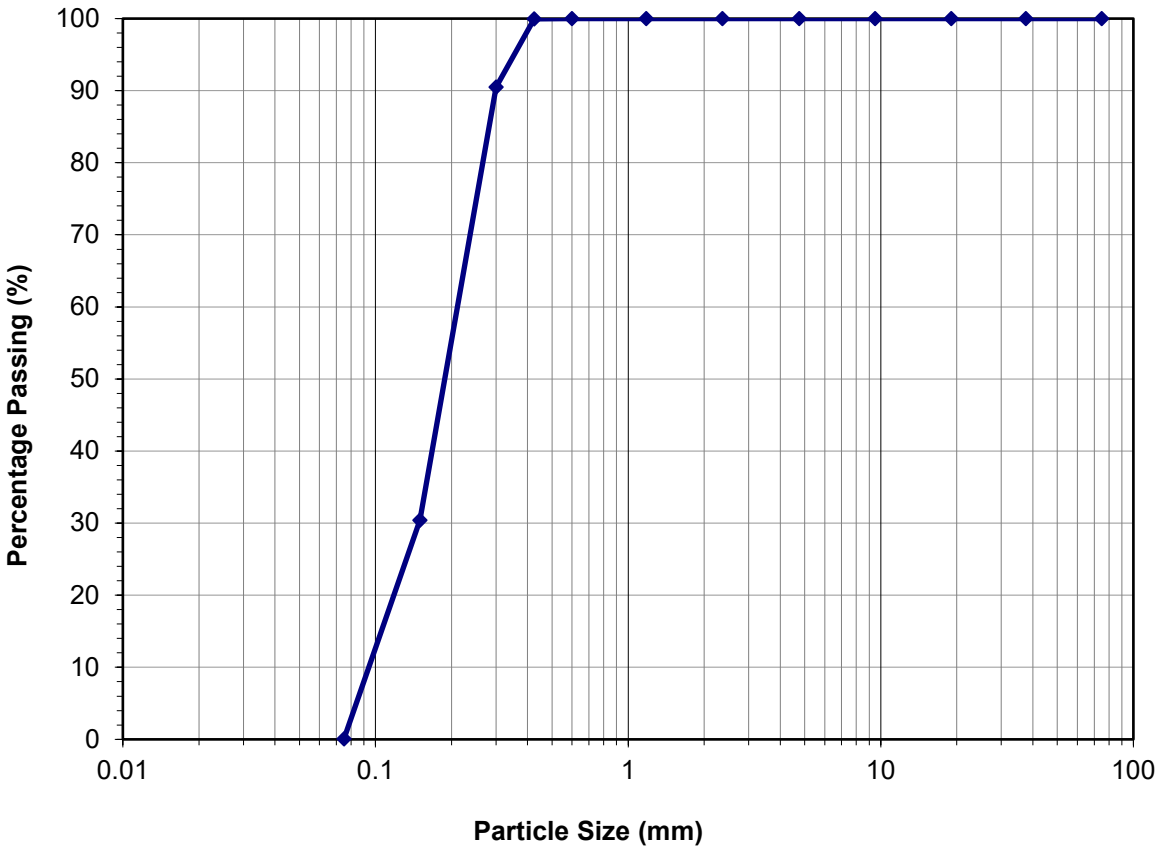
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 1A
Visual Sample Description: White sand

IPO Number: 2019-030
Sample ID: 2019-030-026
Borehole ID: -
Depth: 6.00 m to 6.00 m

Tested By:	ARC
Date:	20/12/2019

Checked By:	RC
Date:	23/12/2019

PARTICLE SIZE DISTRIBUTION
Test Method: AS1289.3.6.1



Sieve Analysis			
Particle size (mm)	**% passing**	**Particle size (mm)**	**% passing**
75	100	1.18	100
37.5	100	0.600	100
19	100	0.425	100
9.5	100	0.300	90
4.75	100	0.150	30
2.36	100	0.075	0

Note: PSD analysis performed on material after permeability testing

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Particle Size Distribution

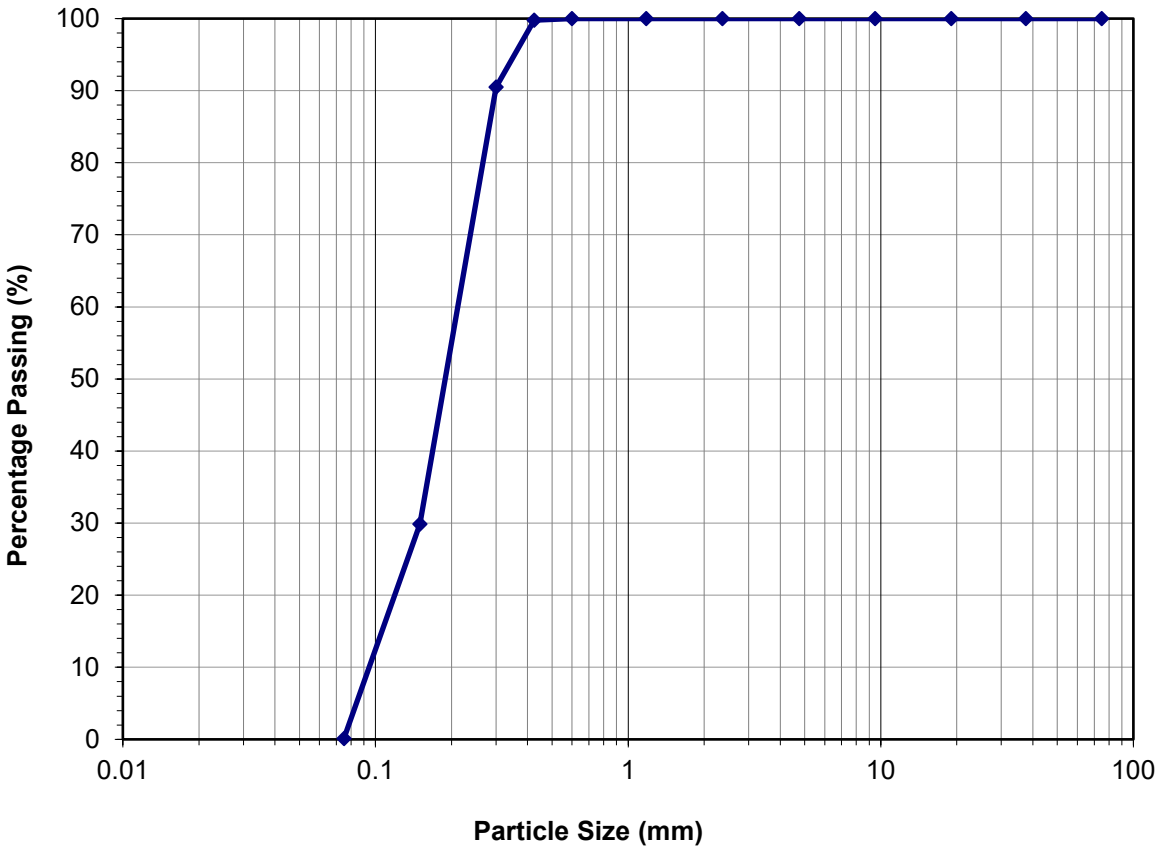
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4A
Visual Sample Description: White sand

IPO Number: 2019-030
Sample ID: 2019-030-027
Borehole ID: -
Depth: 6.00 m to 6.00 m

Tested By:	ARC
Date:	20/12/2019

Checked By:	RC
Date:	23/12/2019

PARTICLE SIZE DISTRIBUTION
Test Method: AS1289.3.6.1



Sieve Analysis			
Particle size (mm)	**% passing**	**Particle size (mm)**	**% passing**
75	100	1.18	100
37.5	100	0.600	100
19	100	0.425	100
9.5	100	0.300	91
4.75	100	0.150	30
2.36	100	0.075	0

Note: PSD analysis performed on material after permeability testing

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Particle Size Distribution

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

IPO Number: 2019-030
Sample ID: Refer to Table
Borehole ID: Refer to Table

Tested By:	SL	**Checked By:**	RC
Date:	Refer to Table	**Date:**	23/12/2019

DETERMINATION OF COEFFICIENT OF PERMEABILITY ON RECEIVED CORE - AGLab Test Procedure FAM-17858

Borehole ID	Sample No.	Sample ID	Date Tested	Depth (m)		Initial Dry Density	Initial Moisture Content	k*
				From	To	(t/m^3)	%	(m/sec)
-	1A	2019-030-021	29/11/2019	6.00	6.00	1.87	19.5	**5.2E-07**
-	4A	2019-030-022	17/12/2019	6.00	6.00	1.75	19.0	**4.4E-07**

* k = Coefficient of permeability at 20ºC

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Permeability on Core Sample - Constant Head

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2A

IPO Number: 2019-030
Sample ID: 2019-030-013
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	1C-TX-01	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 2 for 400 cycles	
Loading rate (%/Hr):	1	
Tested By:	SRJ	
Date:	29/11/2019	

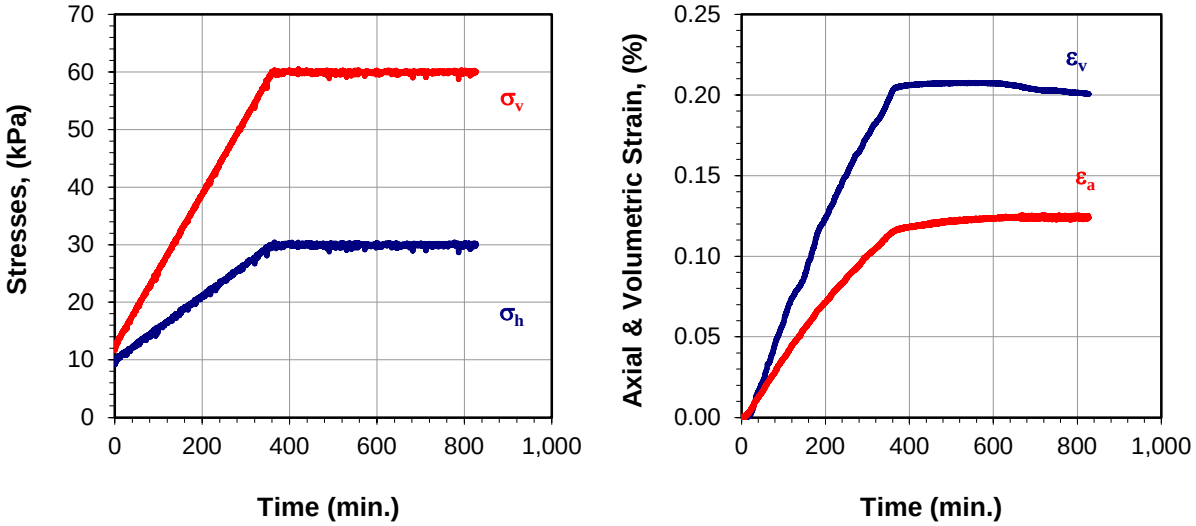
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	72.9
Sample Height (mm) :	149.7	146.0
Dry Density (t/m^3) :	1.70	1.71
Moisture Content (%) :	21.7 *	-

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

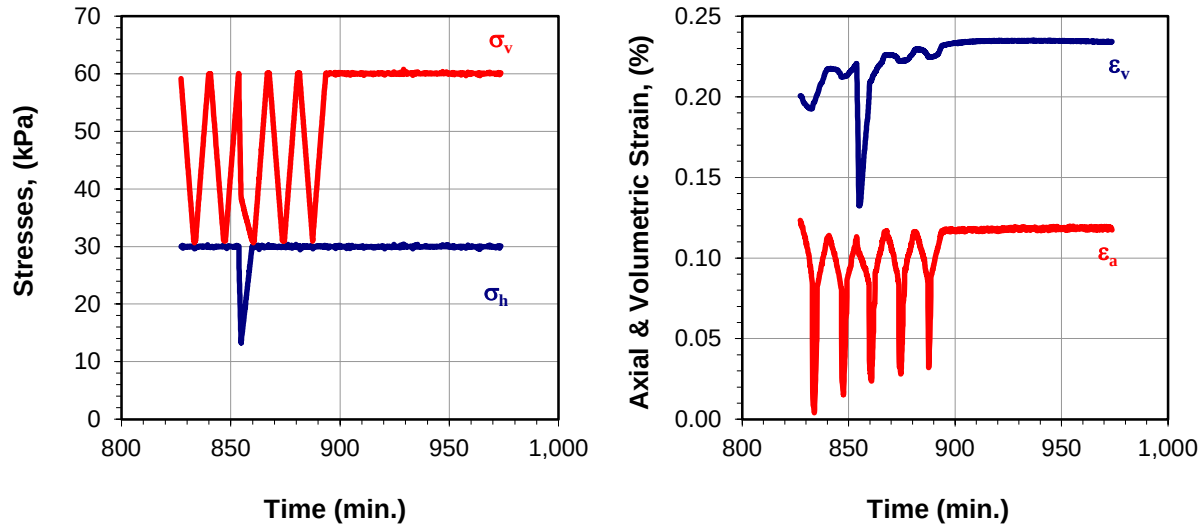
Checked By:	TC
Date:	23/06/2020

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

Step 1: Consolidation



Step 2: Drained Preloading Stage 1



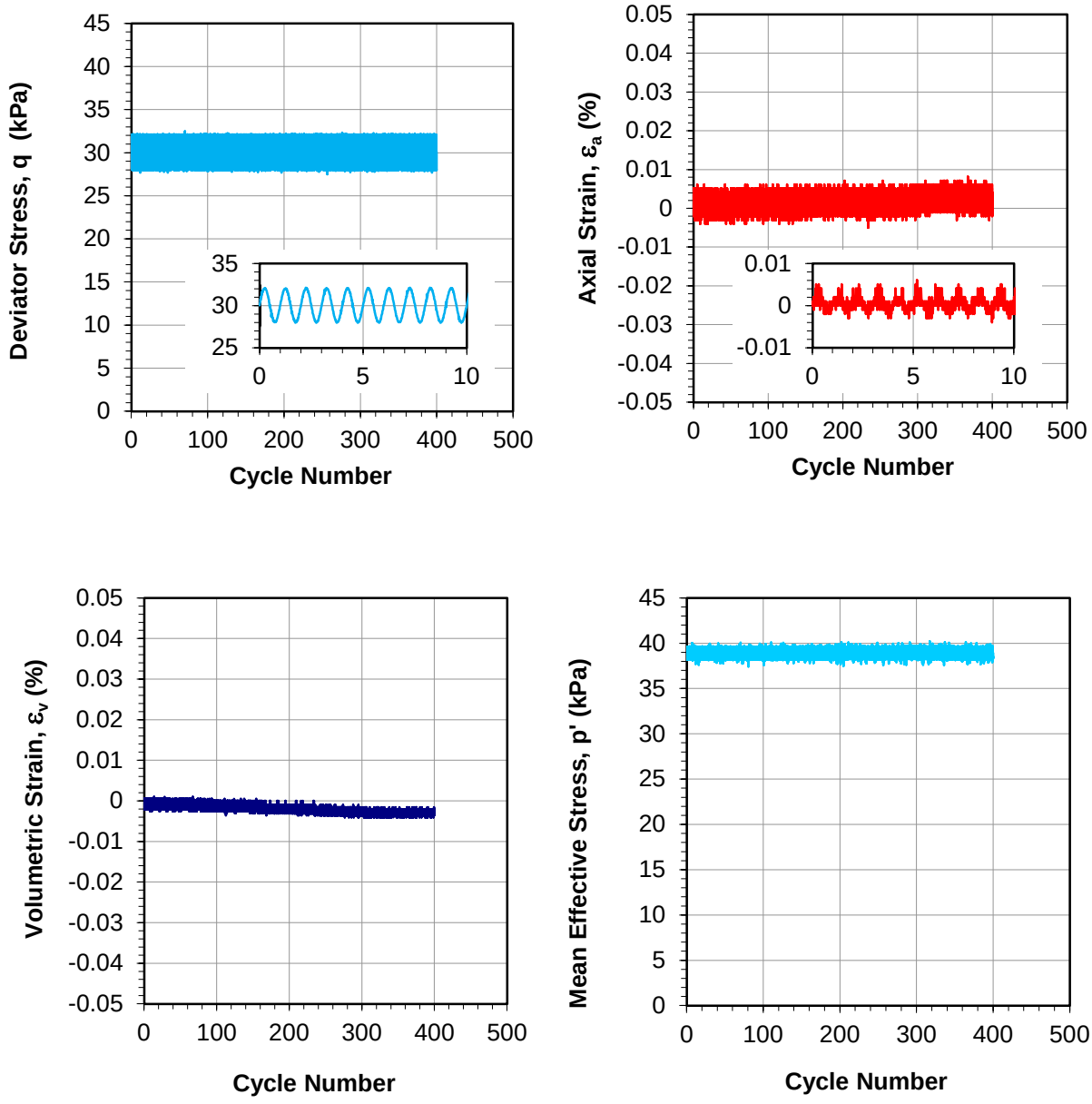
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2A

IPO Number: 2019-030
Sample ID: 2019-030-013
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



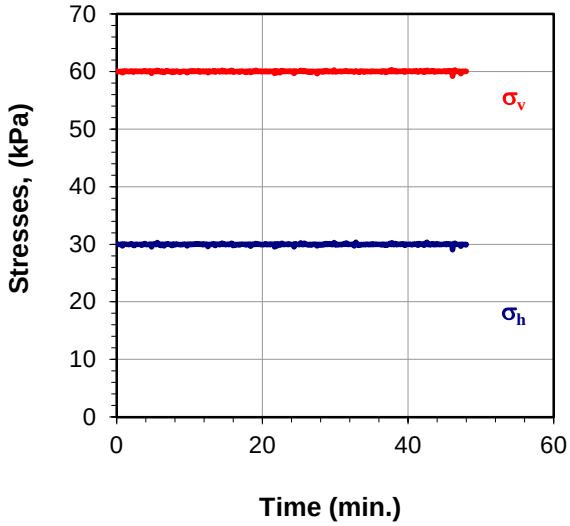
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

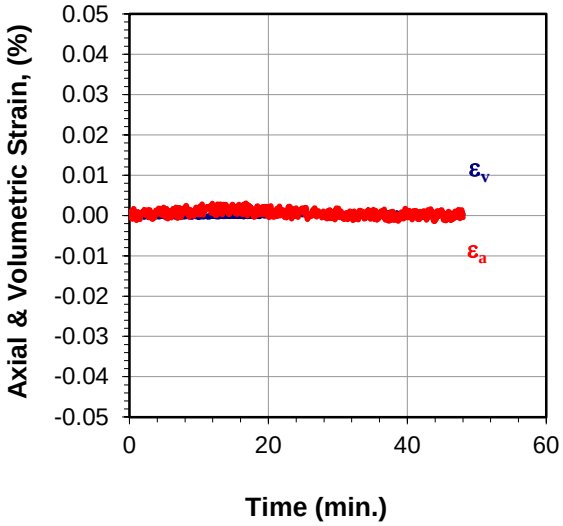
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2A

IPO Number: 2019-030
Sample ID: 2019-030-013
Borehole ID: -
Depth: 6.00 m

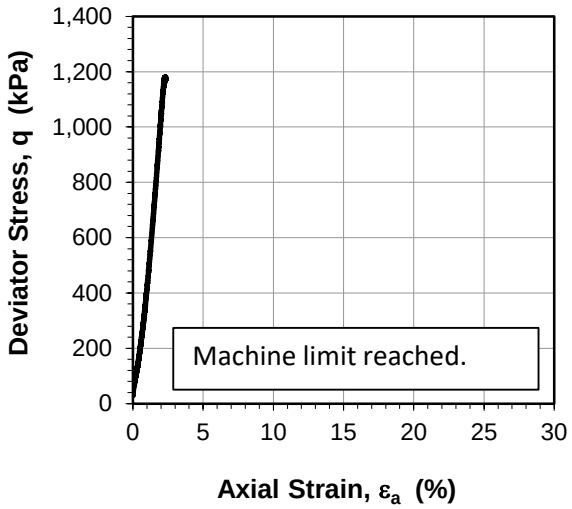
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

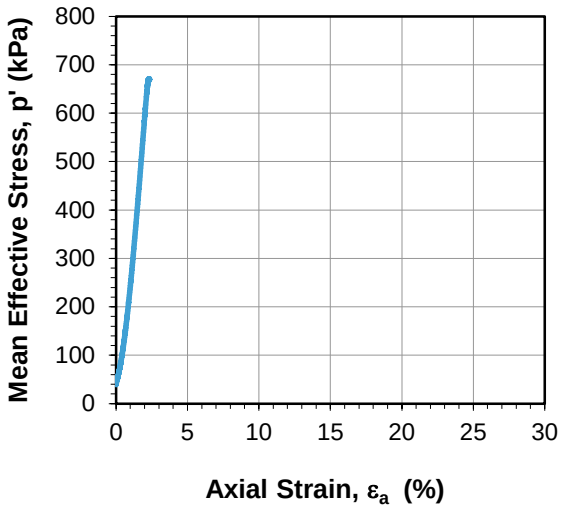
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Undrained Compression





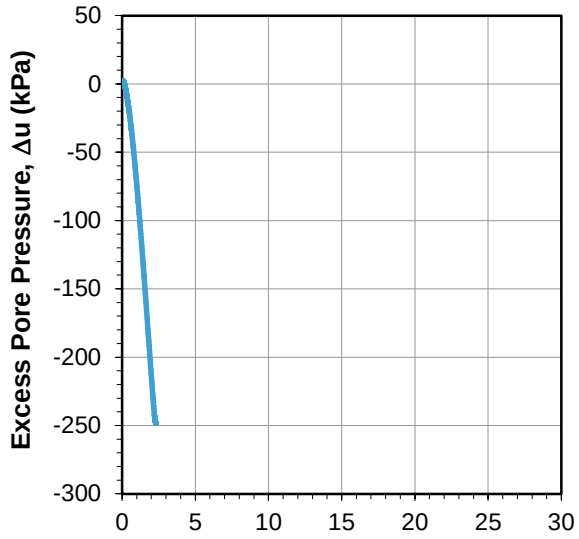
Note: Test was terminated prematurely due to vertical stress reaching the machine limit.
Final moisture content was not measured.

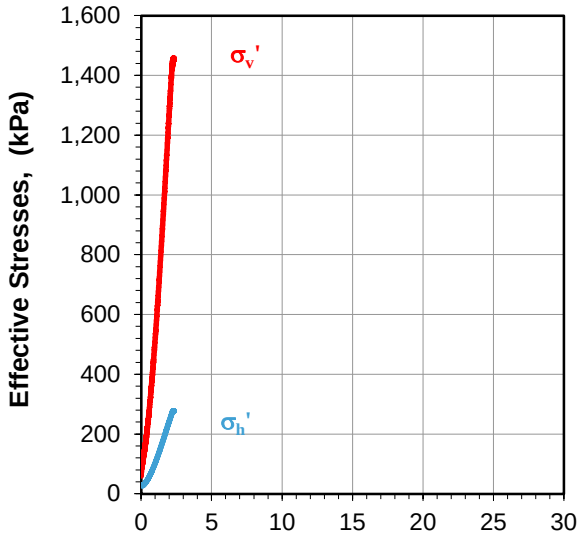
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

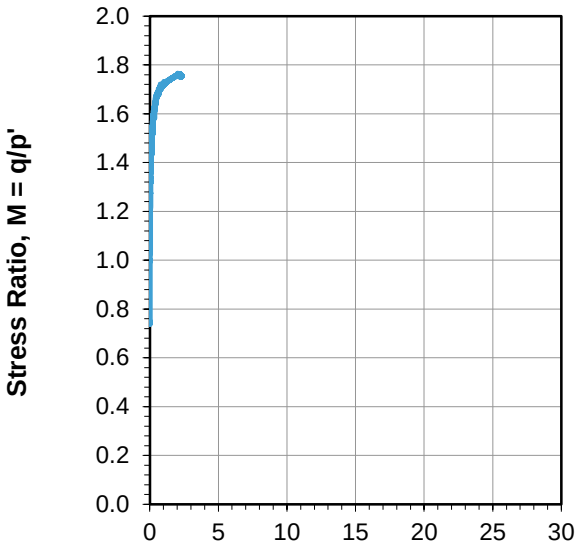
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2A

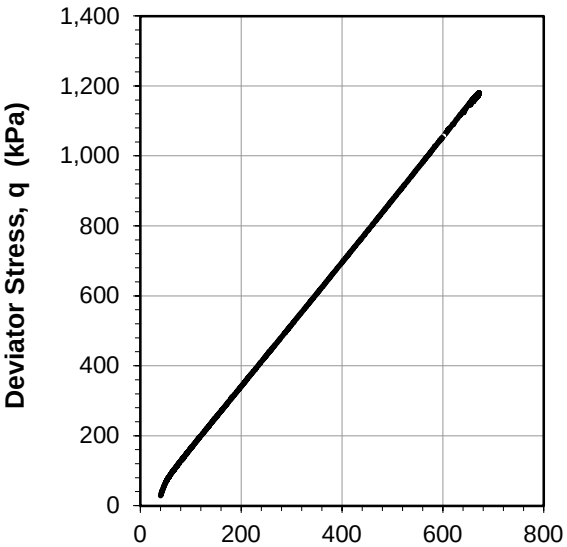
IPO Number: 2019-030
Sample ID: 2019-030-013
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Undrained Compression









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2A

IPO Number: 2019-030
Sample ID: 2019-030-013
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Sample photographs after the test.

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2C

IPO Number: 2019-030
Sample ID: 2019-030-014
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	2C-TX-02	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 3 for 400 cycles	
Loading rate (%/Hr):	1	
Tested By:	SRJ	
Date:	05/12/2019	

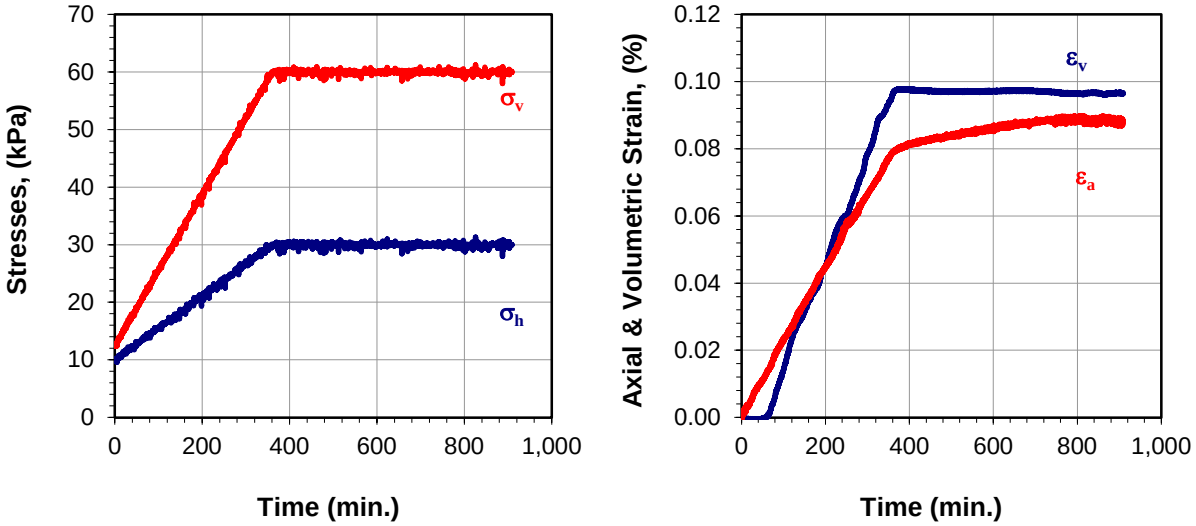
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	72.8
Sample Height (mm) :	149.7	146.4
Dry Density (t/m^3) :	1.75	1.82
Moisture Content (%) :	22.5 *	19.6

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

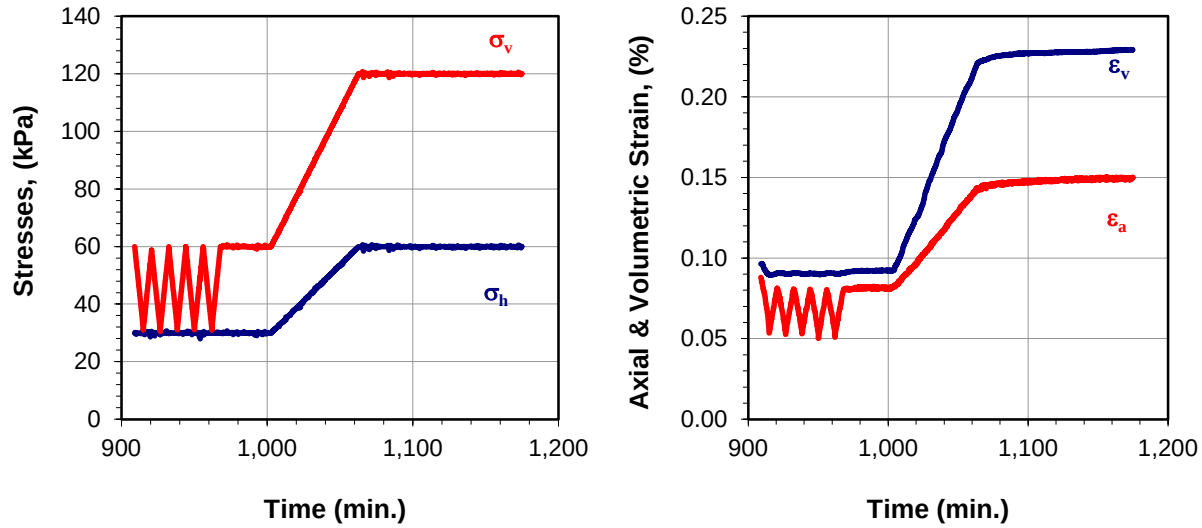
Checked By:	TC
Date:	23/06/2020

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

Step 1: Consolidation



Step 2: Drained Preloading Stage 1



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

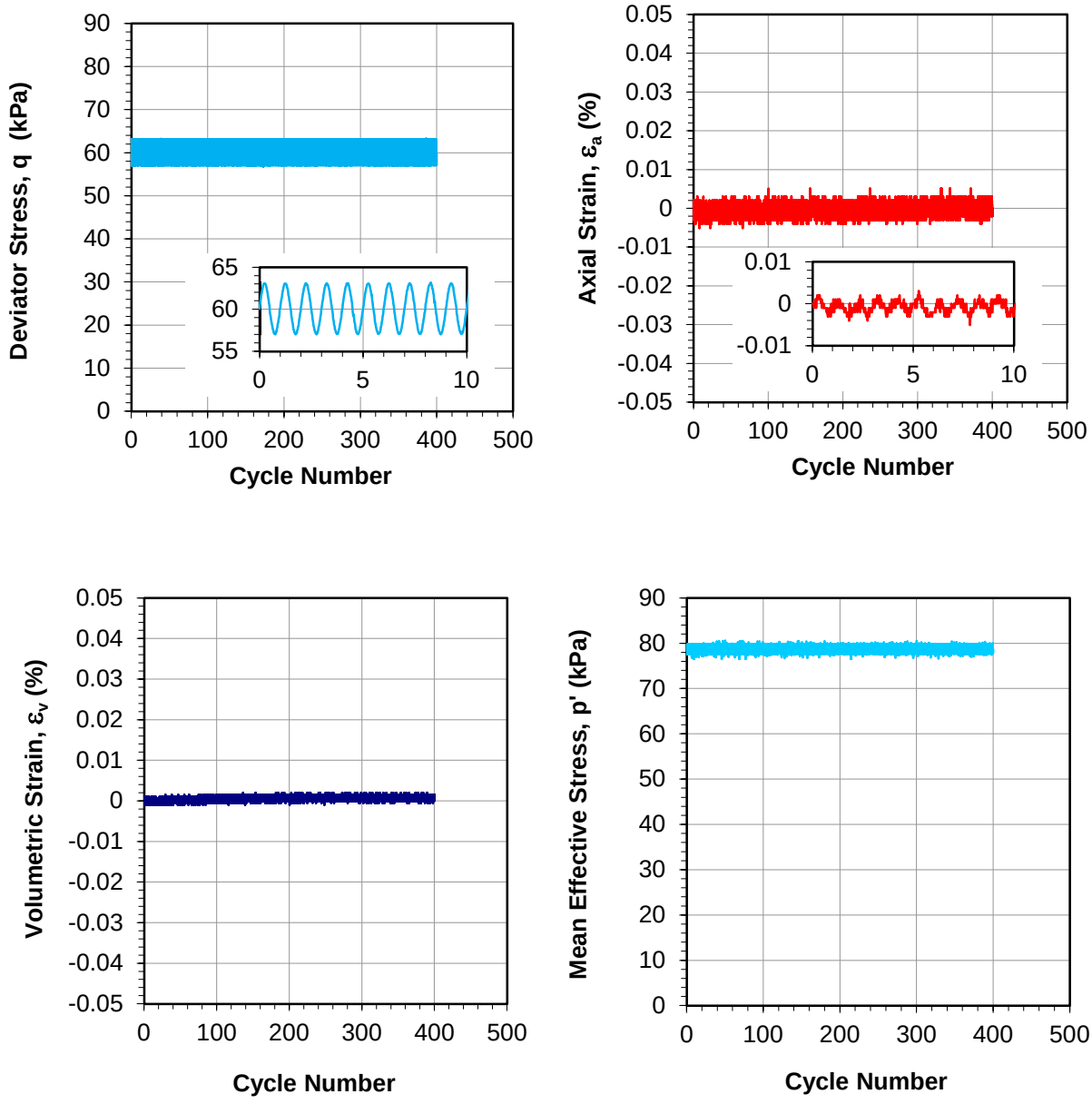
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-014
		Borehole ID:	-
Sample No.:	2C	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Step 3: Drained Preloading Stage 2



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

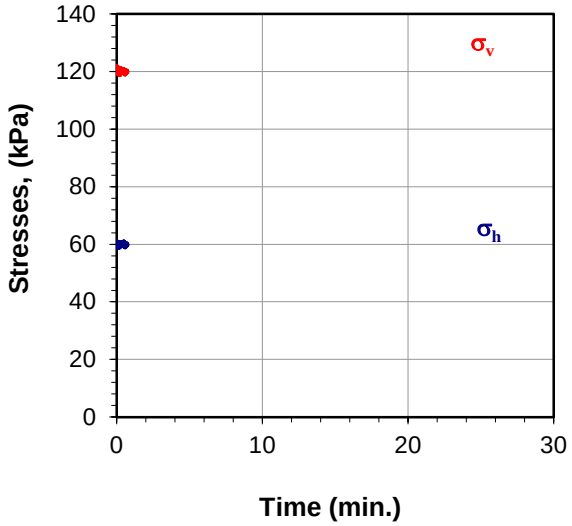
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

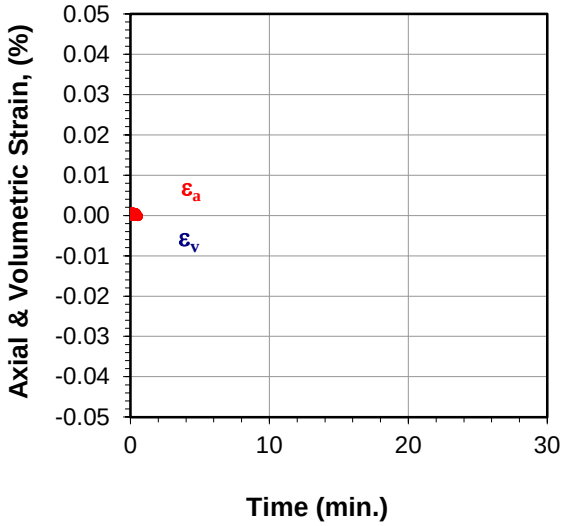
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2C

IPO Number: 2019-030
Sample ID: 2019-030-014
Borehole ID: -
Depth: 6.00 m

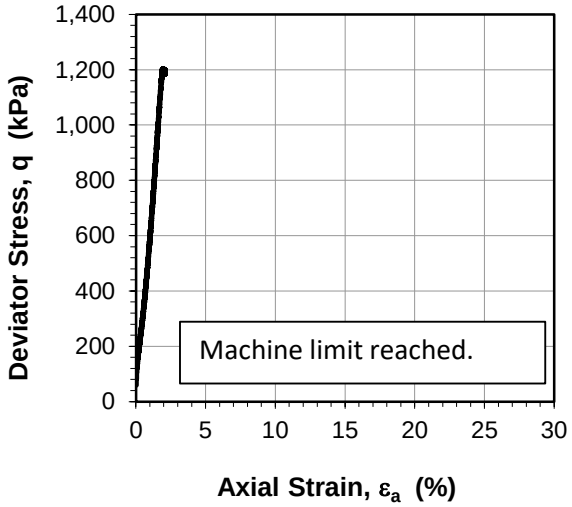
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

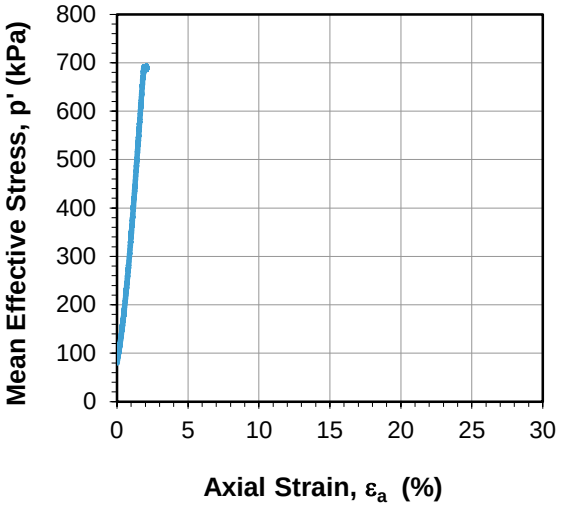
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Undrained Compression





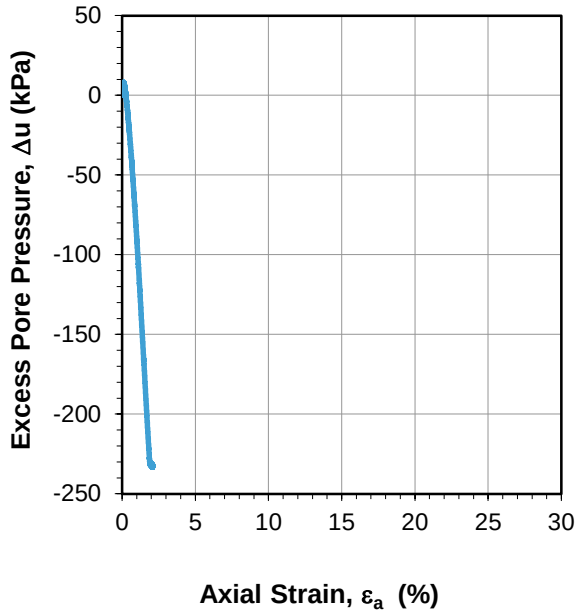
Note: 1. Reconsolidation data after 40 seconds is not availabe due to data loss.
2. Test was terminated prematurely due to vertical stress reached the machine limit.

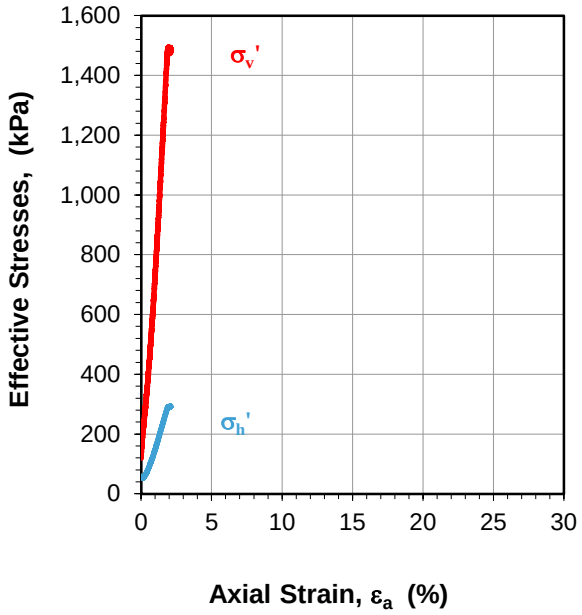
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

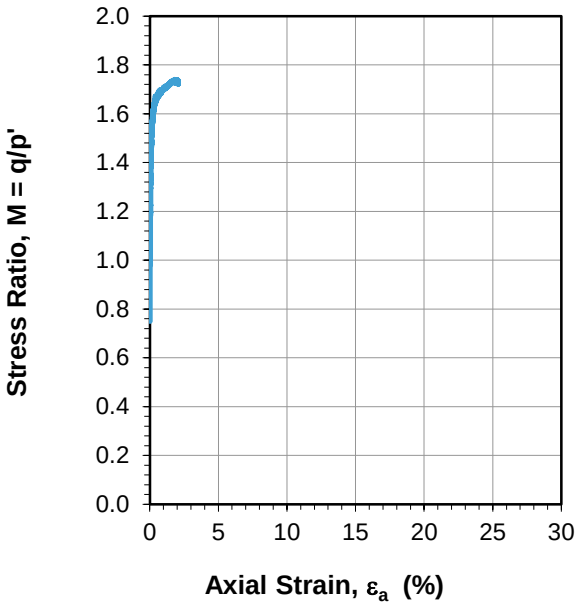
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2C

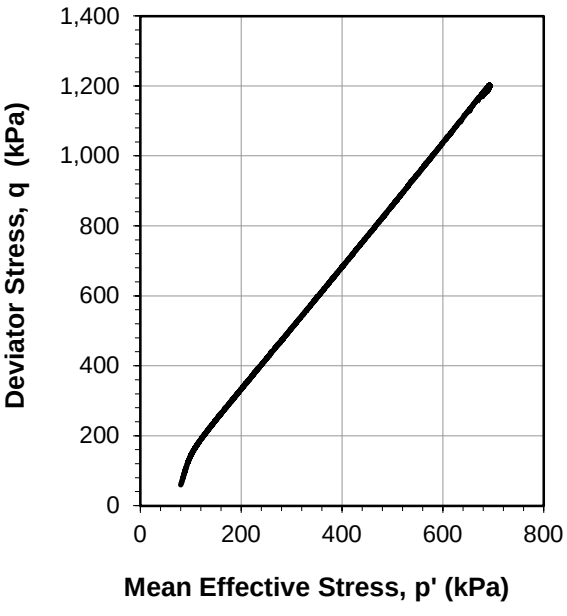
IPO Number: 2019-030
Sample ID: 2019-030-014
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Undrained Compression









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-014
		Borehole ID:	-
Sample No.:	2C	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample photographs after the test

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Undrained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3C

IPO Number: 2019-030
Sample ID: 2019-030-015
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	3C-TX-03	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 2 for 400 cycles	
Loading rate (%/Hr):	1	
Tested By:	SRJ	
Date:	13/12/2019	

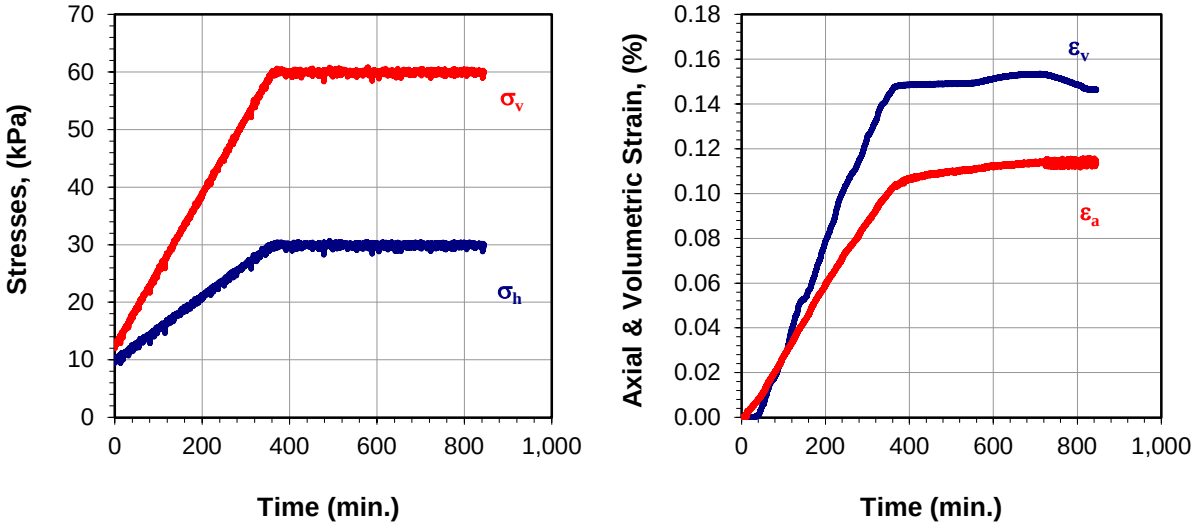
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	65.8
Sample Height (mm) :	149.7	179.7
Dry Density (t/m^3) :	1.72	1.84
Moisture Content (%) :	20.7 *	20.4

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

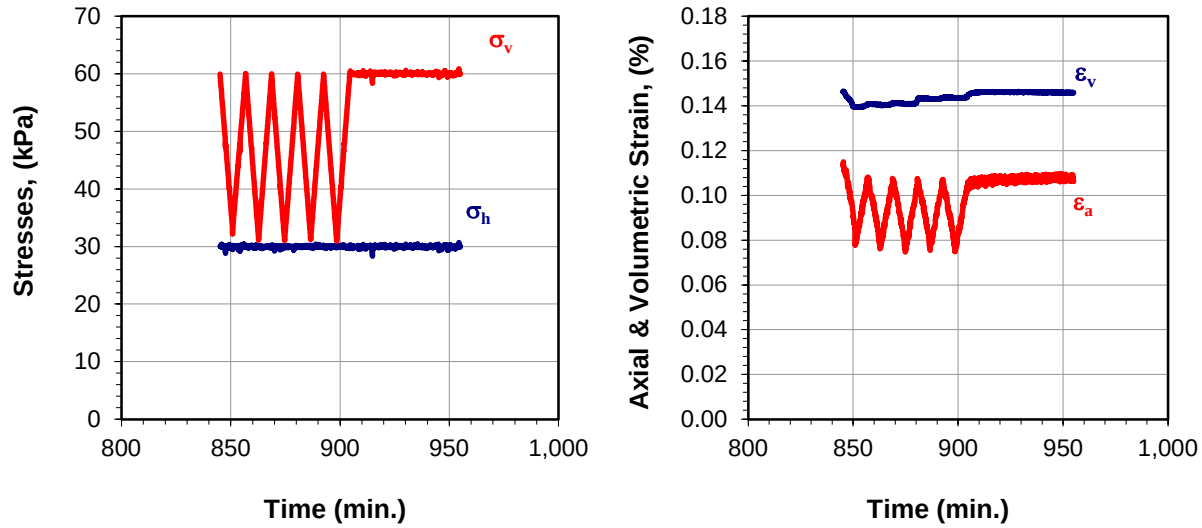
Checked By:	TC
Date:	23/06/2020

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

Step 1: Consolidation



Step 2: Drained Preloading Stage 1



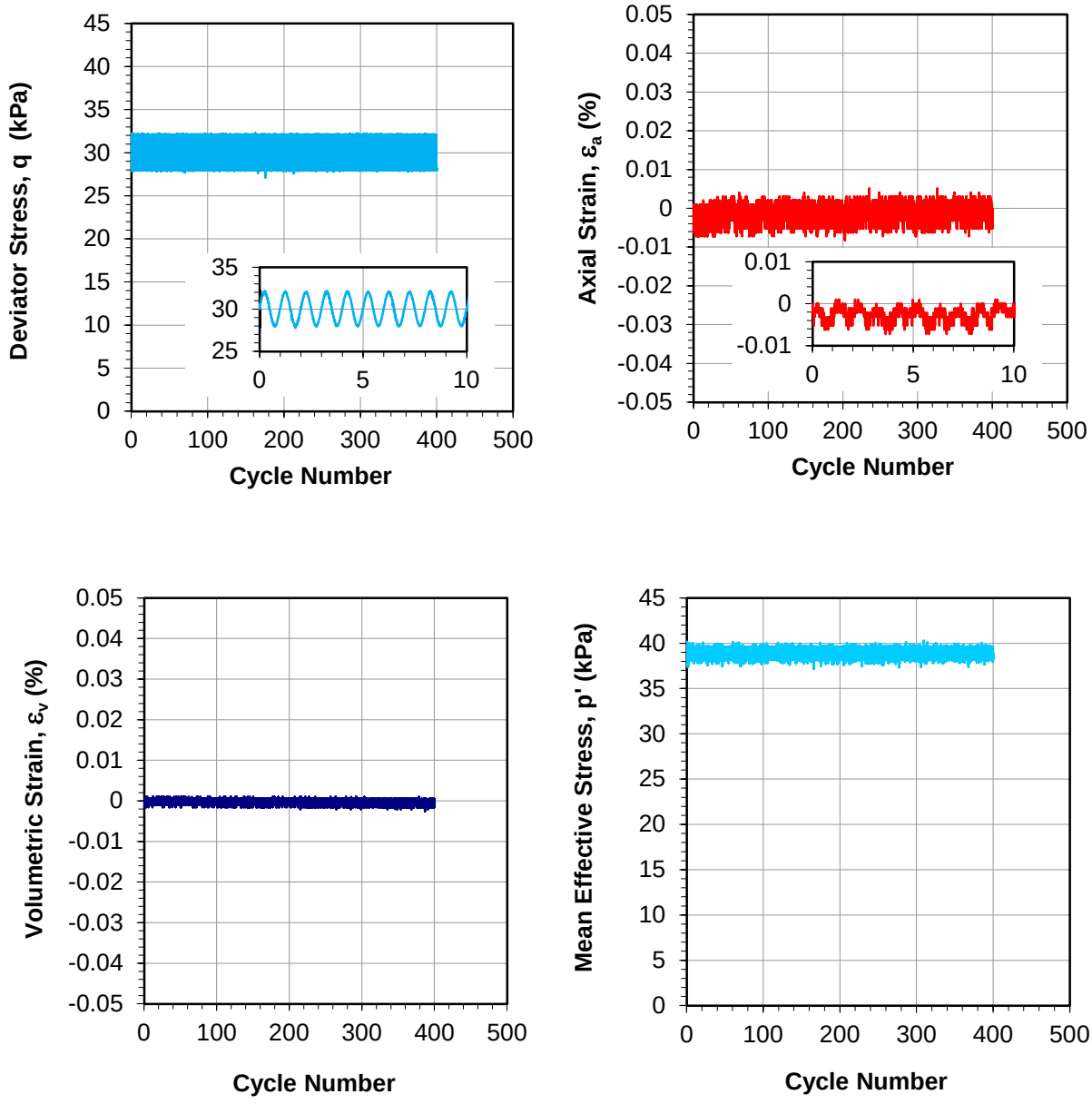
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3C

IPO Number: 2019-030
Sample ID: 2019-030-015
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



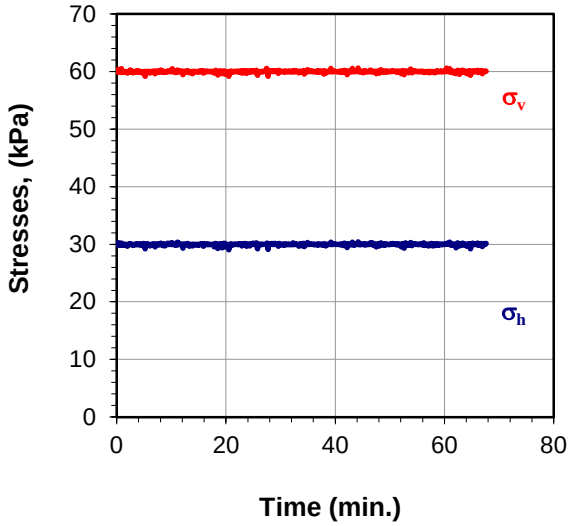
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

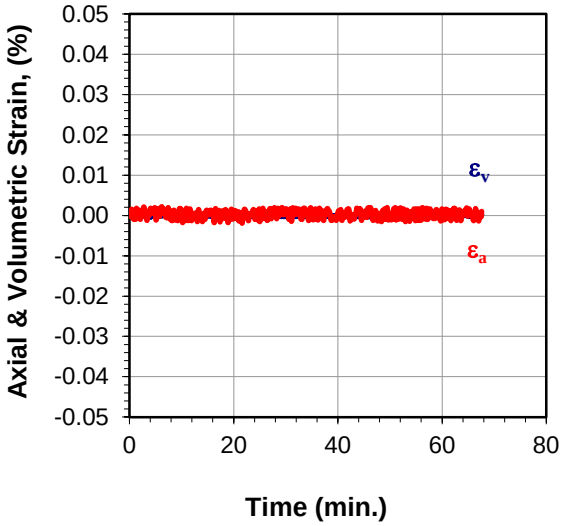
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3C

IPO Number: 2019-030
Sample ID: 2019-030-015
Borehole ID: -
Depth: 6.00 m

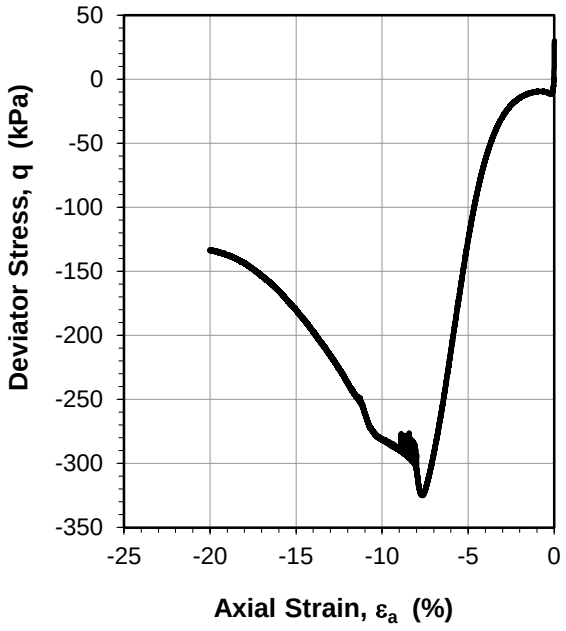
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

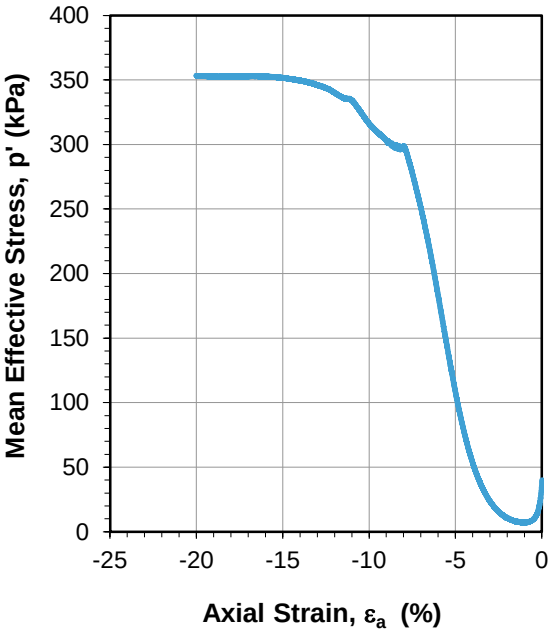
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Undrained Extension



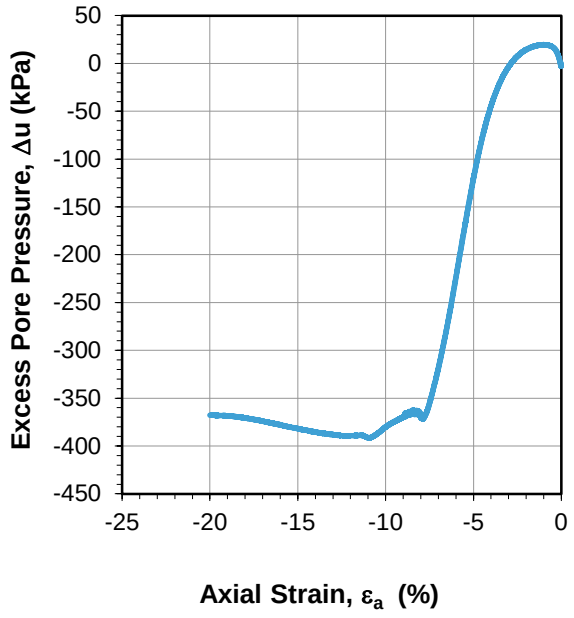


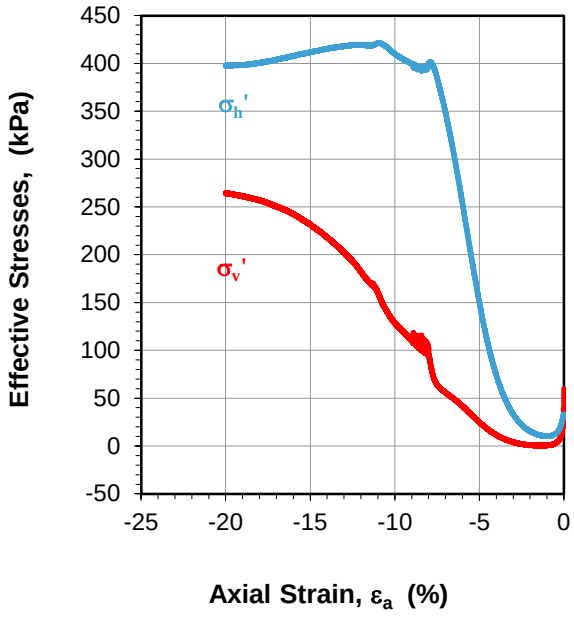
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

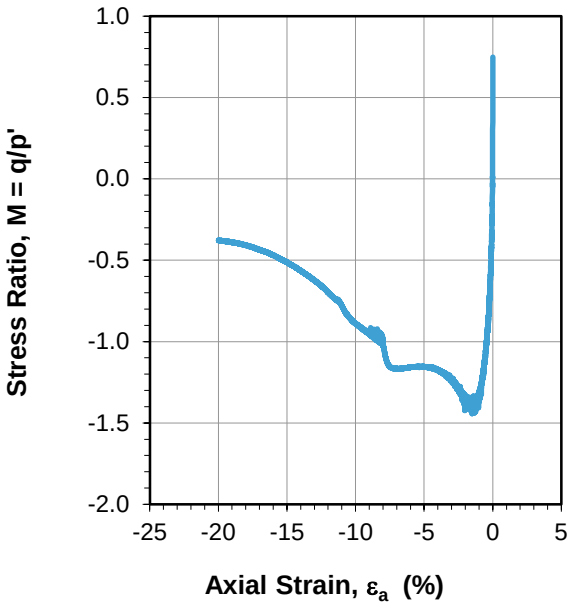
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3C

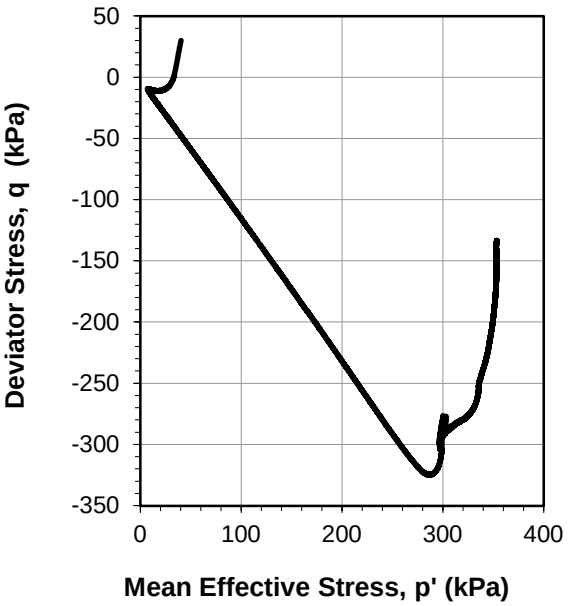
IPO Number: 2019-030
Sample ID: 2019-030-015
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Undrained Extension









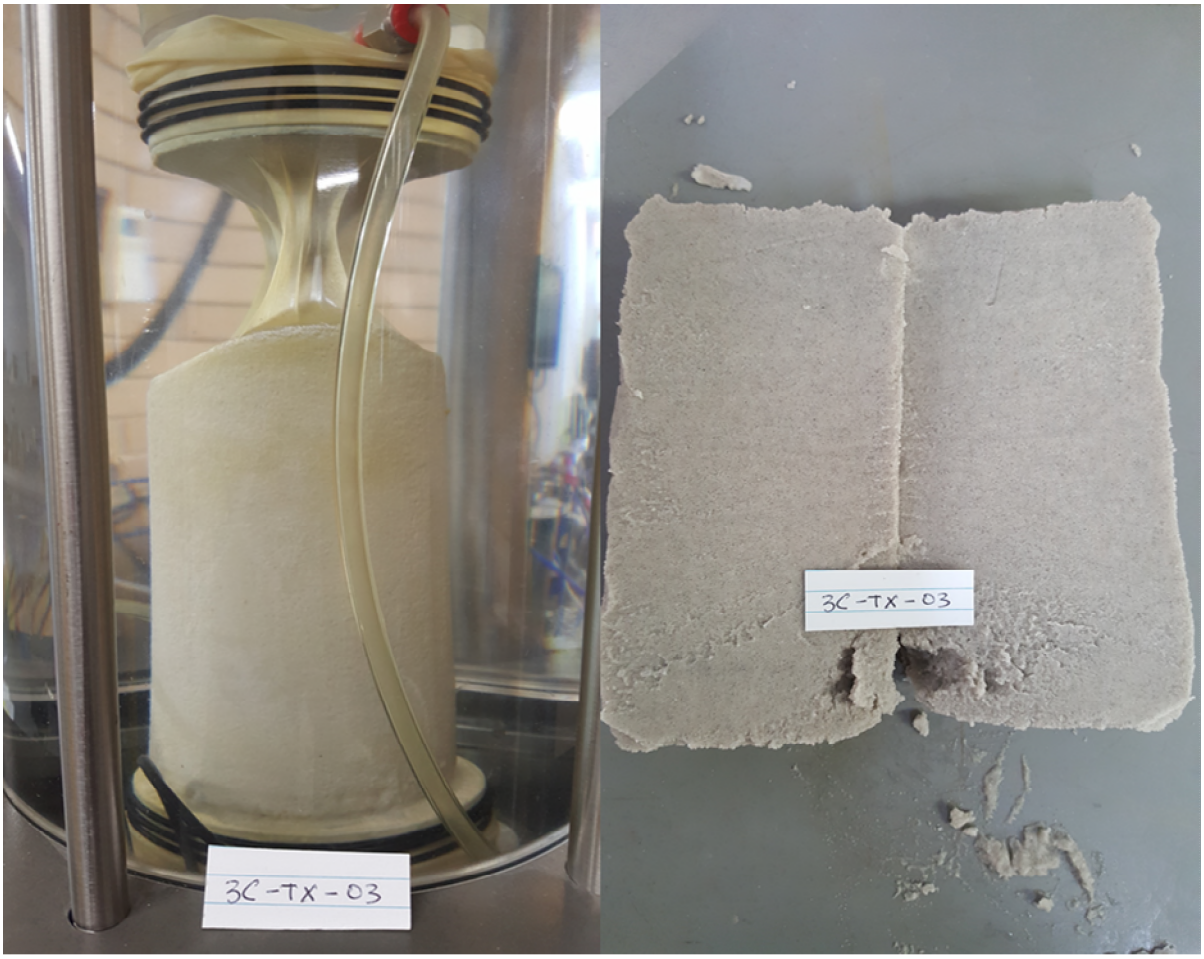
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-015
		Borehole ID:	-
Sample No.:	3C	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4C

IPO Number: 2019-030
Sample ID: 2019-030-016
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	4C-TX-04	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 3 for 400 cycles	
Loading rate (%/Hr):	1	
Tested By:	SRJ	
Date:	17/12/2019	

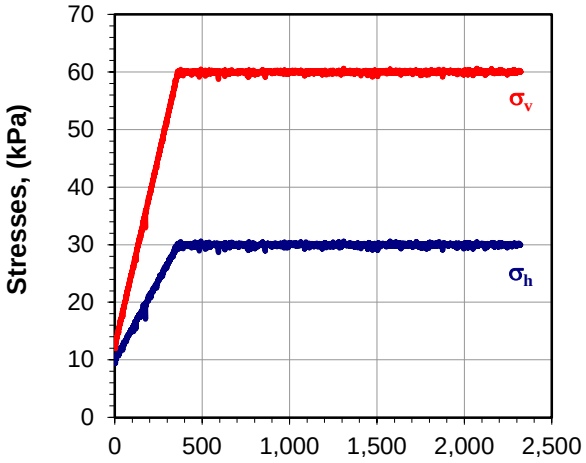
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	66.4
Sample Height (mm) :	149.7	176.1
Dry Density (t/m^3) :	1.73	1.79
Moisture Content (%) :	21.6 *	20.0

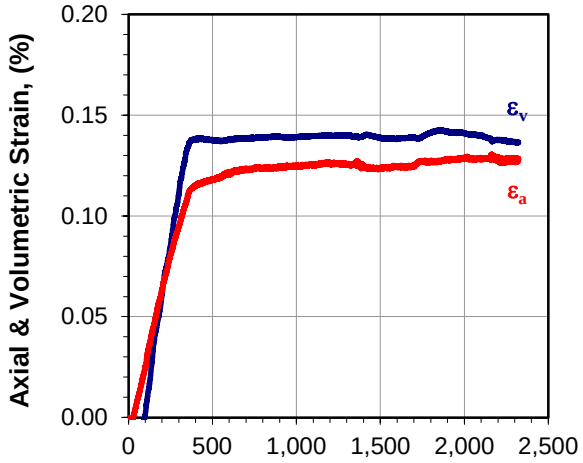
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Checked By:	TC
Date:	23/06/2020

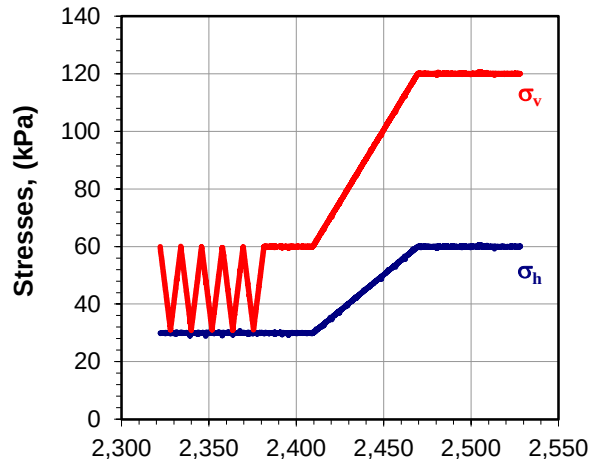
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

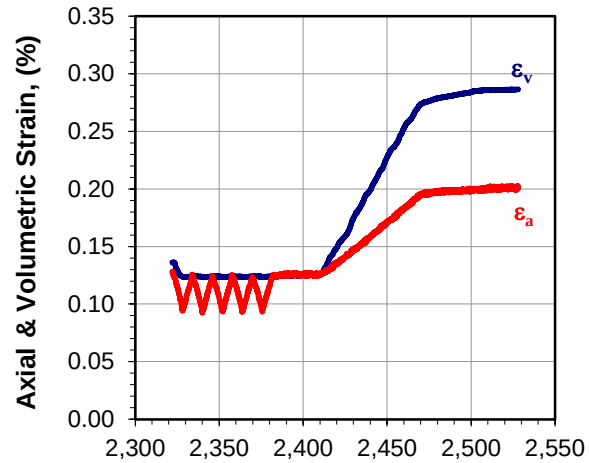
Step 1: Consolidation





Step 2: Drained Preloading Stage 1





BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

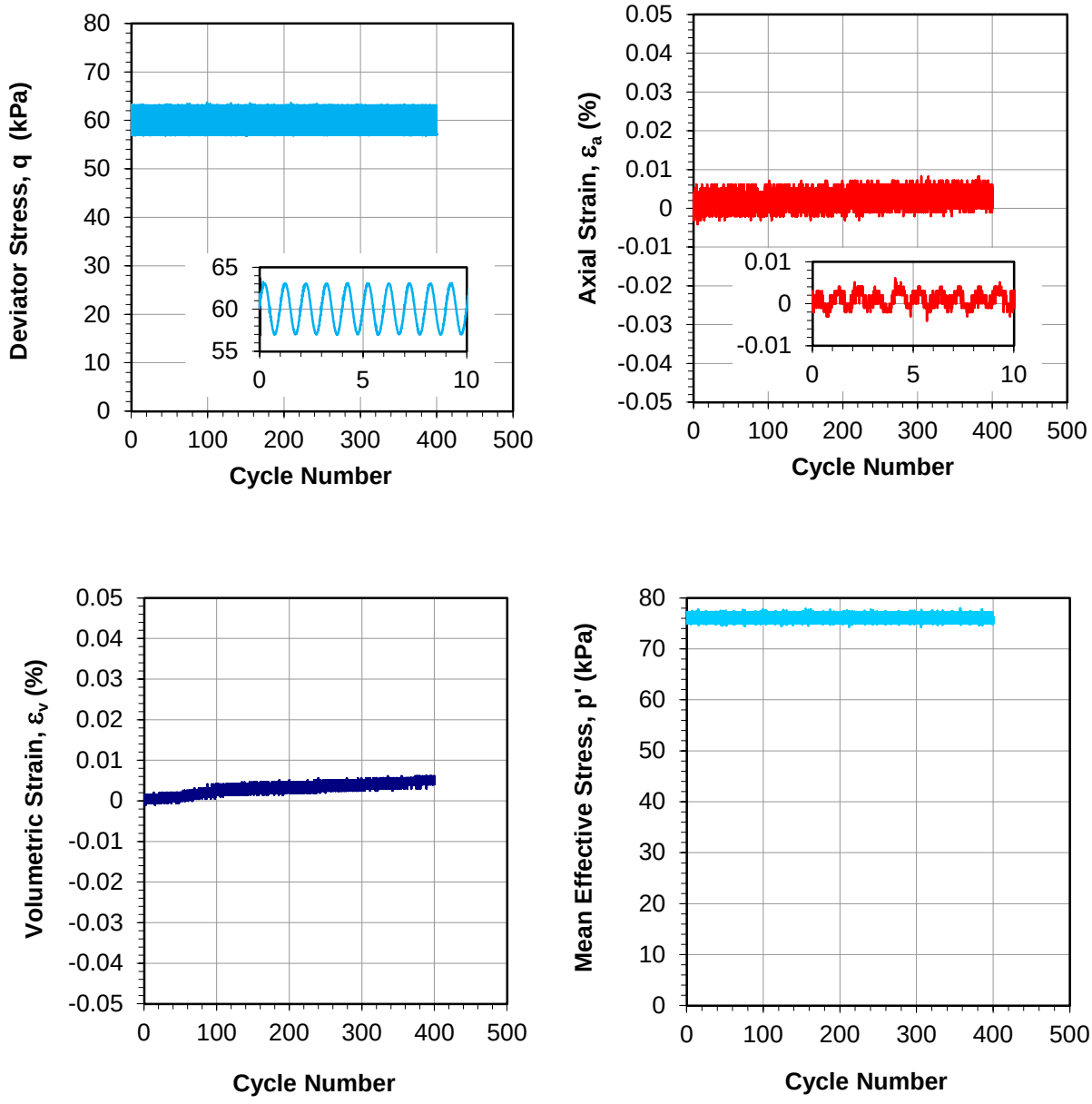
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-016
		Borehole ID:	-
Sample No.:	4C	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Step 3: Drained Preloading Stage 2



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

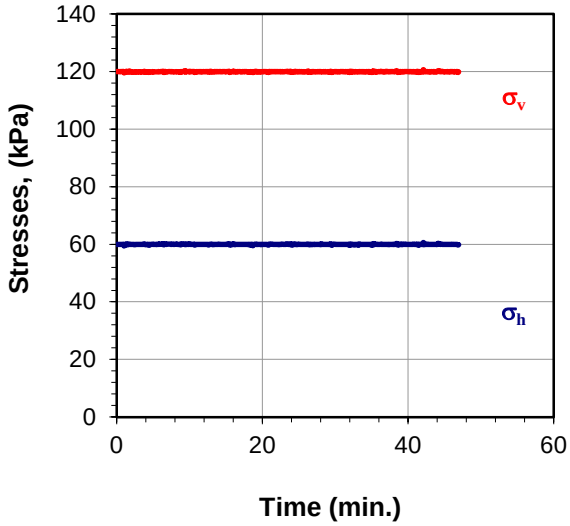
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

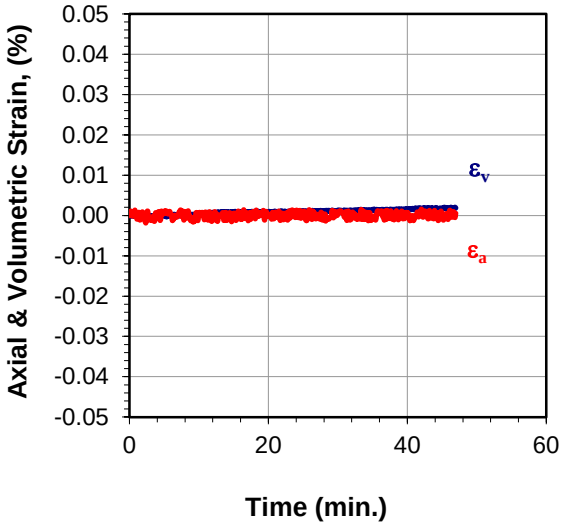
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4C

IPO Number: 2019-030
Sample ID: 2019-030-016
Borehole ID: -
Depth: 6.00 m

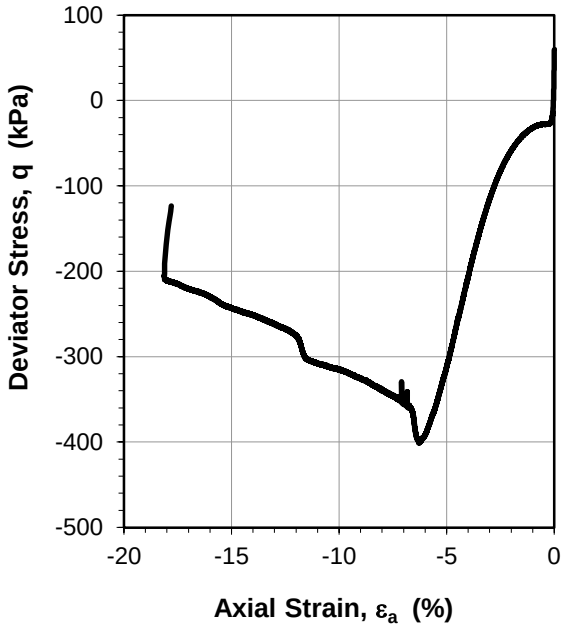
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

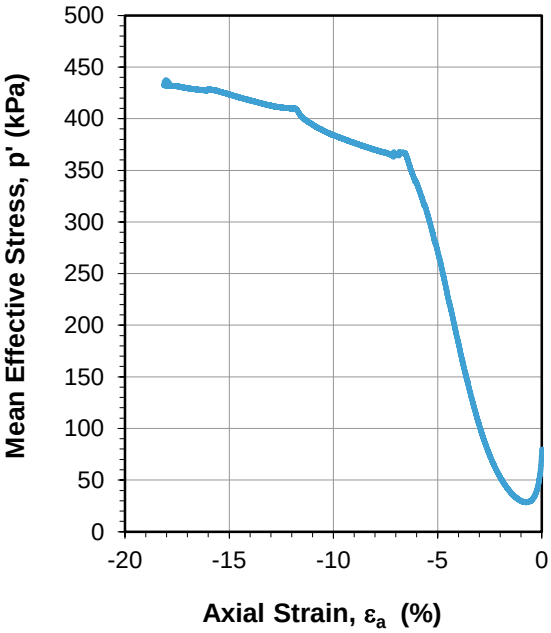
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Undrained Extension



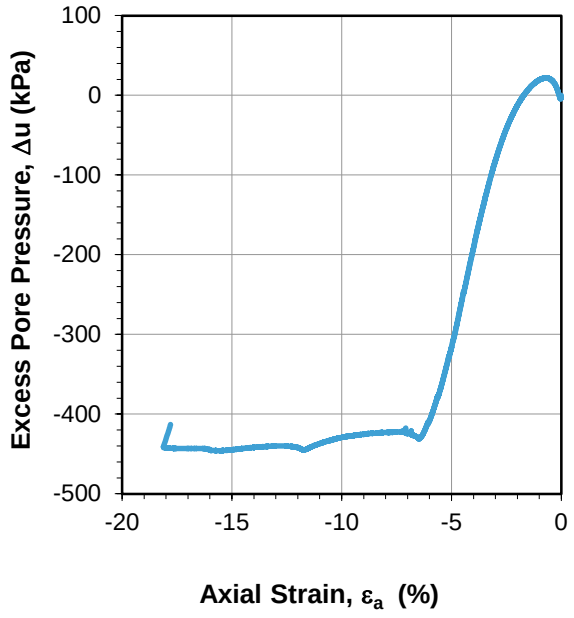


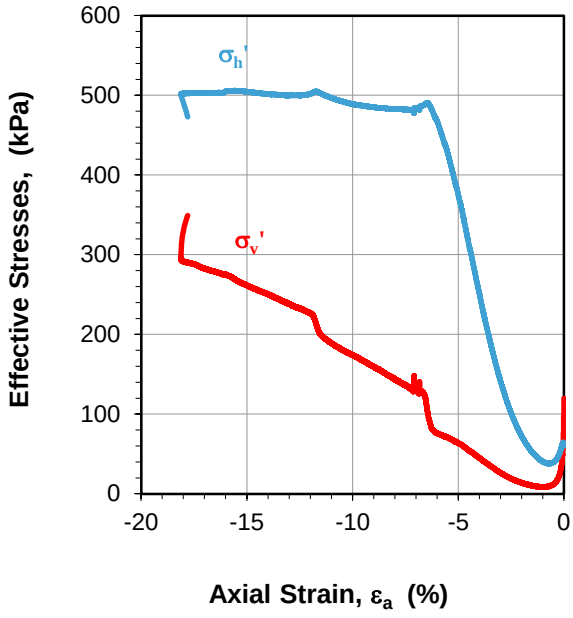
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

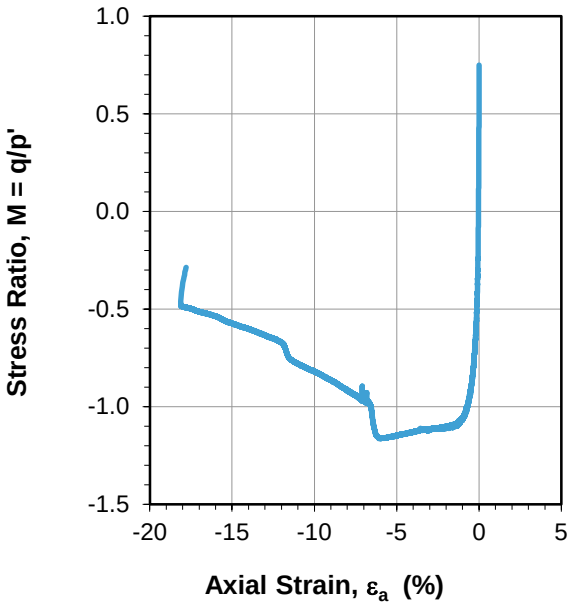
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4C

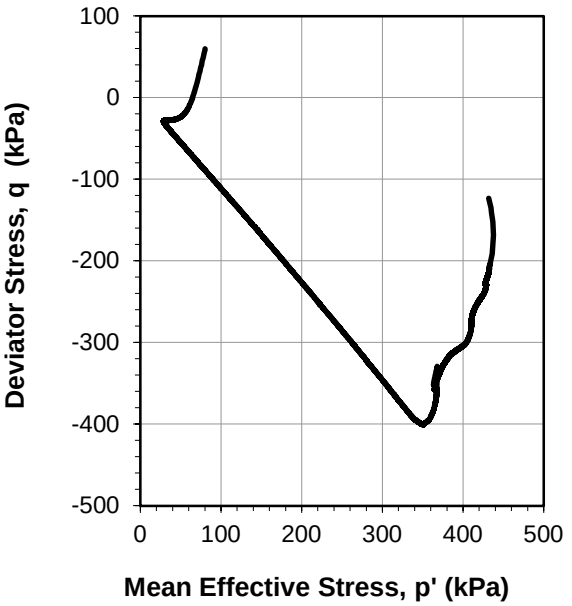
IPO Number: 2019-030
Sample ID: 2019-030-016
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Undrained Extension









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-016
		Borehole ID:	-
Sample No.:	4C	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Undrained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 1D

IPO Number: 2019-030
Sample ID: 2019-030-017
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	1B-TX-05R	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 2 for 400 cycles	
Loading rate (%/Hr):	0.1	
Tested By:	SRJ	
Date:	19/02/2020	

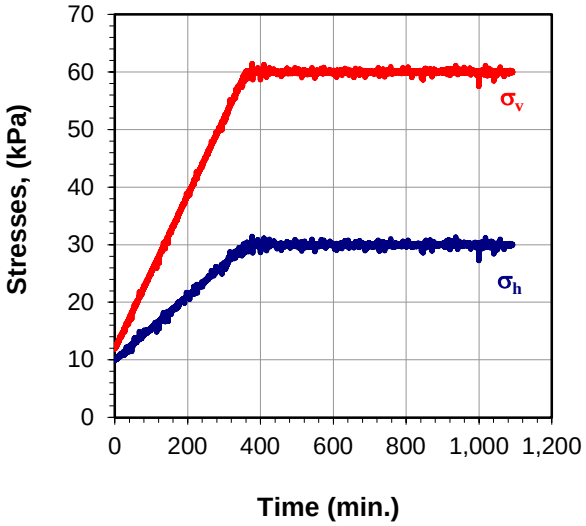
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	82.9
Sample Height (mm) :	149.7	119.5
Dry Density (t/m^3) :	1.75	1.69
Moisture Content (%) :	19.2 *	23.5

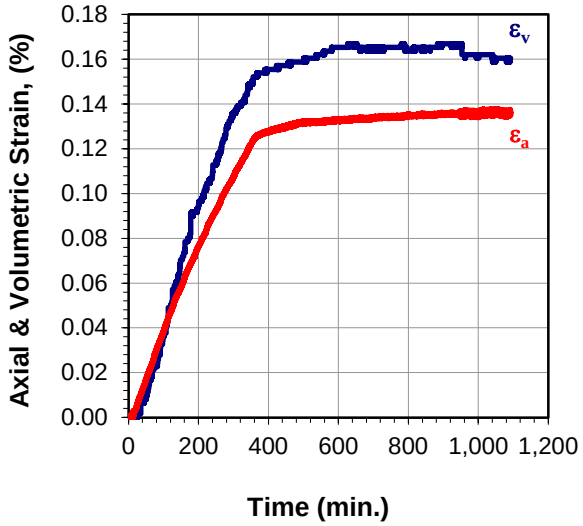
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Checked By:	TC
Date:	23/06/2020

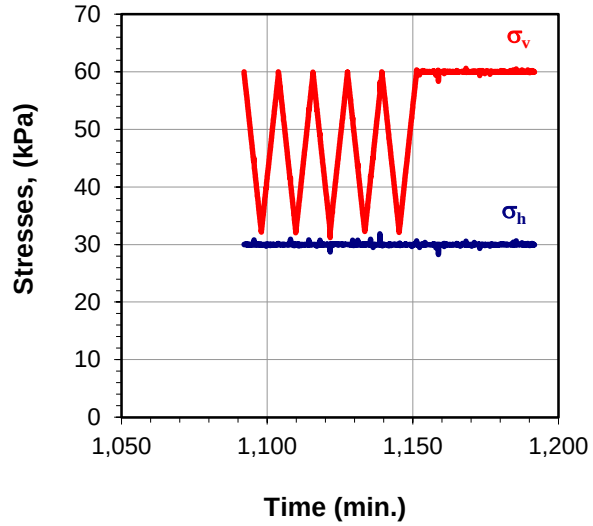
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

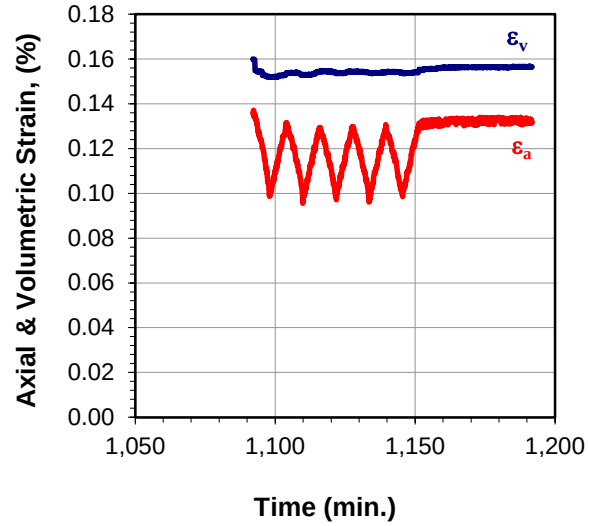
Step 1: Consolidation





Step 2: Drained Preloading Stage 1



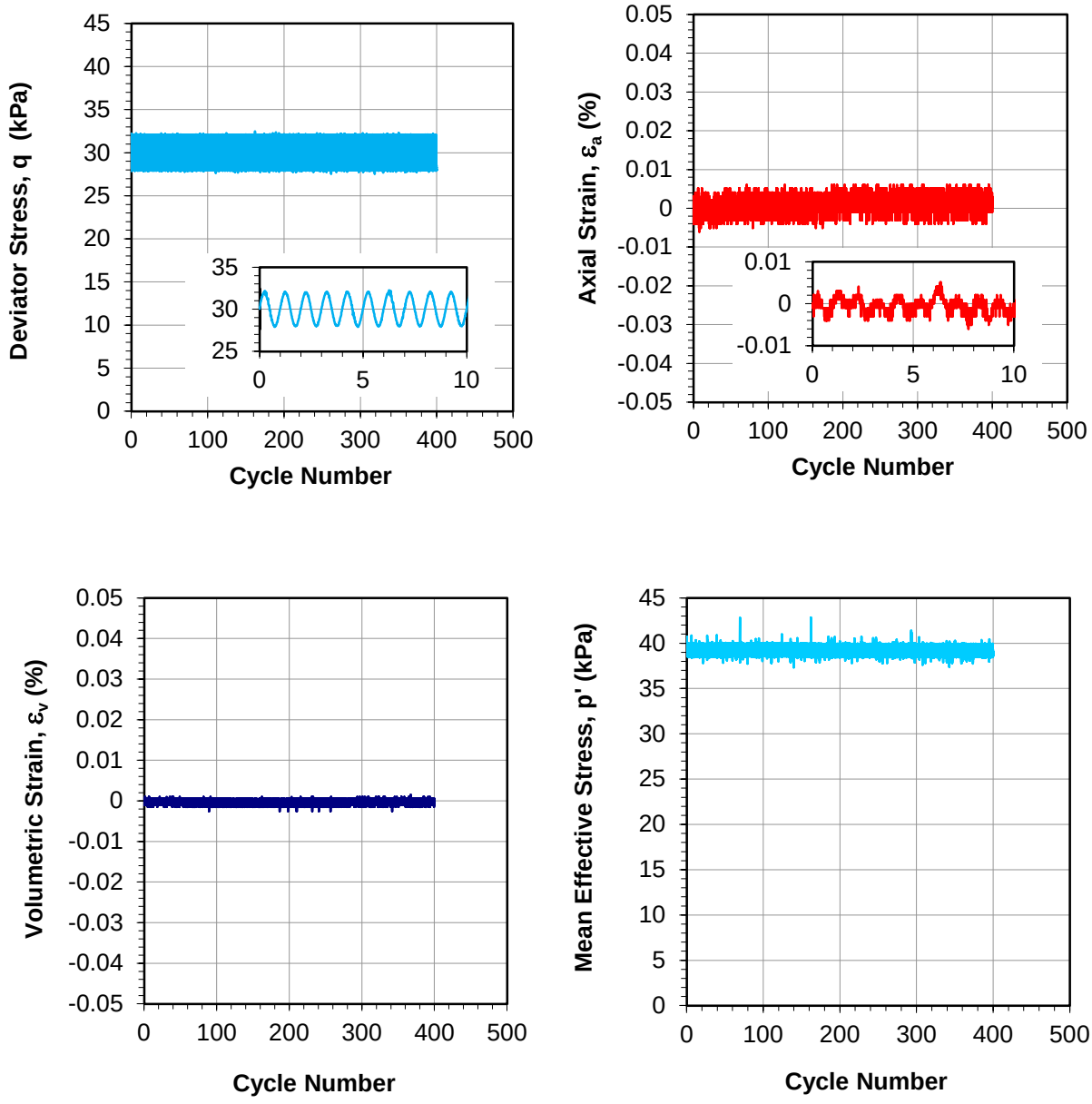


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 1D

IPO Number: 2019-030
Sample ID: 2019-030-017
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



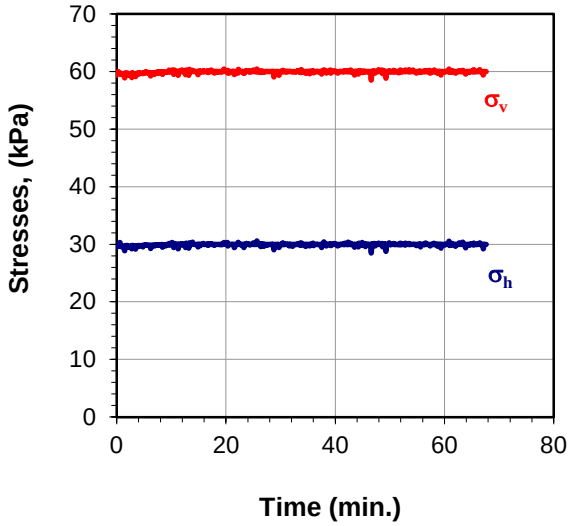
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

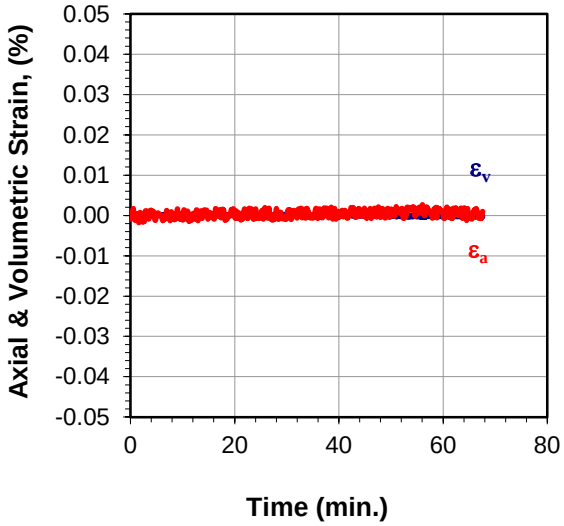
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 1D

IPO Number: 2019-030
Sample ID: 2019-030-017
Borehole ID: -
Depth: 6.00 m

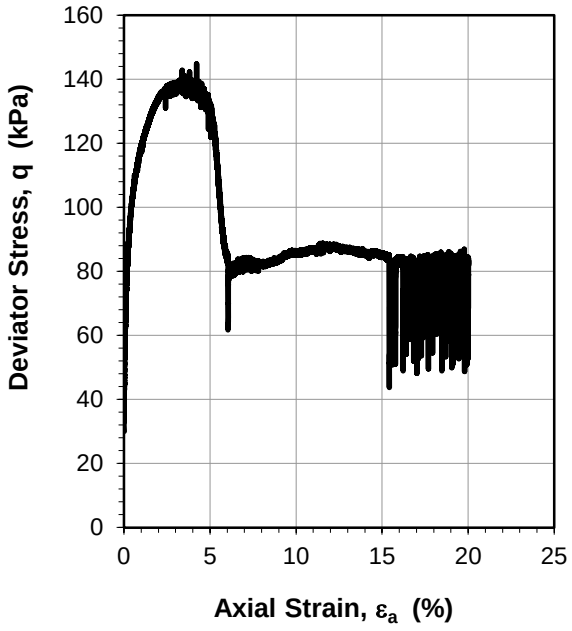
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

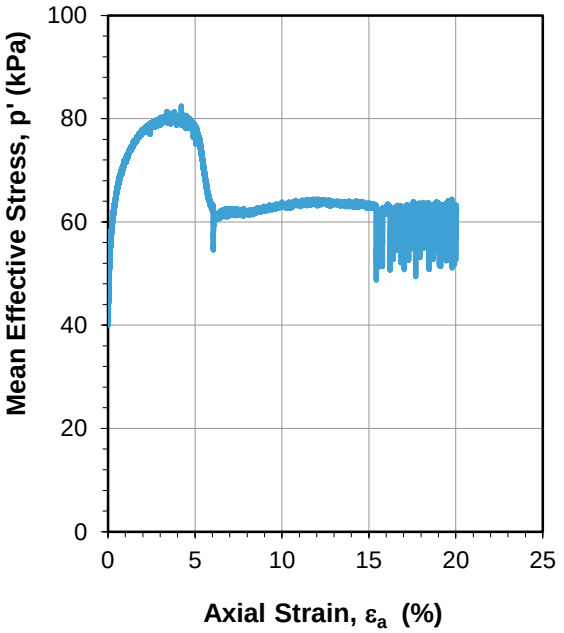
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Drained Compression



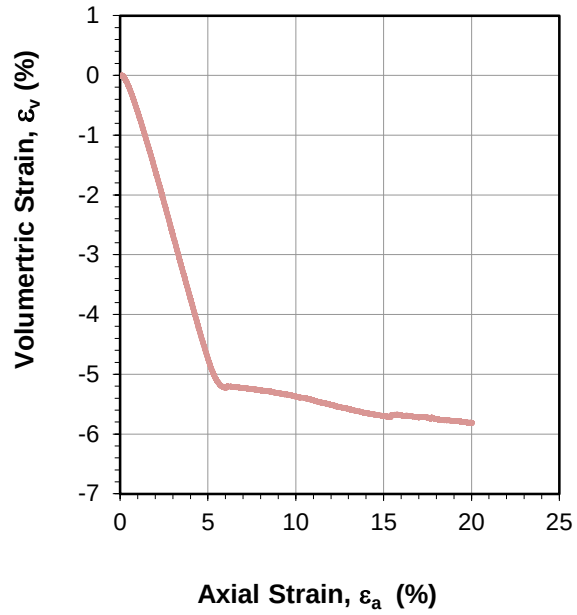


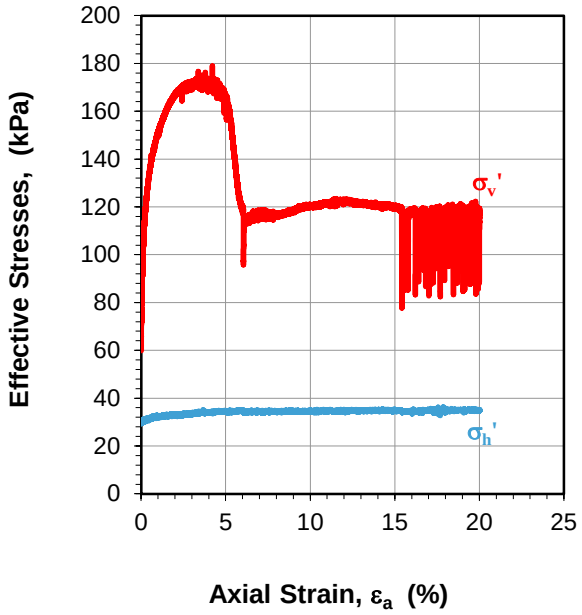
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

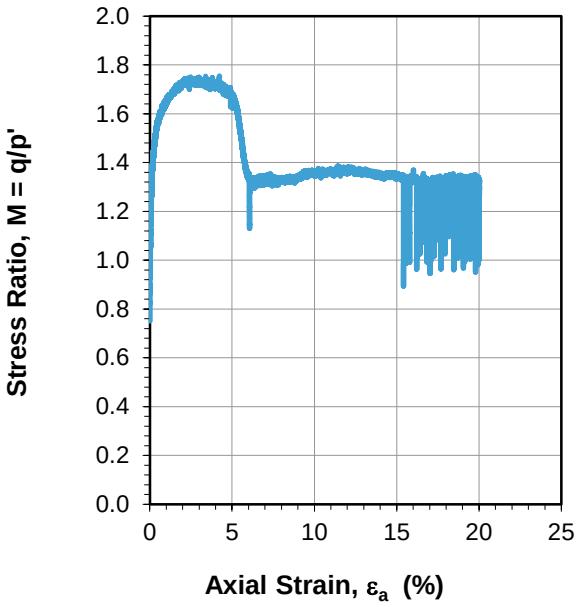
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 1D

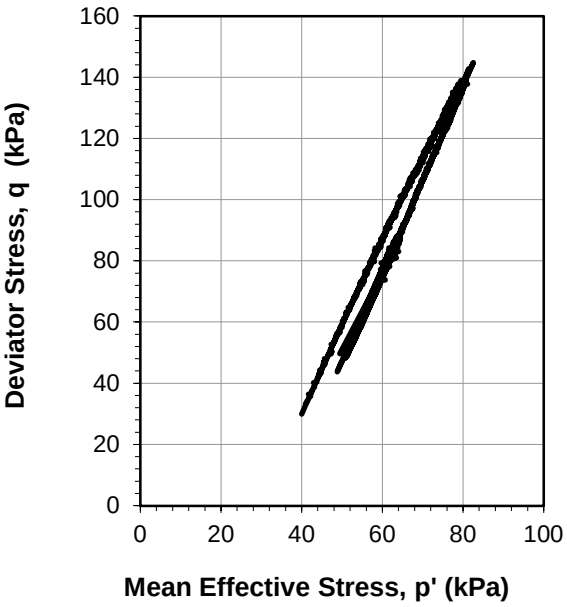
IPO Number: 2019-030
Sample ID: 2019-030-017
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Drained Compression









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-017
		Borehole ID:	-
Sample No.:	1D	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3F

IPO Number: 2019-030
Sample ID: 2019-030-018
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	2B-TX-06R	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 3 for 400 cycles	
Loading rate (%/Hr):	0.10	
Tested By:	SRJ	
Date:	19/03/2020	

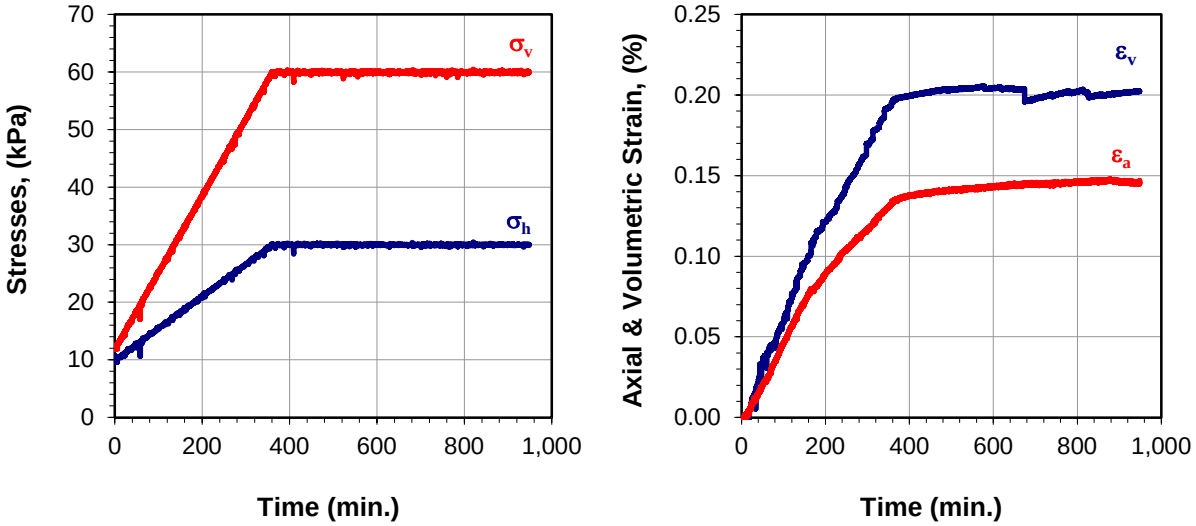
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.2	83.2
Sample Height (mm) :	149.7	119.4
Dry Density (t/m^3) :	1.73	1.66
Moisture Content (%) :	21.3 *	23.6

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

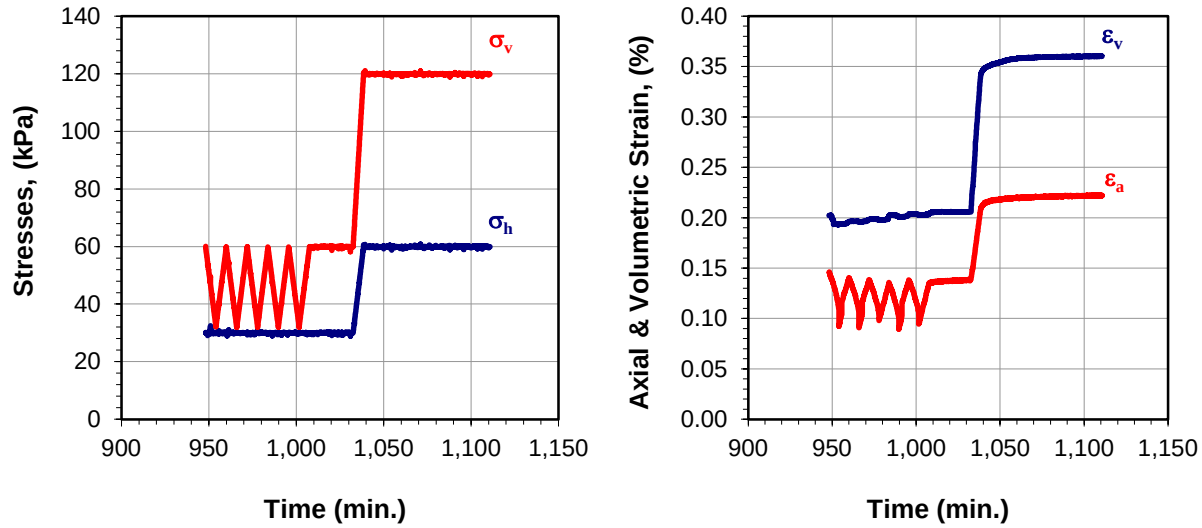
Checked By:	TC
Date:	23/06/2020

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

Step 1: Consolidation



Step 2: Drained Preloading Stage 1



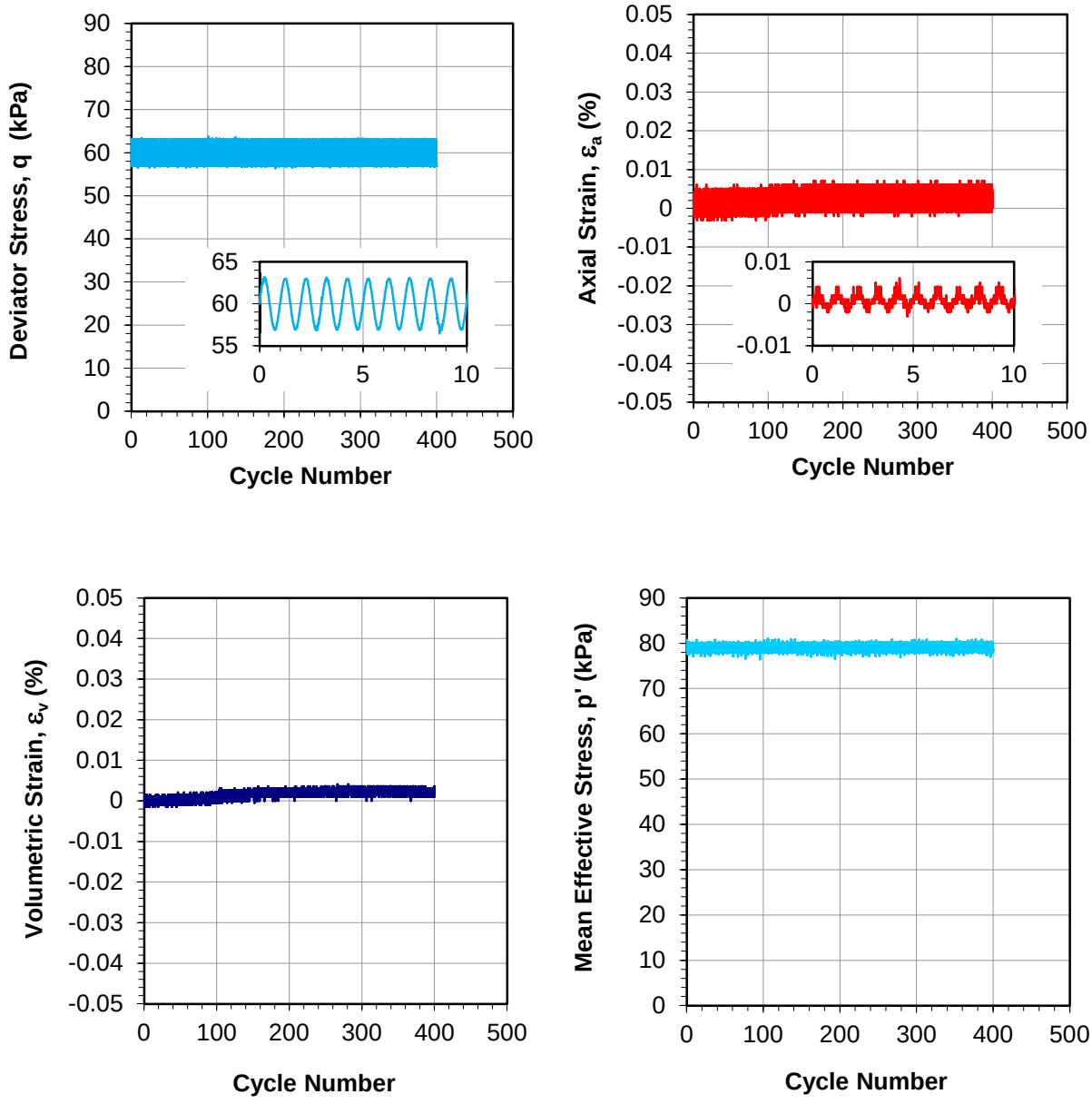
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3F

IPO Number: 2019-030
Sample ID: 2019-030-018
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



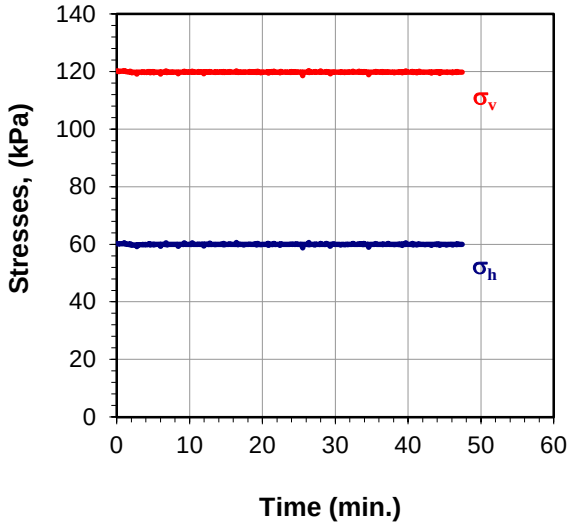
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

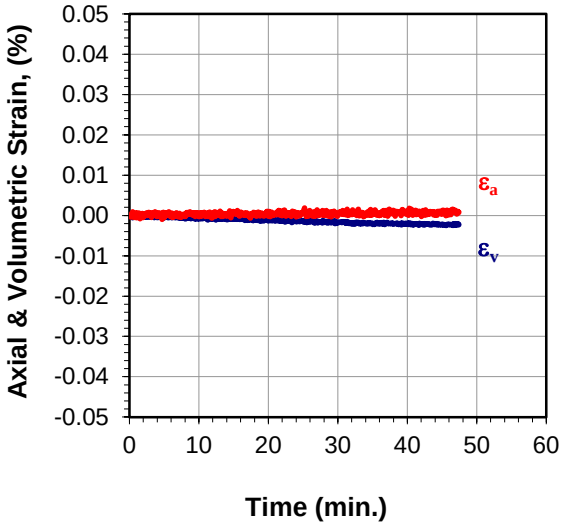
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3F

IPO Number: 2019-030
Sample ID: 2019-030-018
Borehole ID: -
Depth: 6.00 m

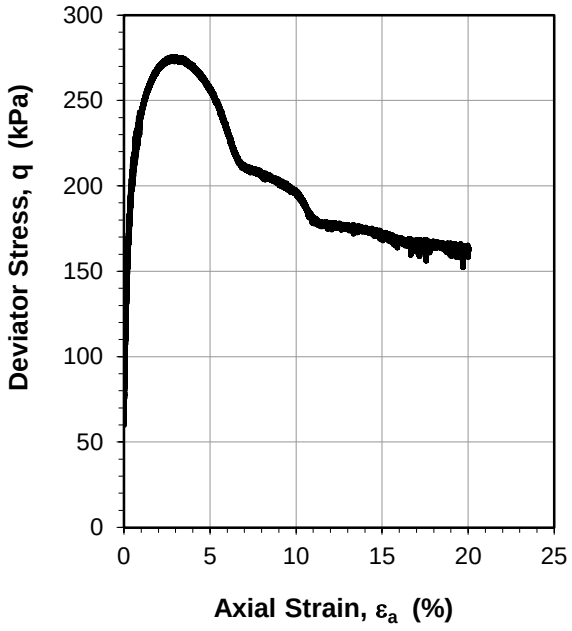
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

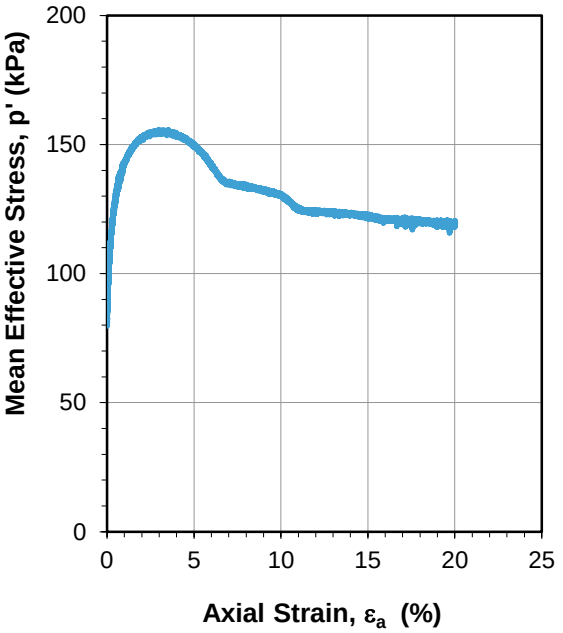
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Drained Compression



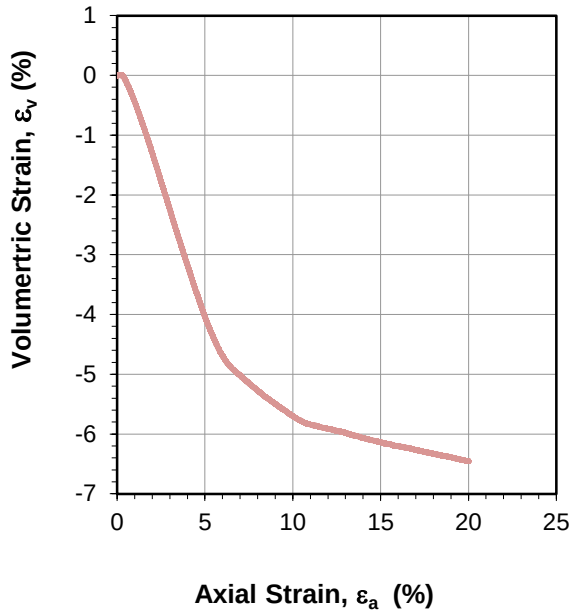


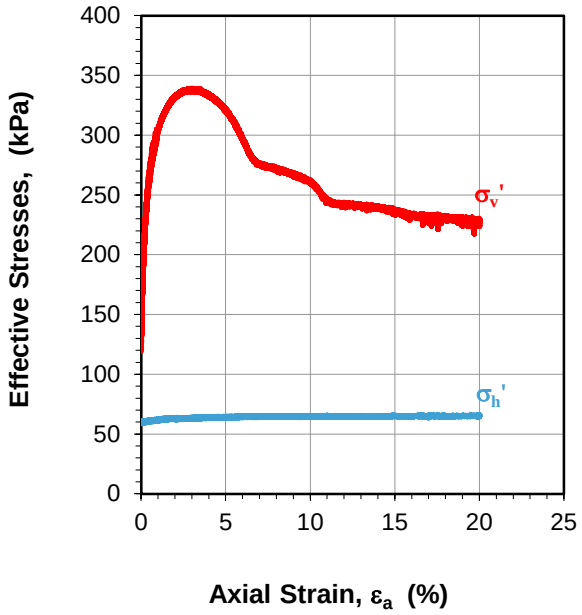
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

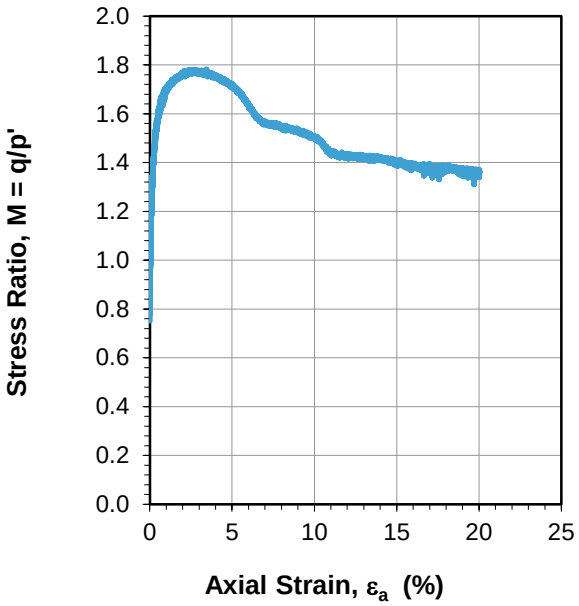
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3F

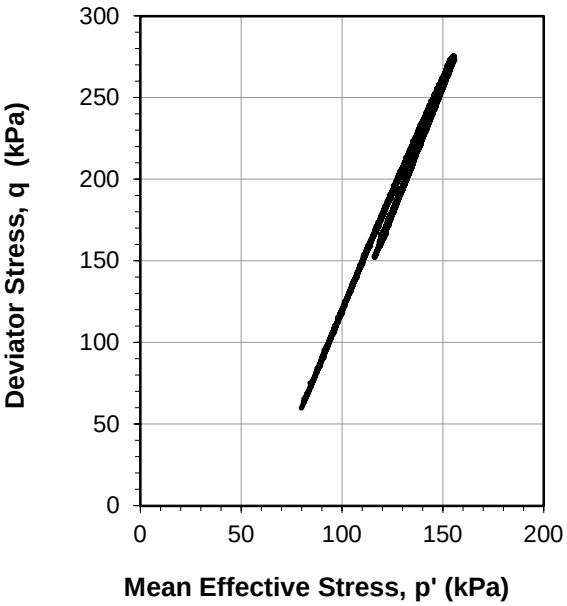
IPO Number: 2019-030
Sample ID: 2019-030-018
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Drained Compression









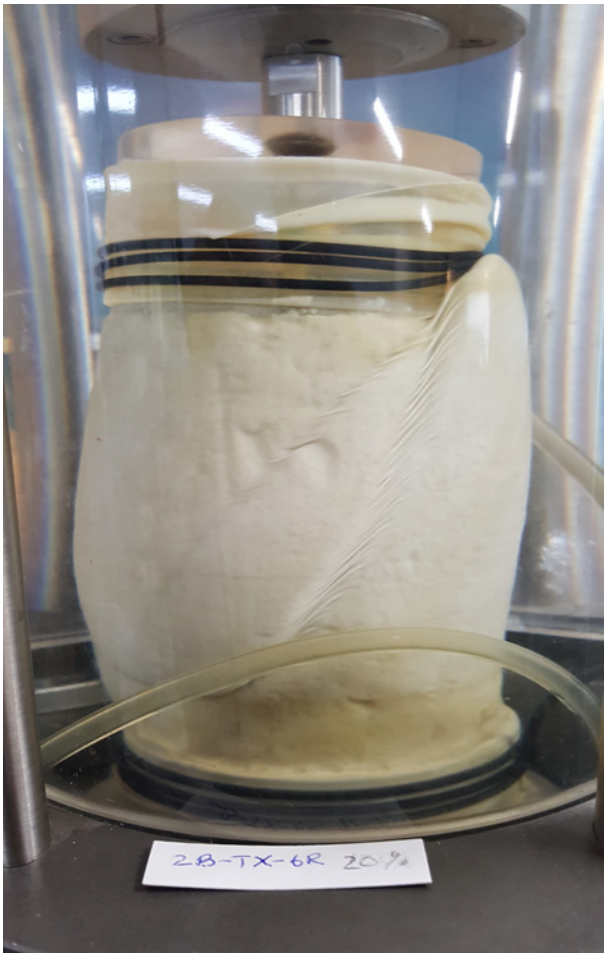
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-018
		Borehole ID:	-
Sample No.:	3F	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Drained Triaxial Compression with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3B

IPO Number: 2019-030
Sample ID: 2019-030-019
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	3B-TX-07	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 2 for 400 cycles	
Loading rate (%/Hr):	1	
Tested By:	SRJ	
Date:	20/12/2019	

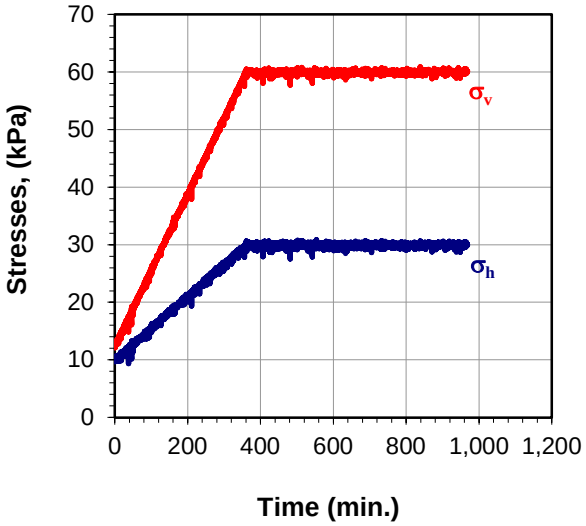
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	66.9
Sample Height (mm) :	149.7	179.4
Dry Density (t/m^3) :	1.72	1.70
Moisture Content (%) :	20.2 *	21.7

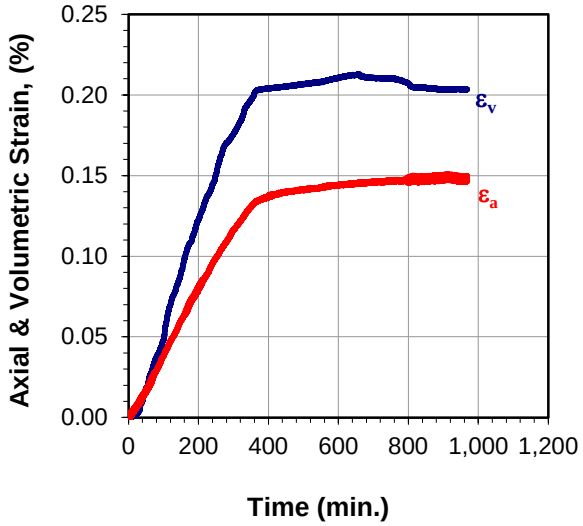
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Checked By:	TC
Date:	23/06/2020

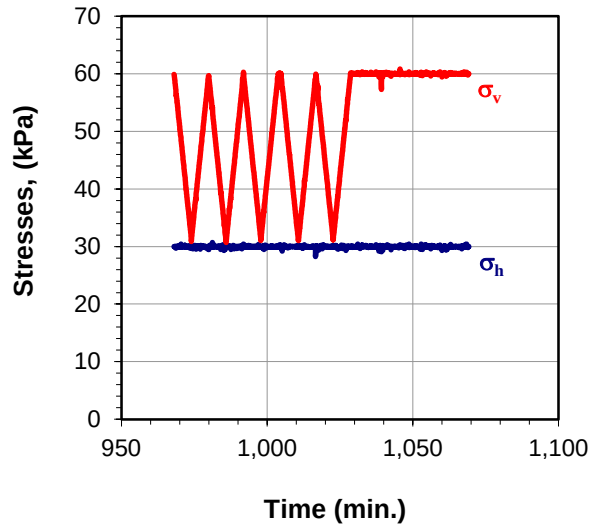
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

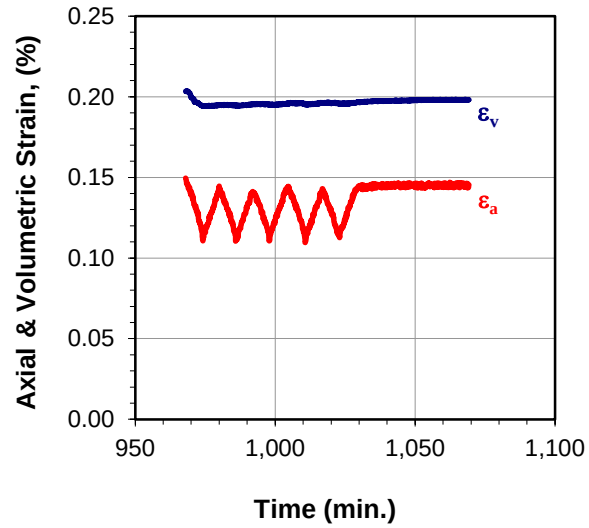
Step 1: Consolidation





Step 2: Drained Preloading Stage 1



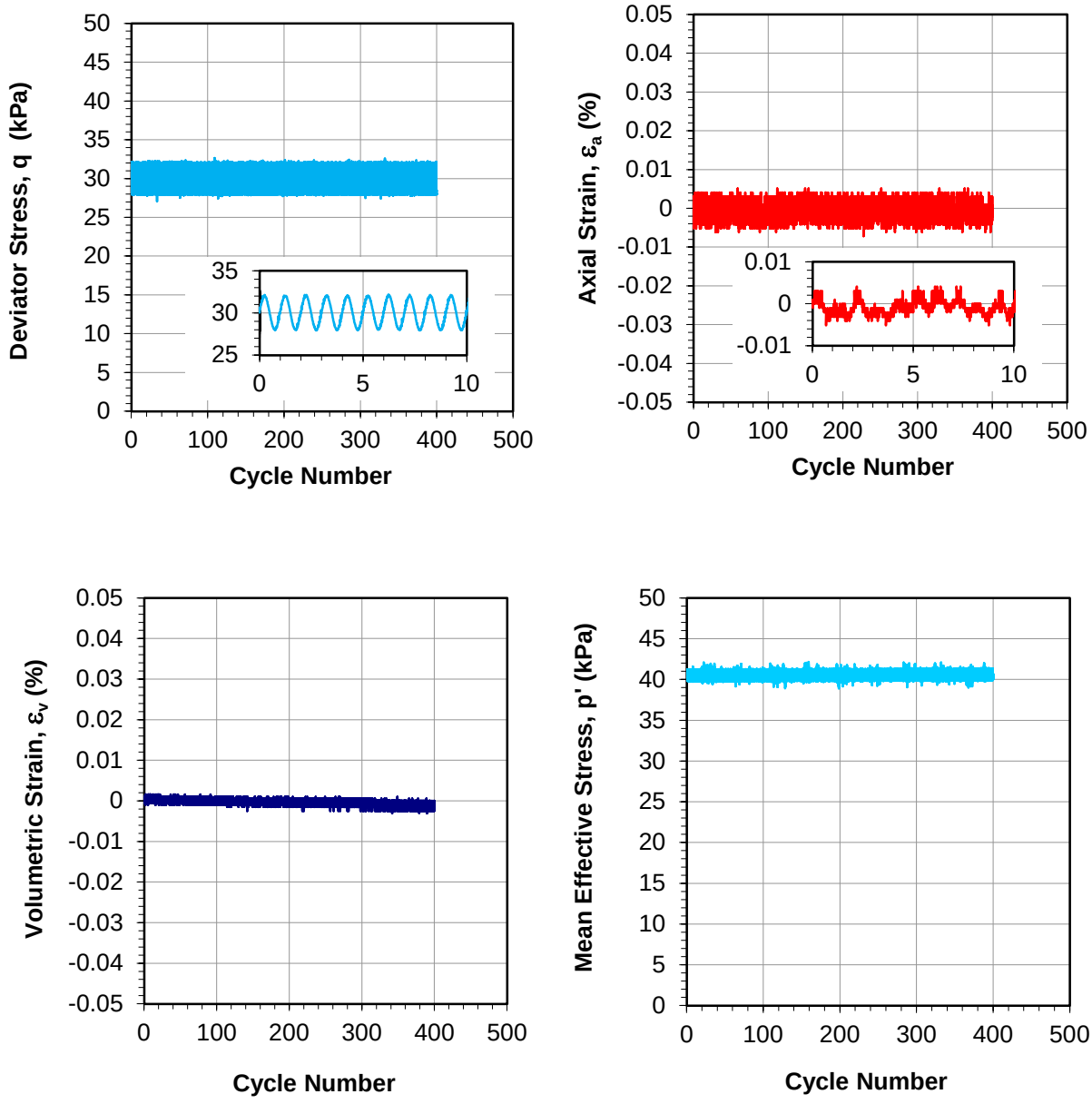


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3B

IPO Number: 2019-030
Sample ID: 2019-030-019
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



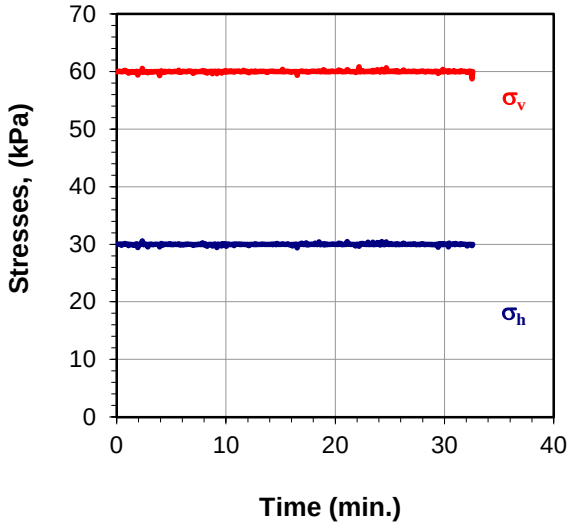
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

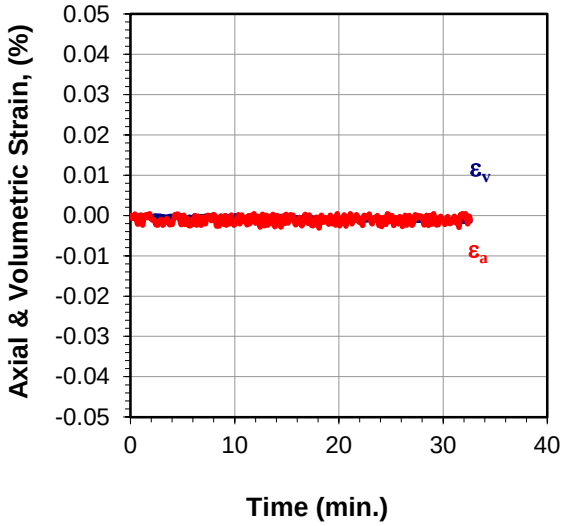
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3B

IPO Number: 2019-030
Sample ID: 2019-030-019
Borehole ID: -
Depth: 6.00 m

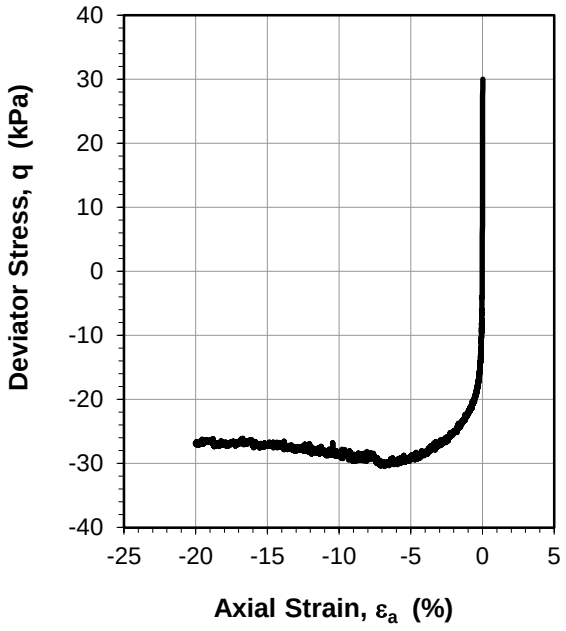
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

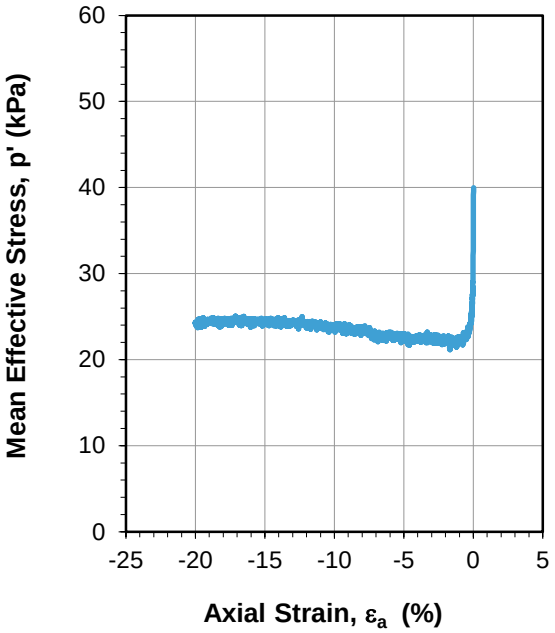
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Drained Extension



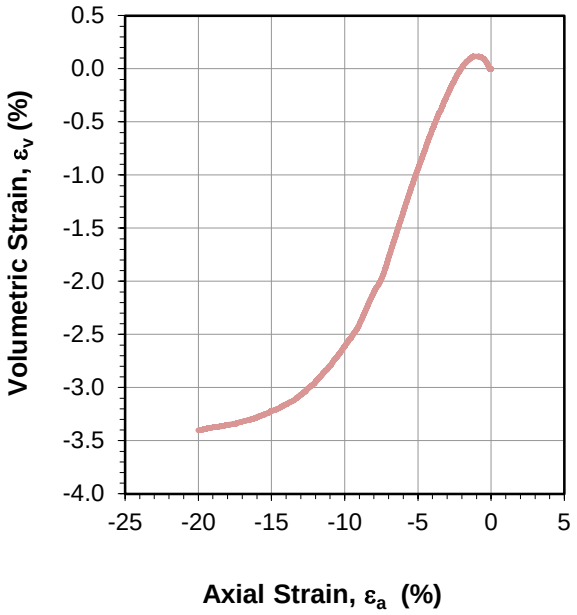


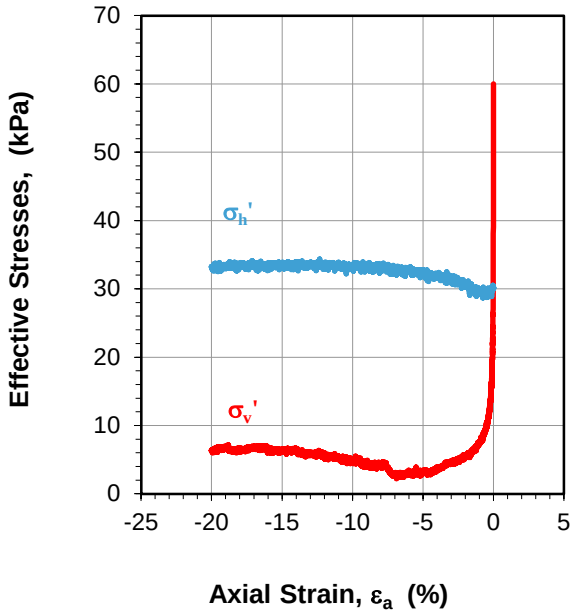
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

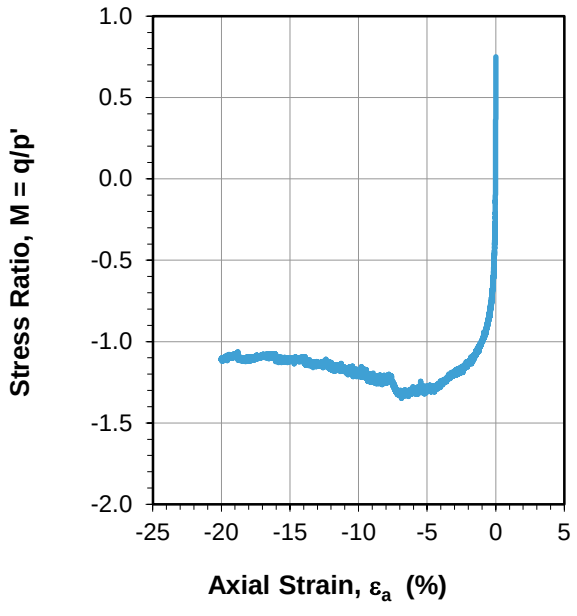
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3B

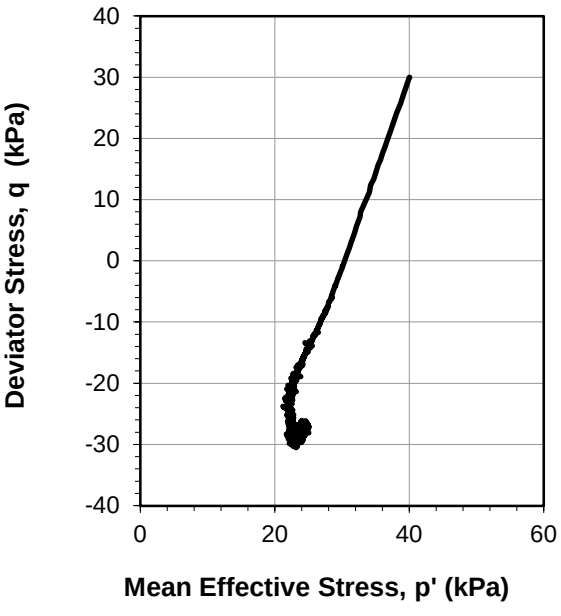
IPO Number: 2019-030
Sample ID: 2019-030-019
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Drained Extension









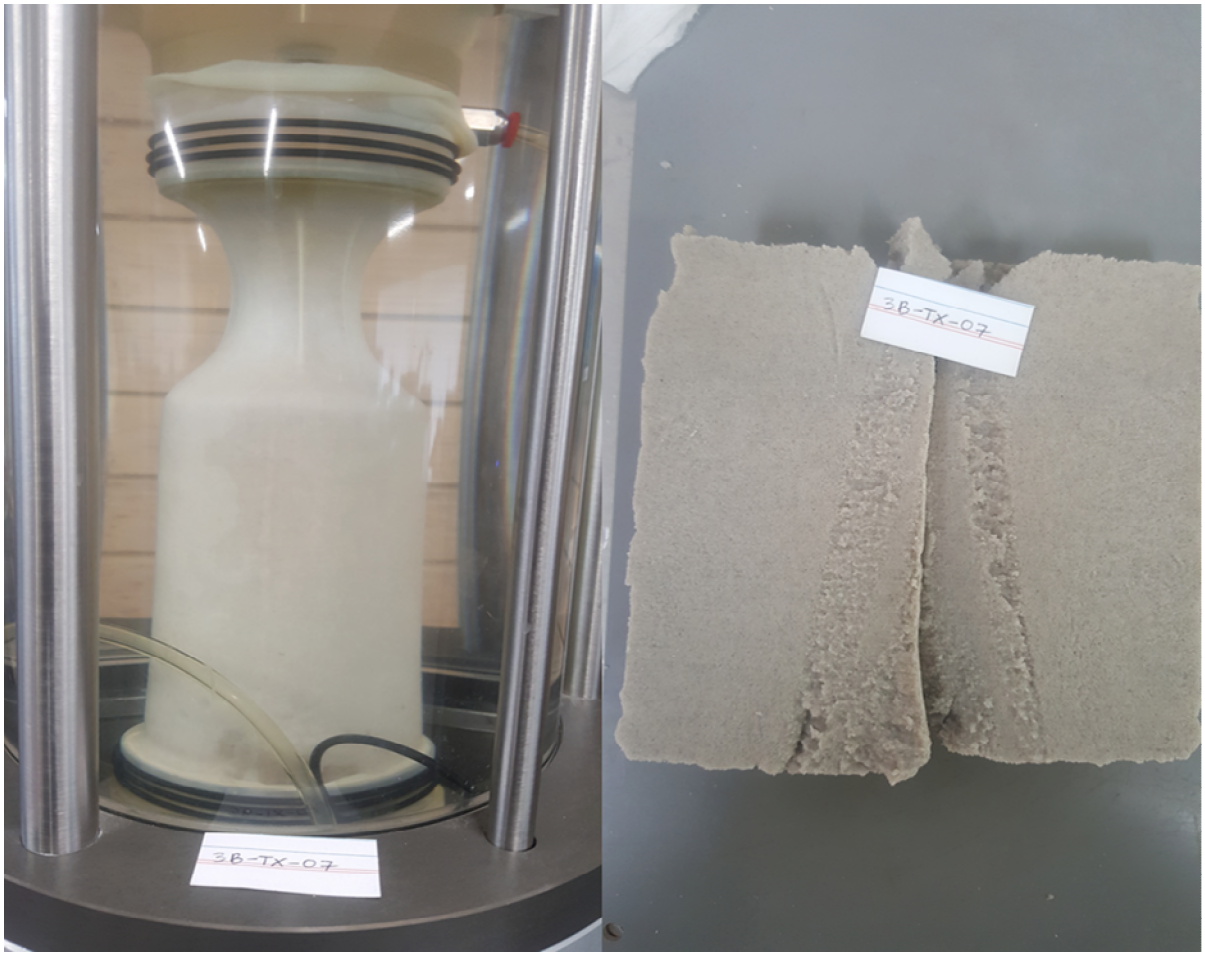
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-019
		Borehole ID:	-
Sample No.:	3B	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4F

IPO Number: 2019-030
Sample ID: 2019-030-020
Borehole ID: -
Depth: 6.00 m

Test Details:		
Test ID:	4B-TX-08R	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Stress Stage 1 (kPa):	30 to 60 for 5 cycles	
Cyclic Stress Stage 2 (kPa):	q ± 3 for 400 cycles	
Loading rate (%/Hr):	0.1	
Tested By:	SRJ	
Date:	29/04/2020	

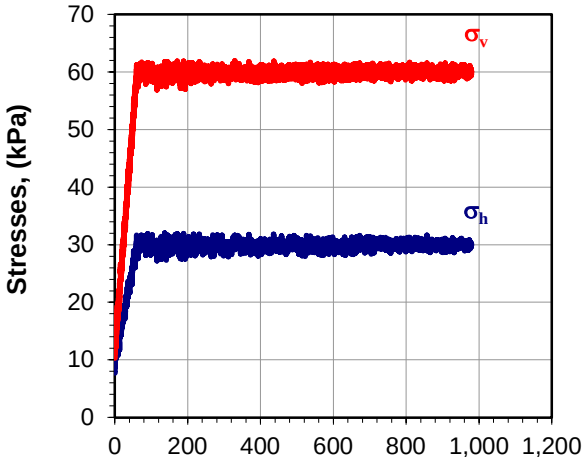
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	66.7
Sample Height (mm) :	149.8	177.9
Dry Density (t/m^3) :	1.71	1.71
Moisture Content (%) :	20.8 *	21.7

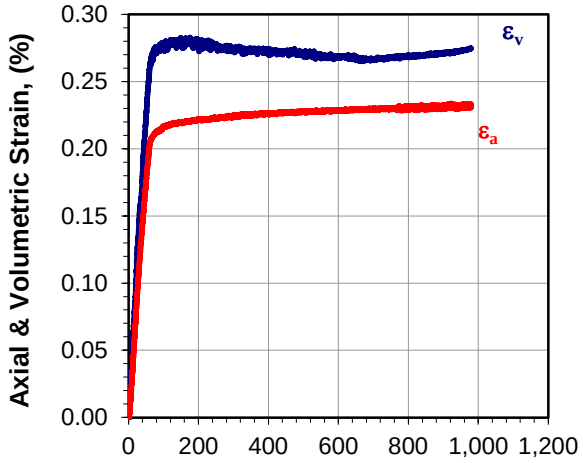
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Checked By:	TC
Date:	23/06/2020

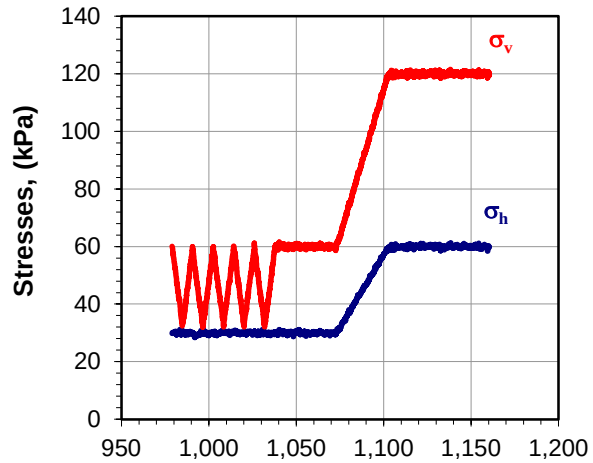
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

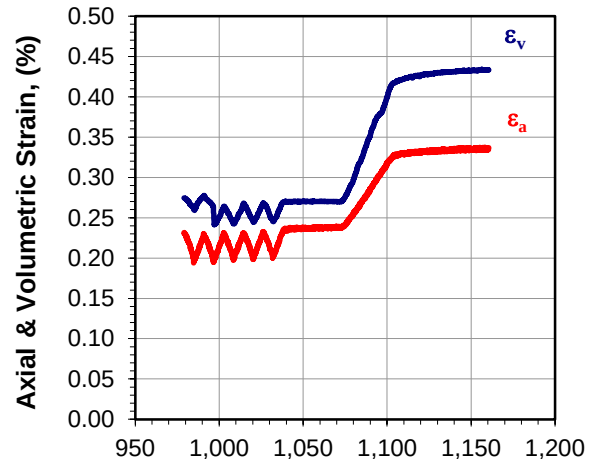
Step 1: Consolidation





Step 2: Drained Preloading Stage 1



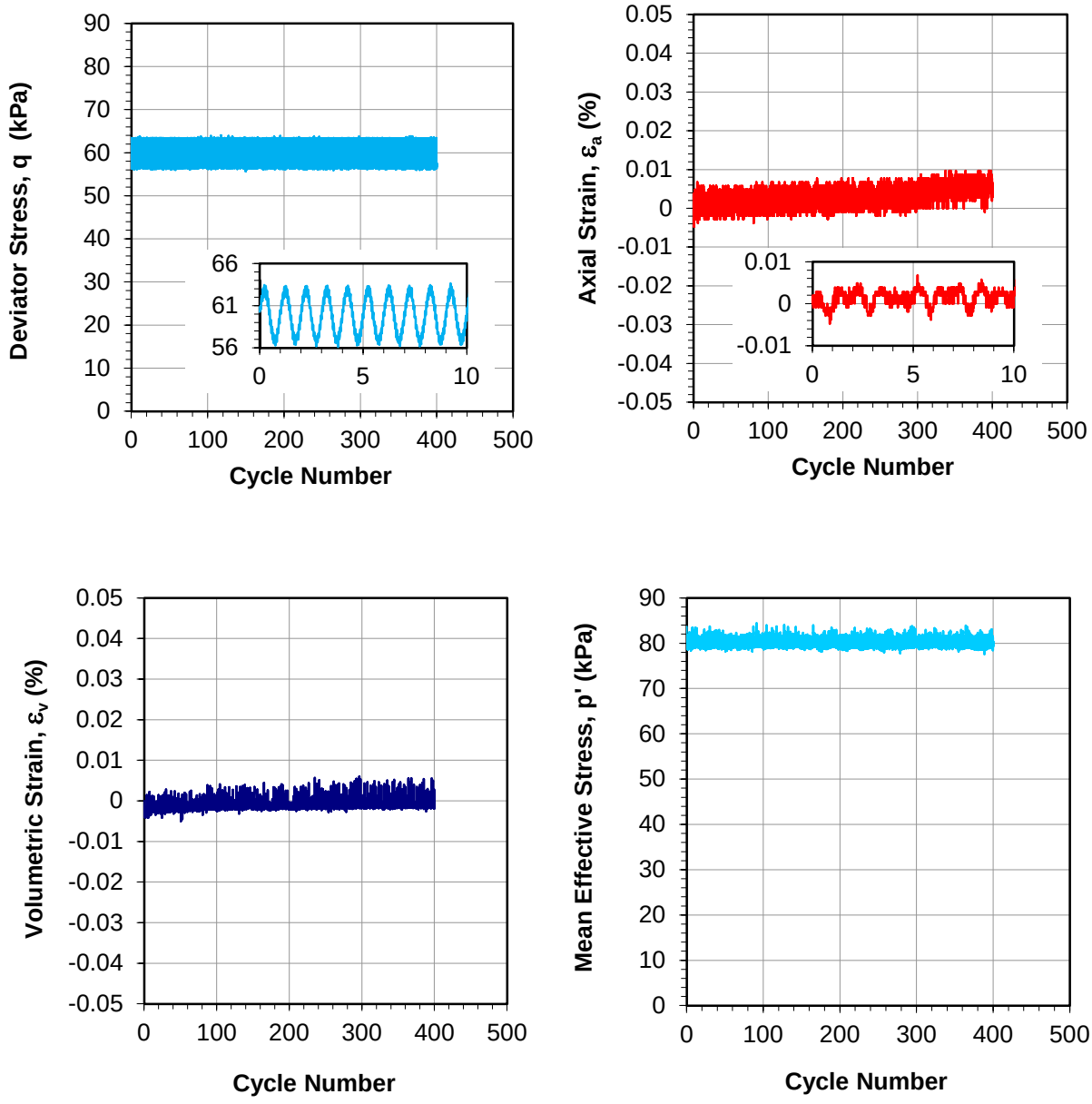


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4F

IPO Number: 2019-030
Sample ID: 2019-030-020
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 3: Drained Preloading Stage 2



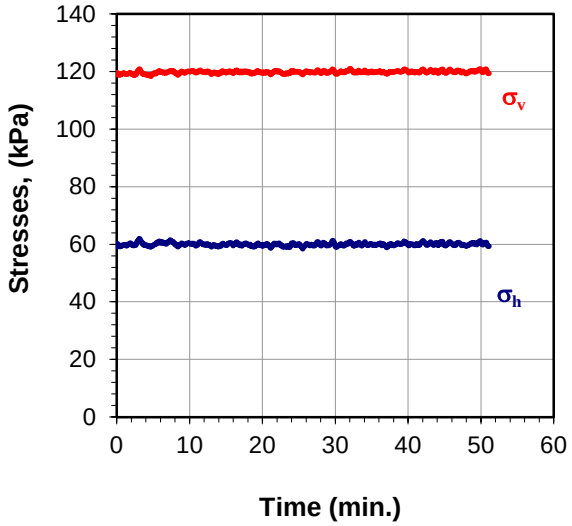
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

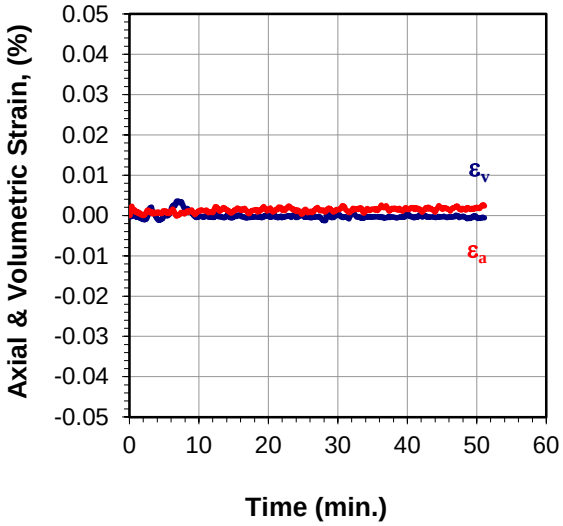
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4F

IPO Number: 2019-030
Sample ID: 2019-030-020
Borehole ID: -
Depth: 6.00 m

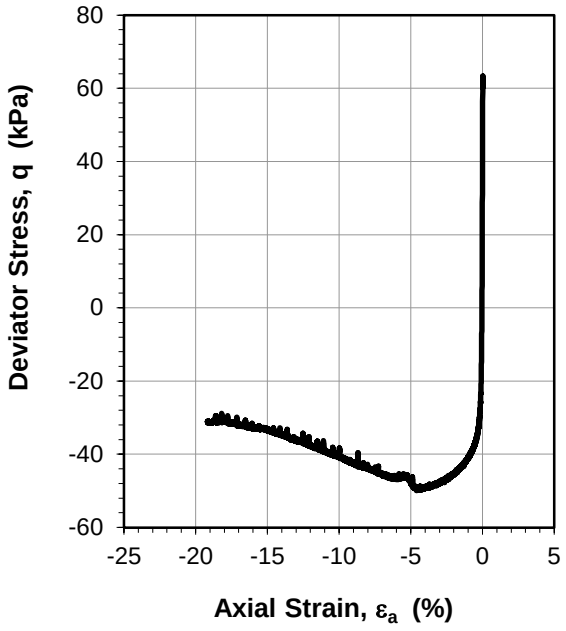
TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

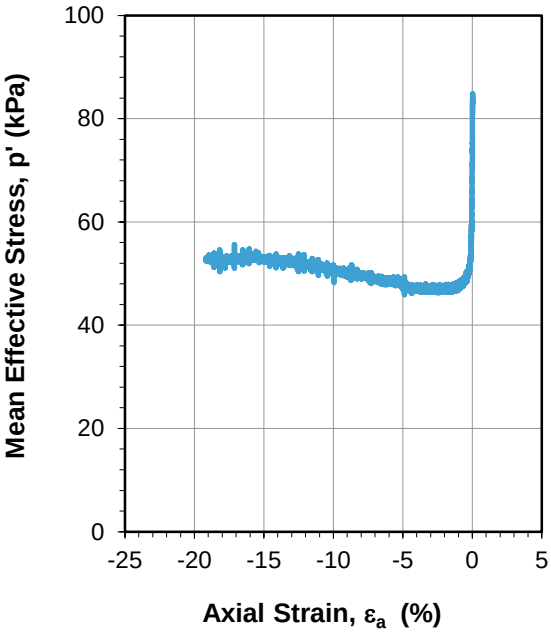
Step 4: Reconsolidation and Pore Pressure Equalization





Step 5: Drained Extension



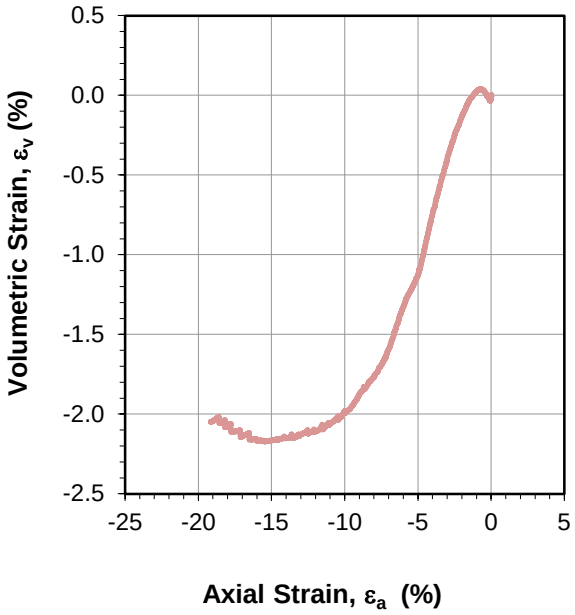


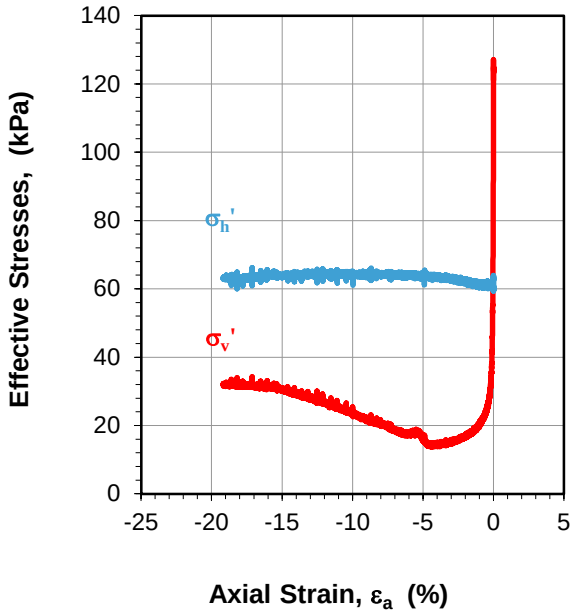
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

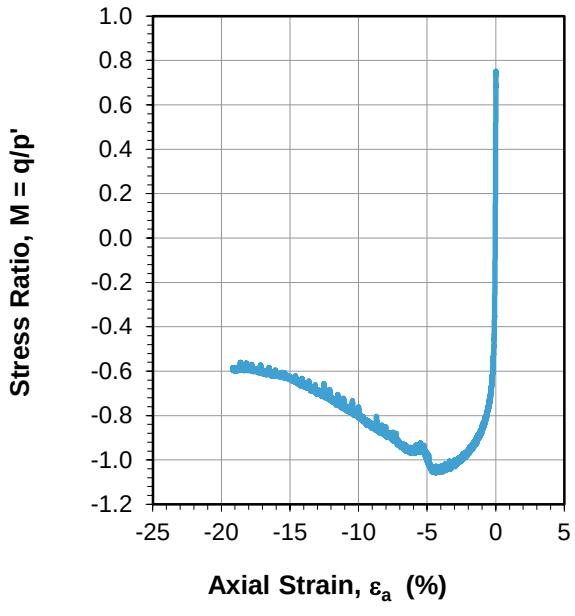
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4F

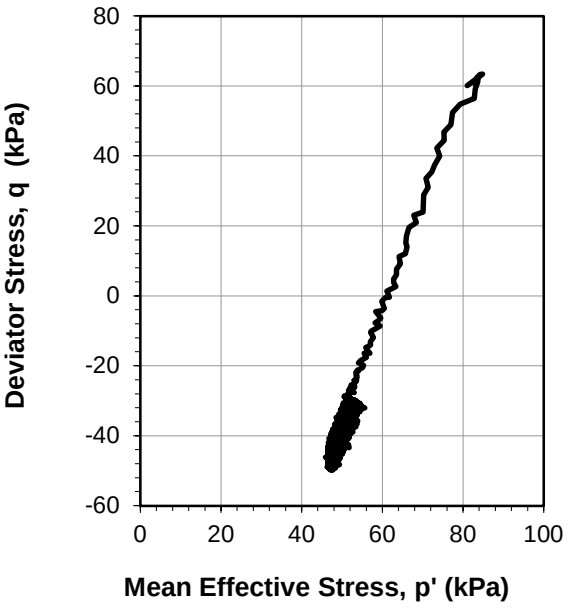
IPO Number: 2019-030
Sample ID: 2019-030-020
Borehole ID: -
Depth: 6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Step 5: Drained Extension









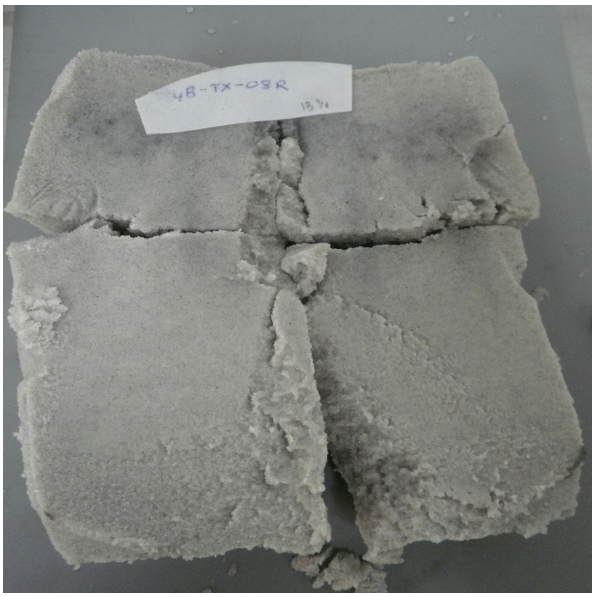
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-020
		Borehole ID:	-
Sample No.:	4F	**Depth:**	6.00 m

TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Sample Photographs after the test



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Drained Triaxial Extension with 2 stage Drained Cyclic Loading

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No: 4E

IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

Test Details:	
Test ID:	TX-BE01
Confining Stress (kPa):	20, 40, 80, 40, 20, 40, 80, 160, 320
Tested By:	SRJ
Date:	08/01/2020

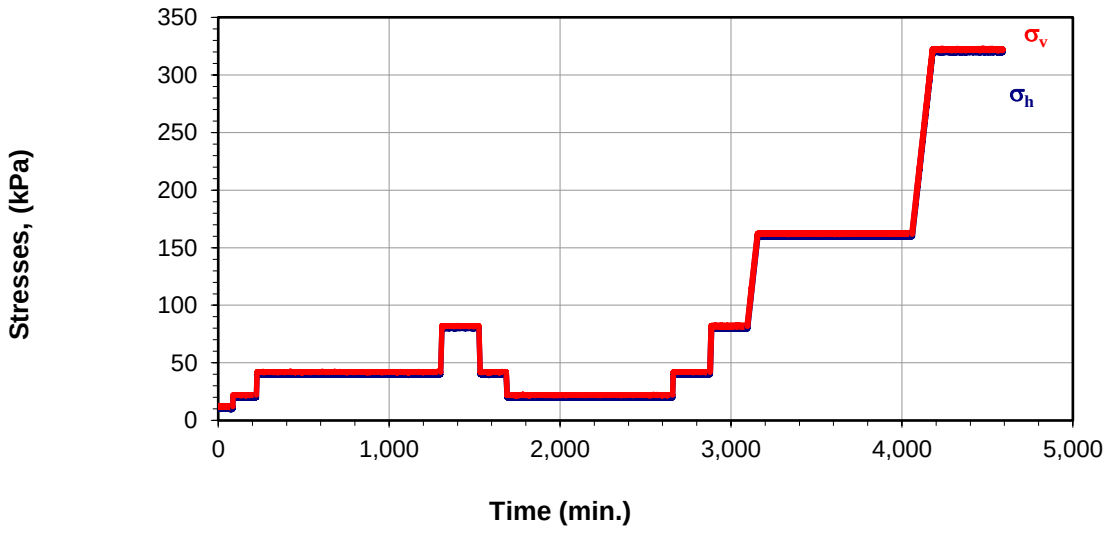
Sample Details:	Initial	Final
Sample Diameter (mm) :	72.1	71.5
Sample Height (mm) :	140.7	141.3
Dry Density (t/m^3) :	1.72	1.79
Moisture Content (%) :	21.6*	19.9

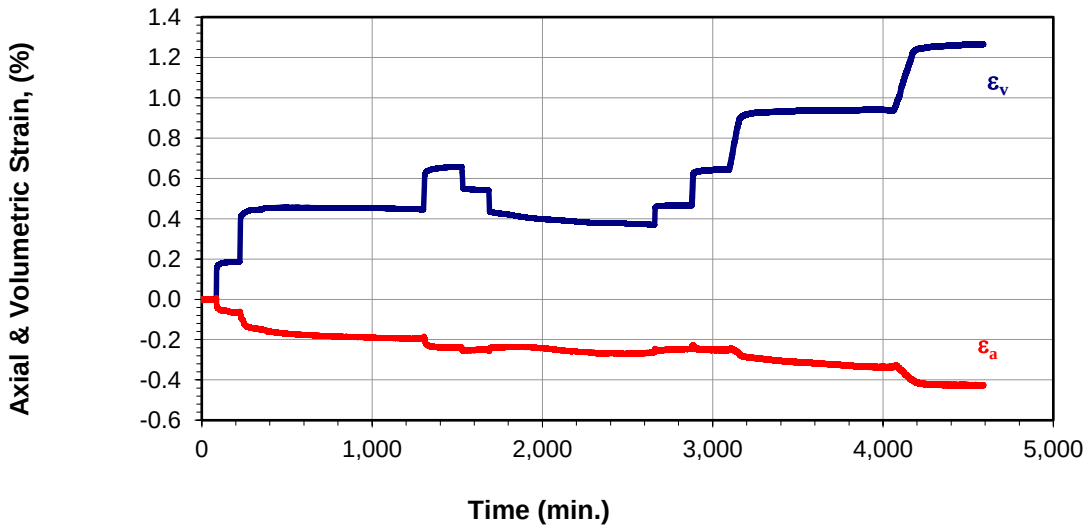
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Checked By:	TC
Date:	23/06/2020

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864

Summary of Consolidation Stages





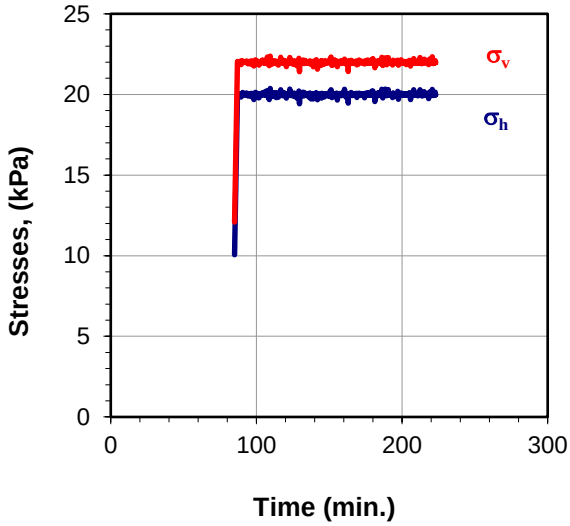
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Triaxial Consolidation and Bender Element

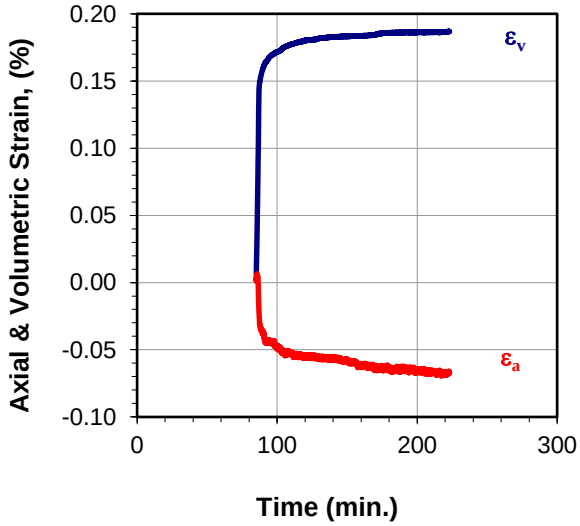
Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

TRIAXIAL TEST

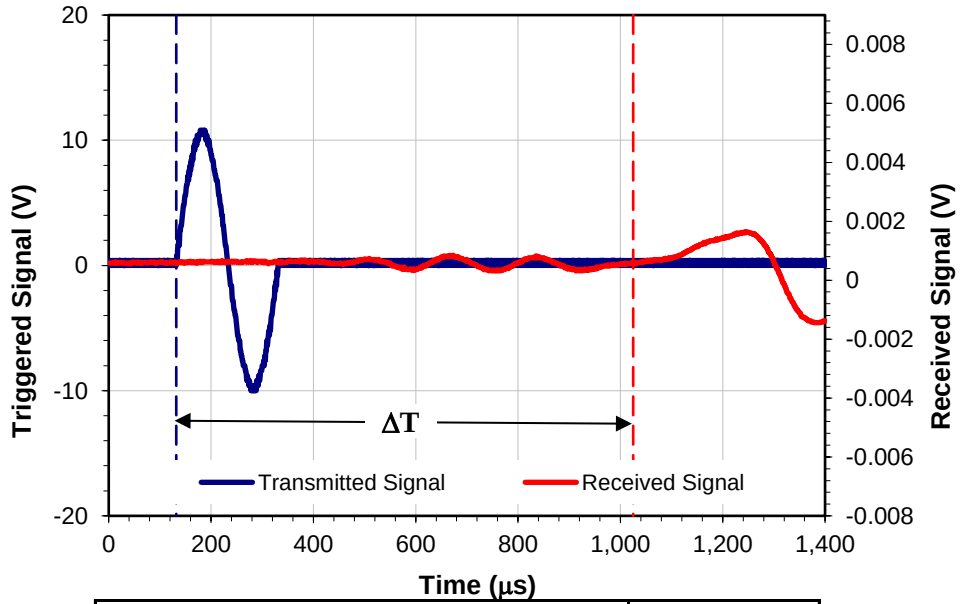
Test Method: AGLab Test Procedure FAM-17864

Consolidation at 20 kPa (Loading).





Bender Element Test at the end of consolidation.



Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	875
Travel Distance (mm):	129.0
Shear Wave Velocity (m/sec):	147.4
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	45.4

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

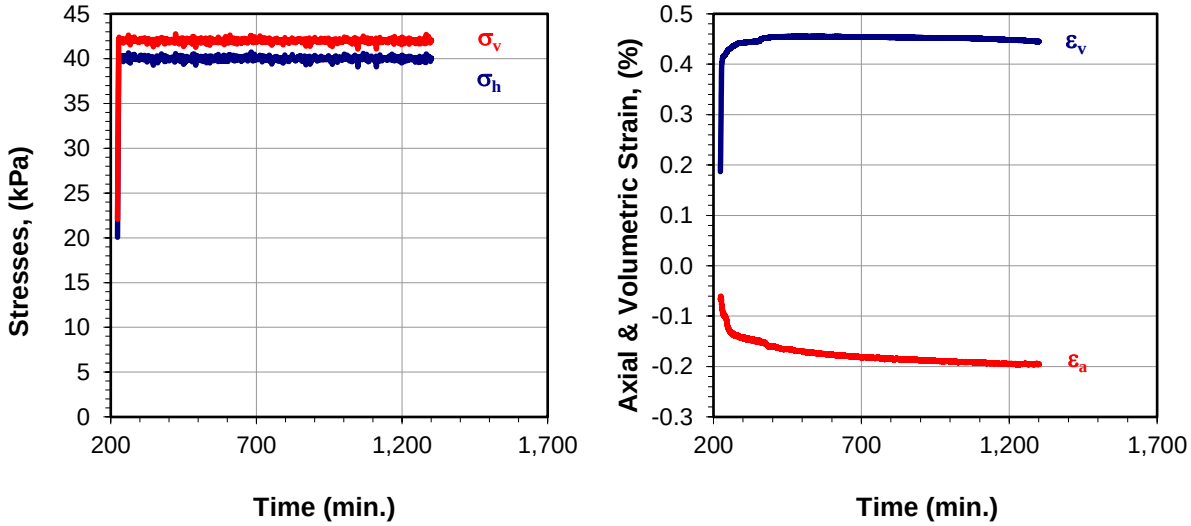
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

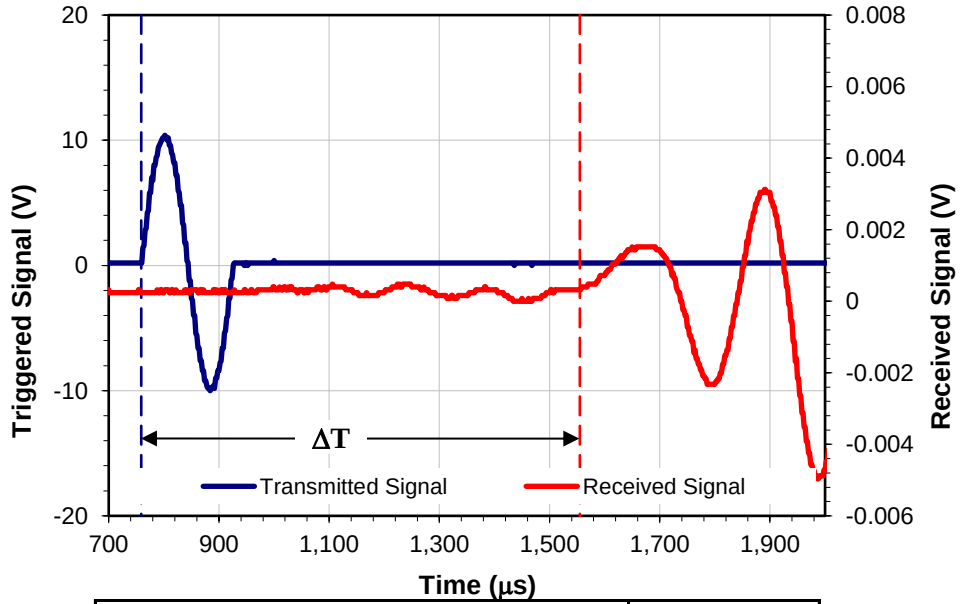
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 40 kPa (Loading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	760
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	169.9
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	60.4

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

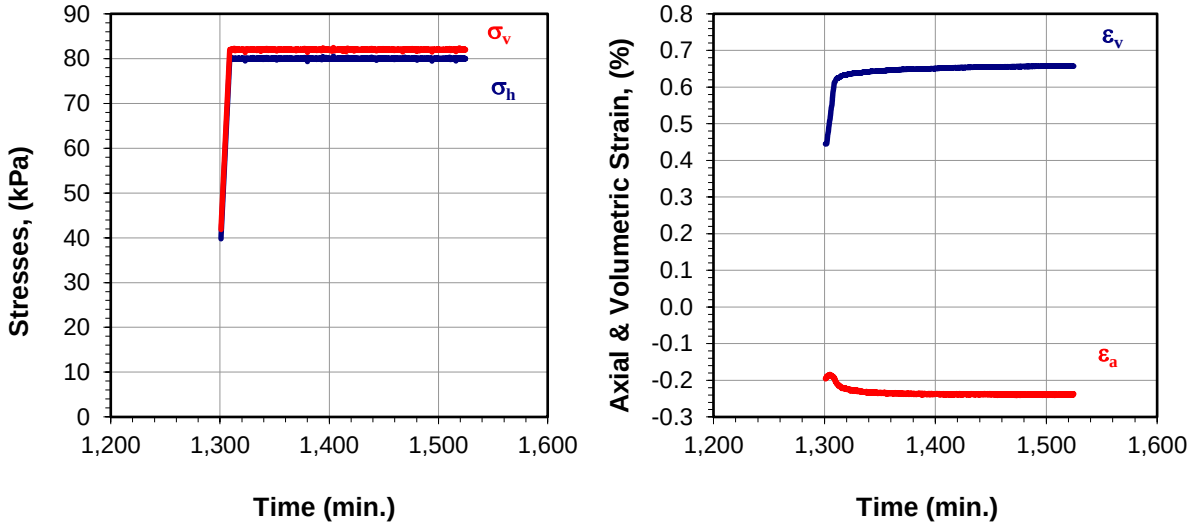
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

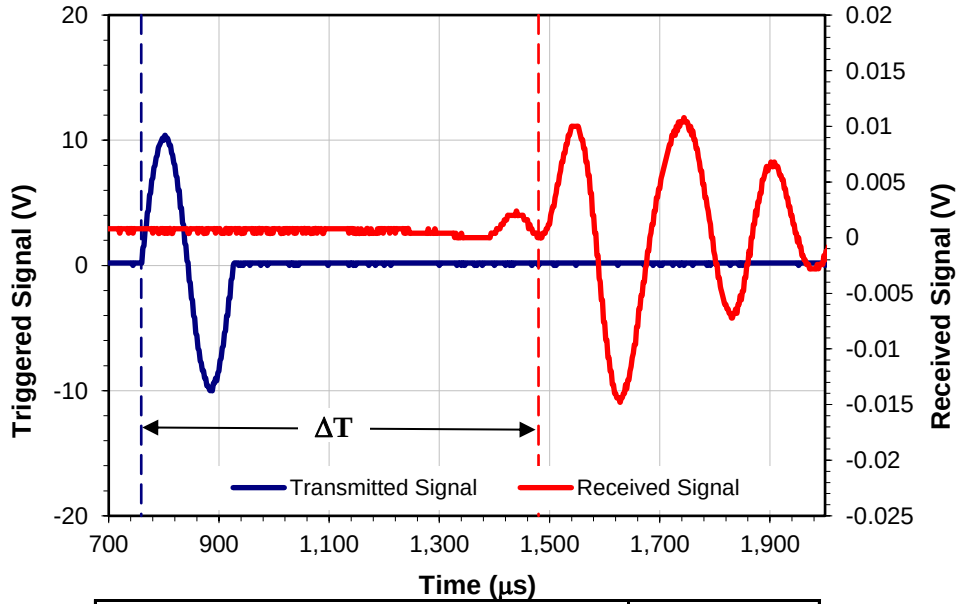
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 80 kPa (Loading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	688
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	187.9
Sample Bulk Density (t/m^3):	2.10
Shear Modulus (MPa):	74.0

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

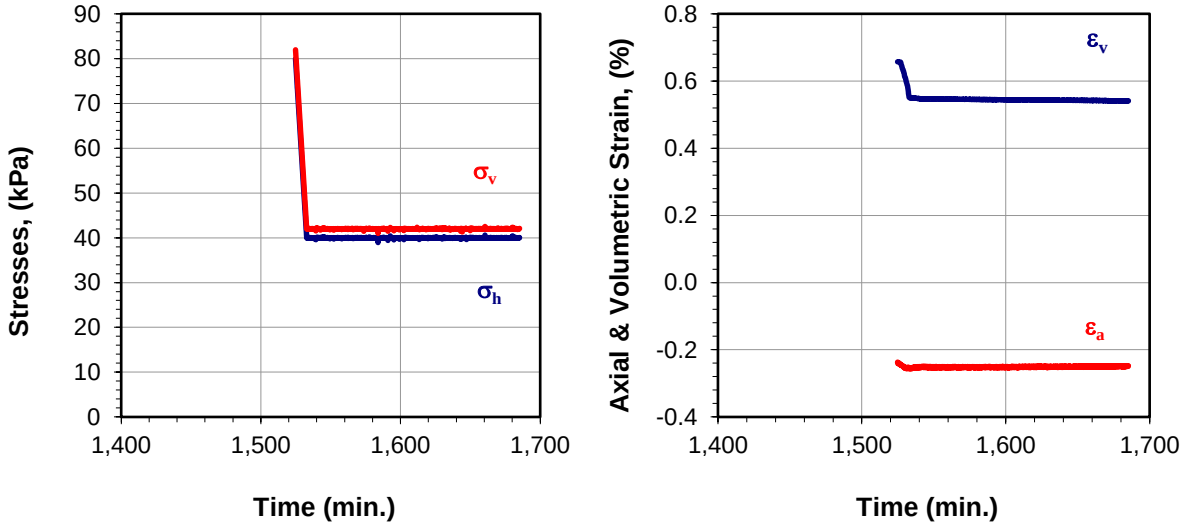
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

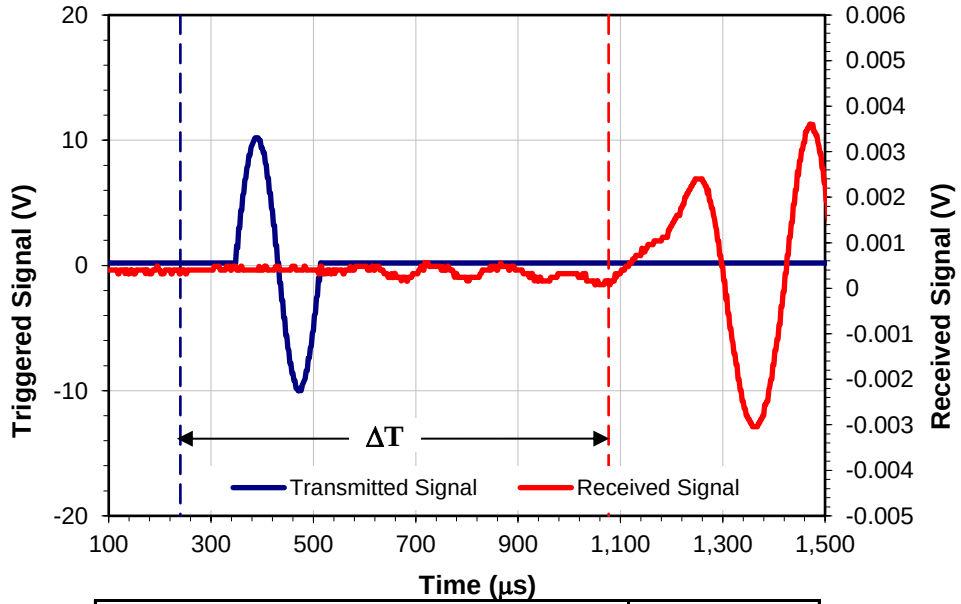
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 40 kPa (Unloading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	773
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	167.1
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	58.5

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

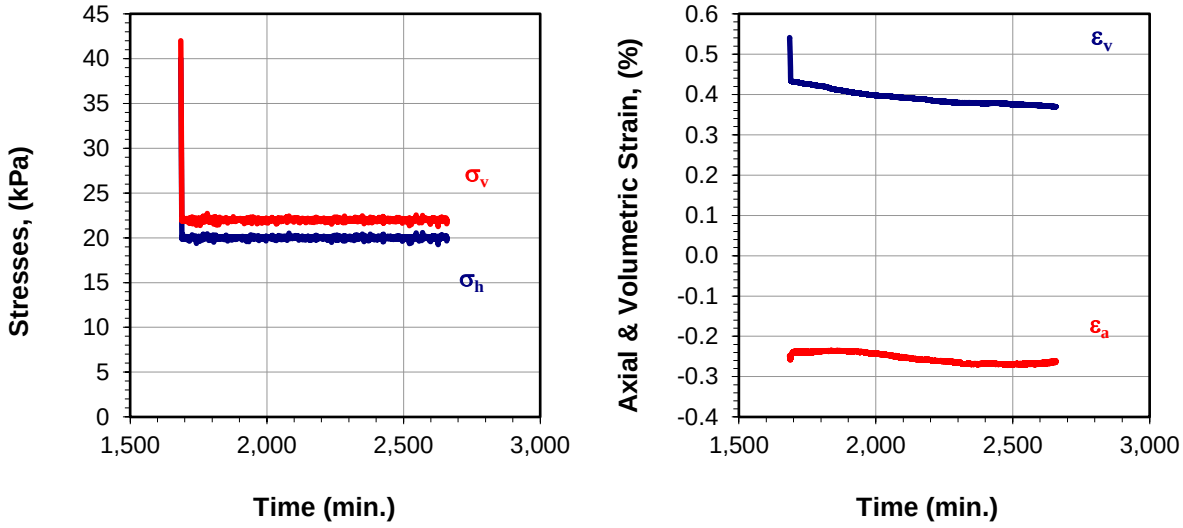
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

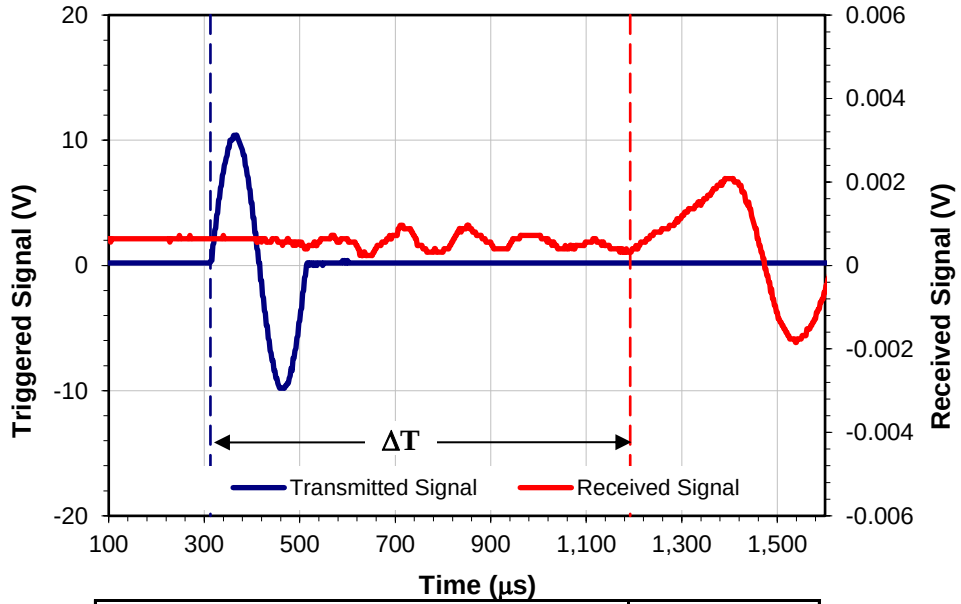
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 20 kPa (Unloading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	4, 5 and 6
Average Travel Time (μs):	871
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	148.4
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	46.1

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

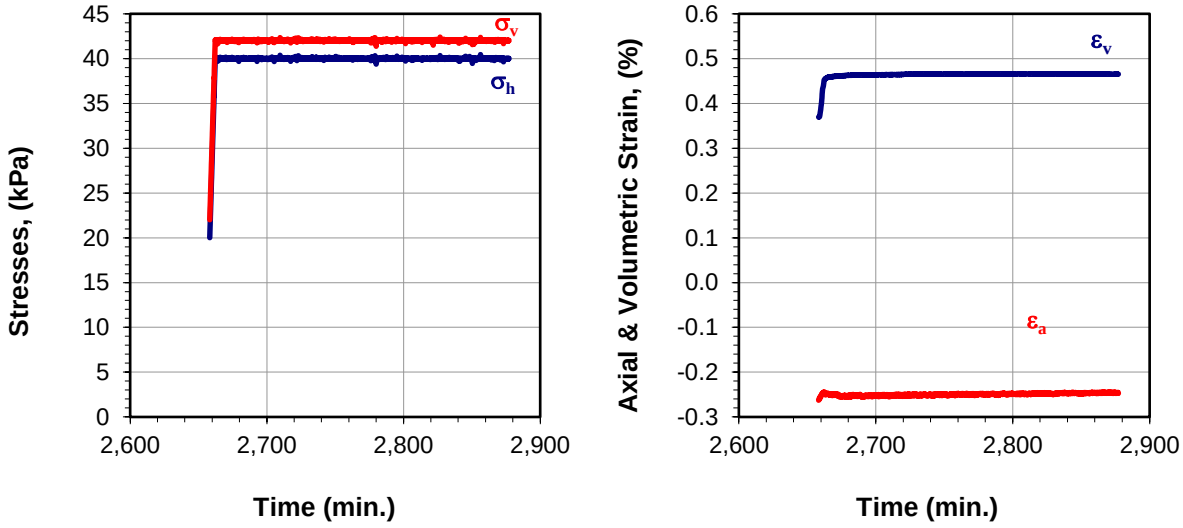
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

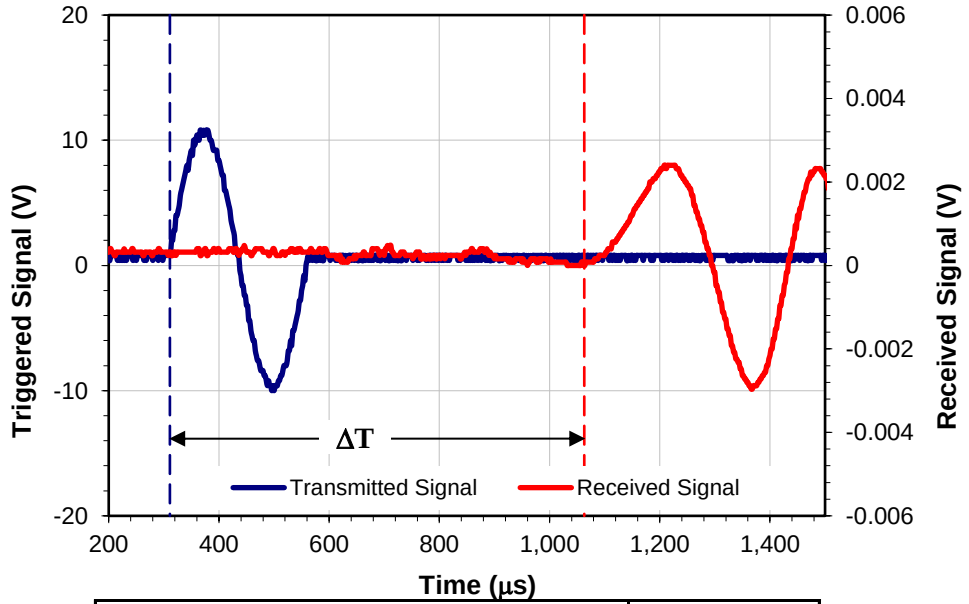
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 40 kPa (Reloading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	3, 4 and 5
Average Travel Time (μs):	733
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	176.4
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	65.1

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

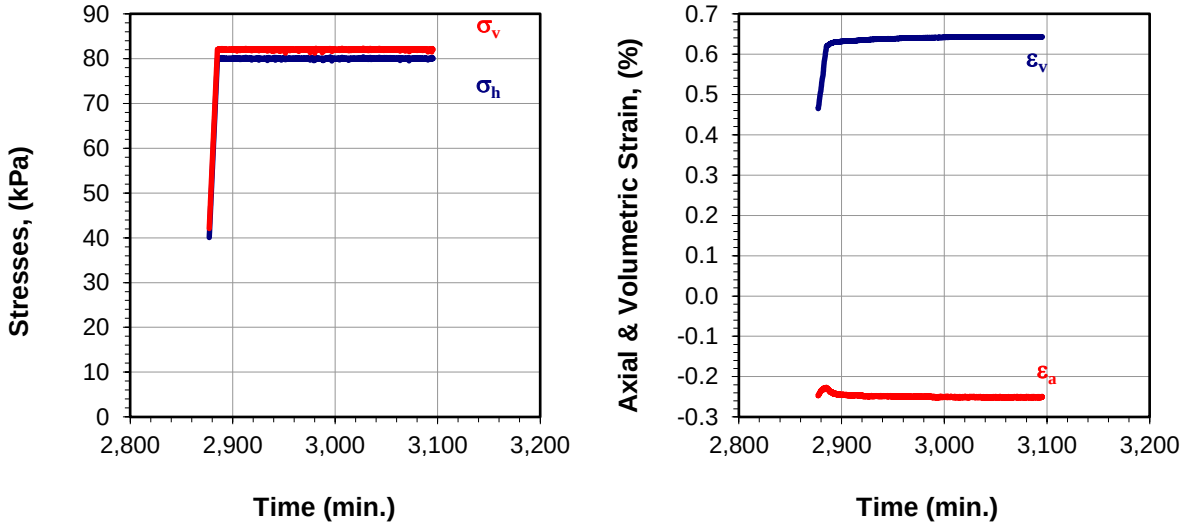
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

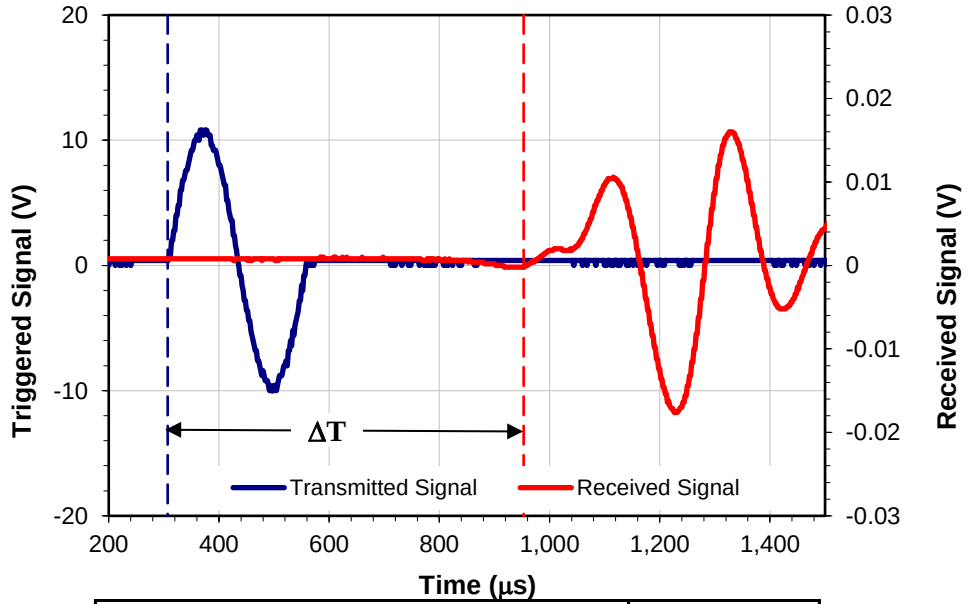
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 80 kPa (Reloading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	3, 4 and 5
Average Travel Time (μs):	659
Travel Distance (mm):	129.2
Shear Wave Velocity (m/sec):	196.1
Sample Bulk Density (t/m^3):	2.09
Shear Modulus (MPa):	80.6

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

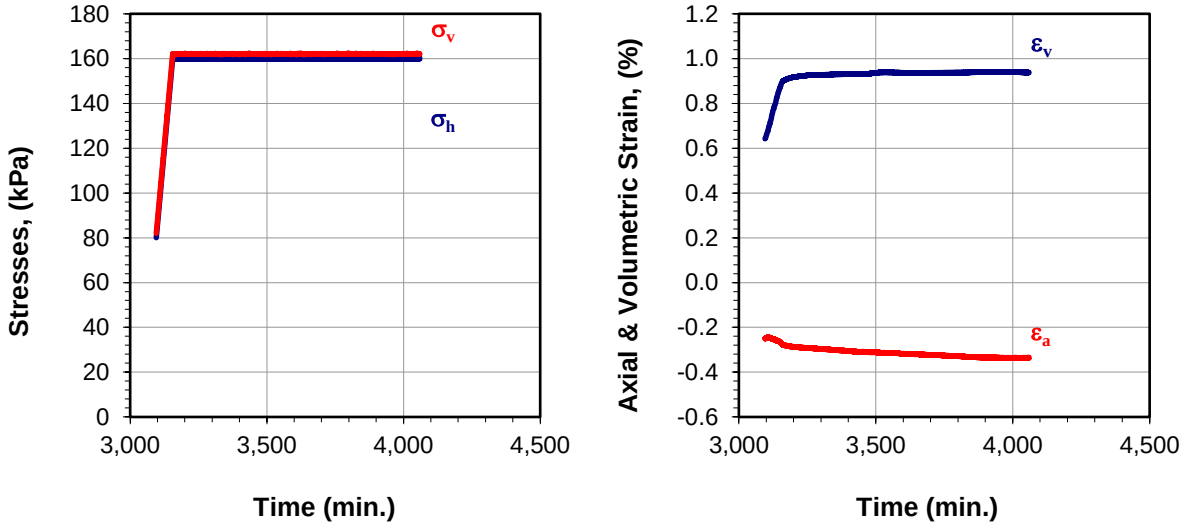
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

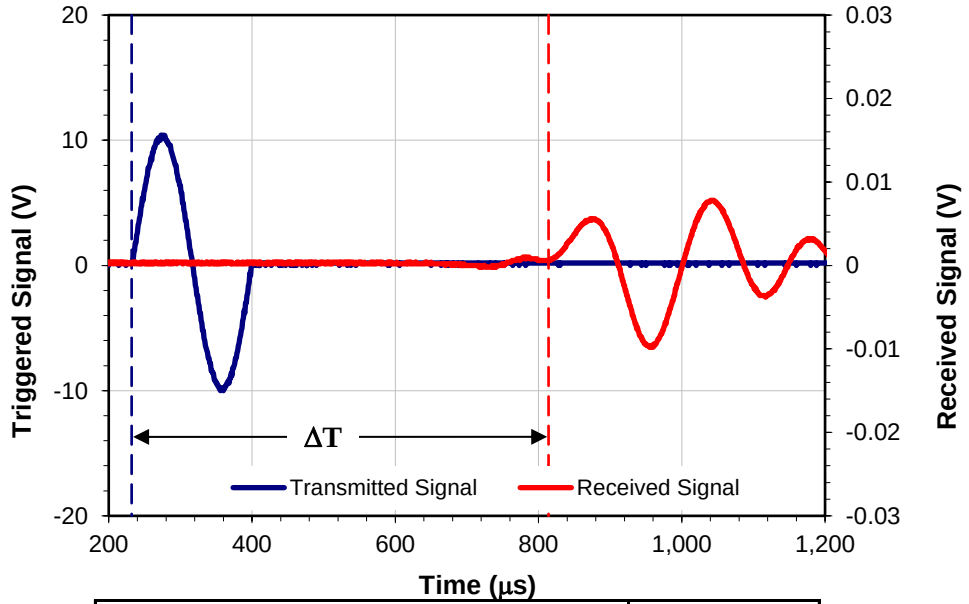
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 160 kPa (Loading).



Bender Element Test at the end of consolidation.



Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	570
Travel Distance (mm):	129.4
Shear Wave Velocity (m/sec):	227.1
Sample Bulk Density (t/m^3):	2.10
Shear Modulus (MPa):	108.2

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

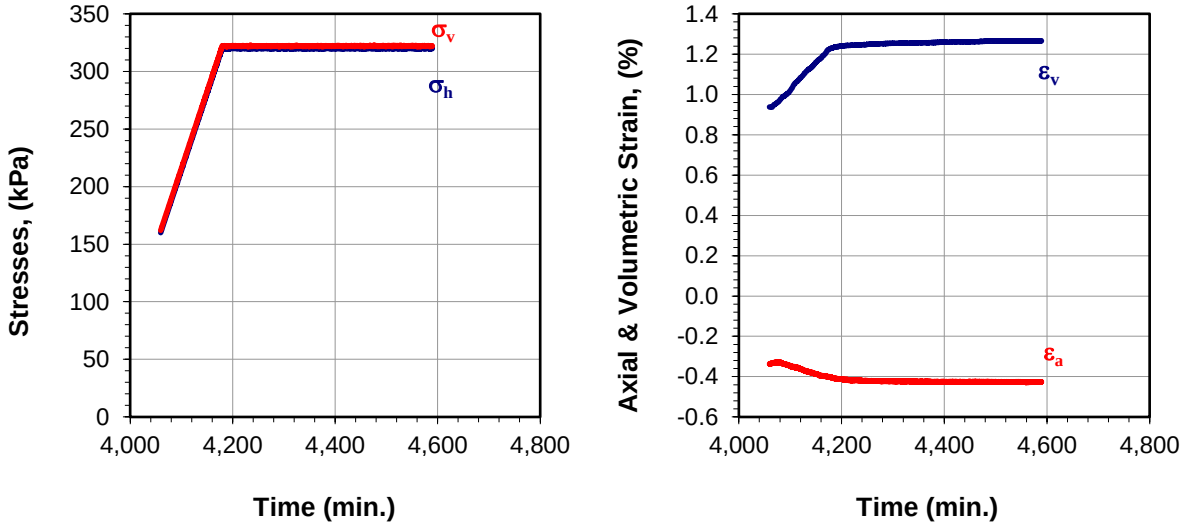
Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

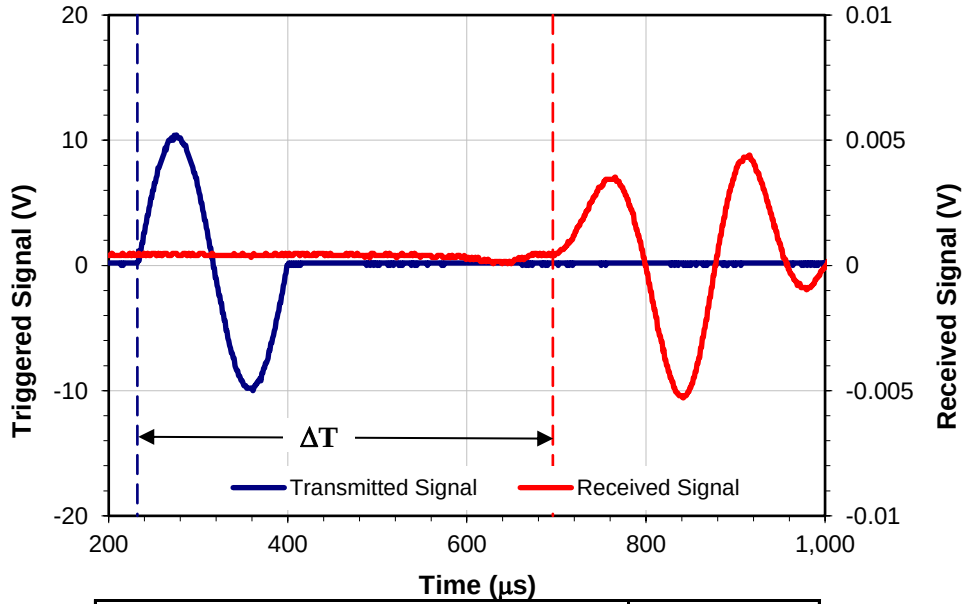
TRIAXIAL TEST

Test Method: AGLab Test Procedure FAM-17864

Consolidation at 320 kPa (Loading).



Bender Element Test at the end of consolidation.



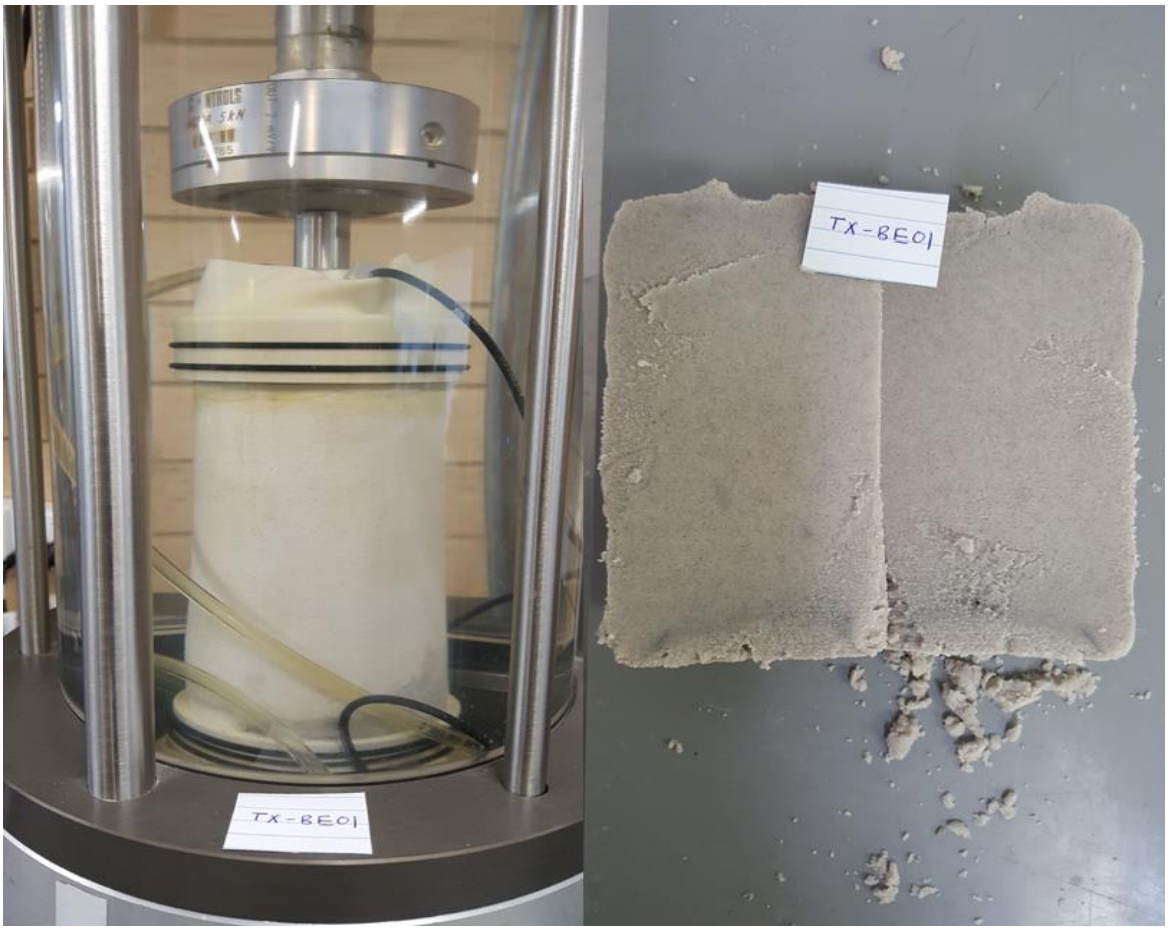
Input Frequency (kHz):	5, 6 and 7
Average Travel Time (μs):	456
Travel Distance (mm):	129.5
Shear Wave Velocity (m/sec):	283.7
Sample Bulk Density (t/m^3):	2.10
Shear Modulus (MPa):	169.2

BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

Triaxial Consolidation and Bender Element

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No:	4E	**Depth:**	6.00 m

TRIAXIAL TEST
Test Method: AGLab Test Procedure FAM-17864
Sample Photographs after the test



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Triaxial Consolidation and Bender Element

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-001
Borehole ID: -
Depth: 6.00 m

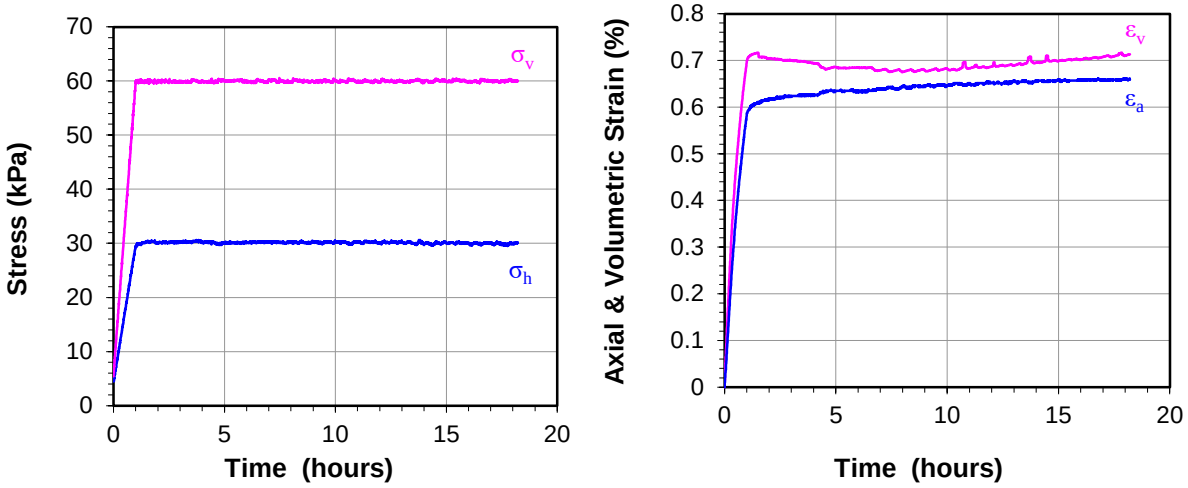
Test Details:		
Test ID:	3D-DSS-01	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Monotonic Shear Rate (%/hr)	5	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

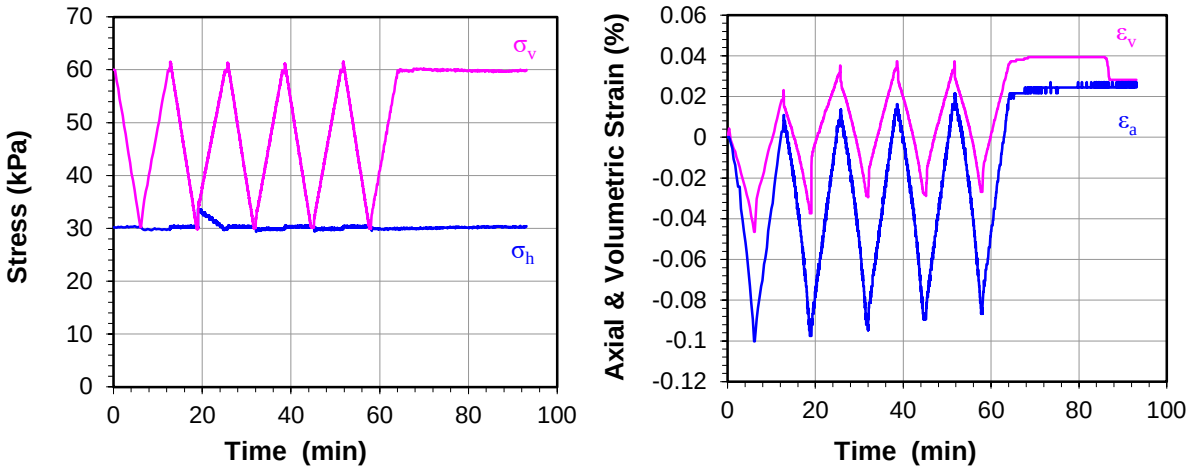
Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.74	1.75
Moisture Content (%) :	19.1	19.9
Tested By:	SF/SRJ	
Date:	25/11/2019	
Checked By:	TC	
Date:	23/06/2020	

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



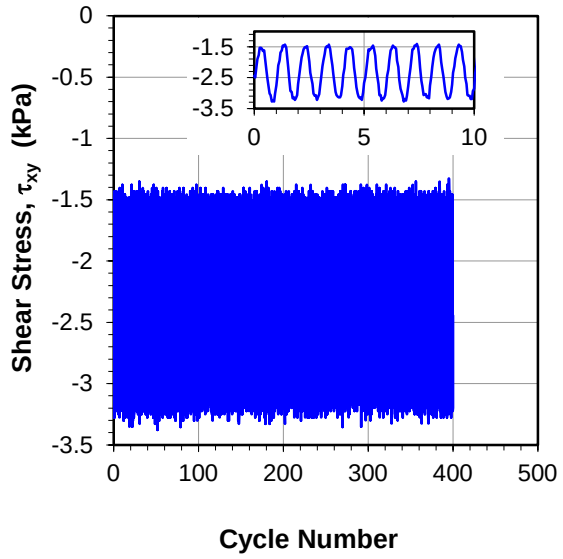
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

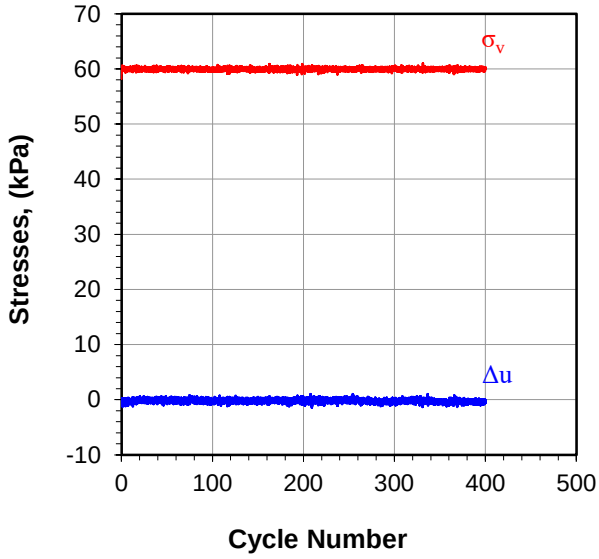
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

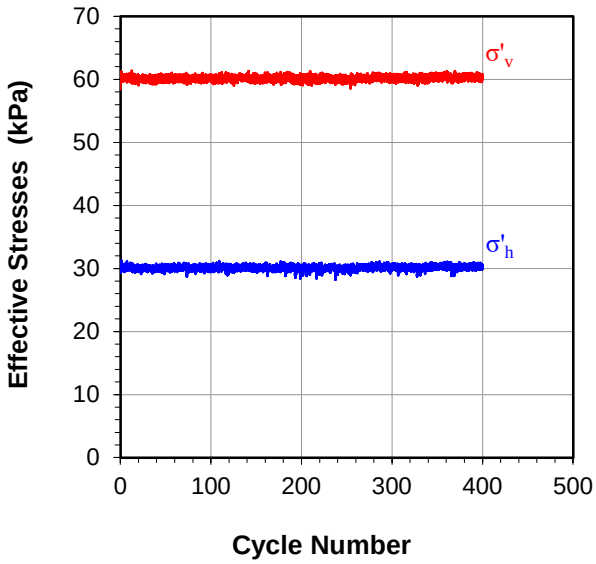
IPO Number: 2019-030
Sample ID: 2019-030-001
Borehole ID: -
Depth: 6.00 m

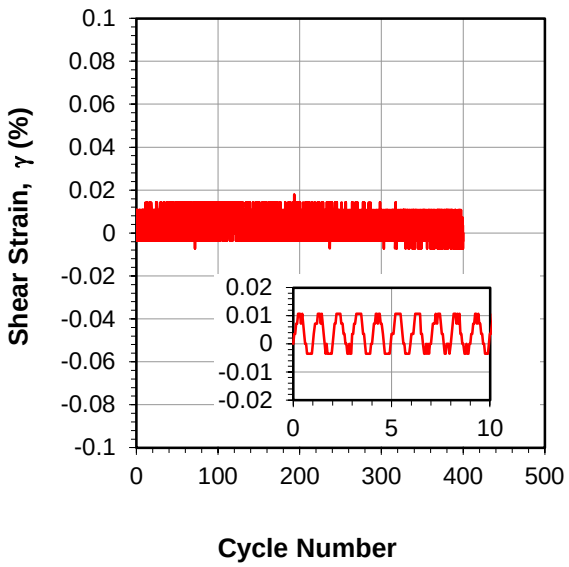
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 3: Drained Pre-shearing Stage 2









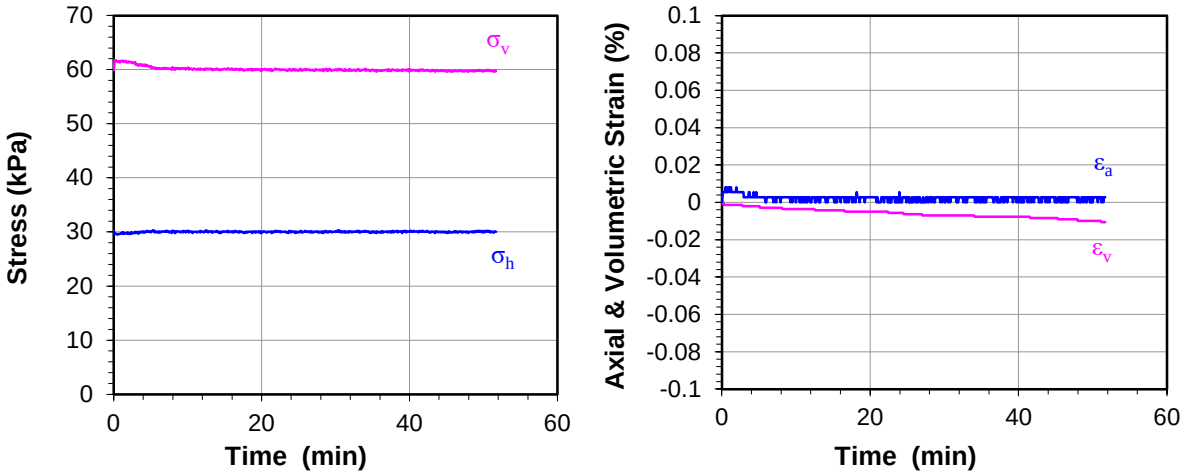
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-001
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 4: Reconsolidation and Pore Pressure Equalization

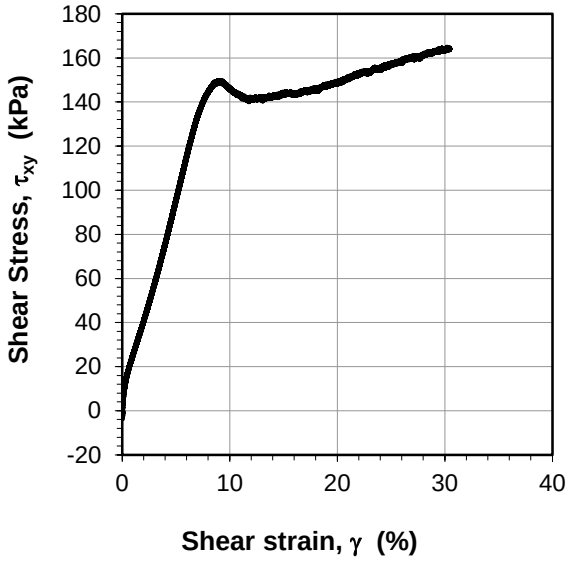


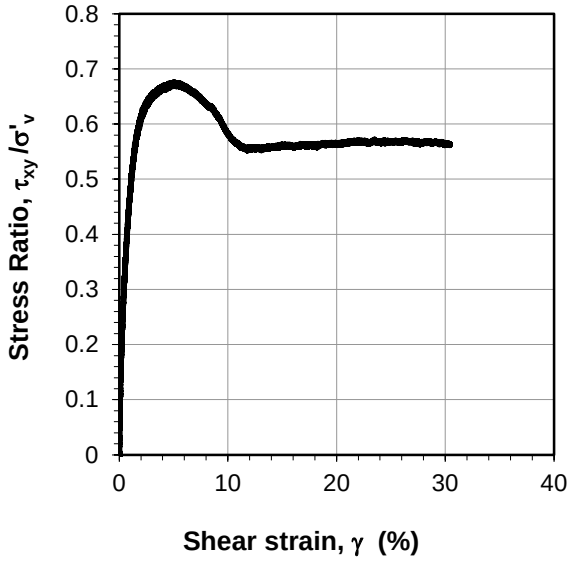
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

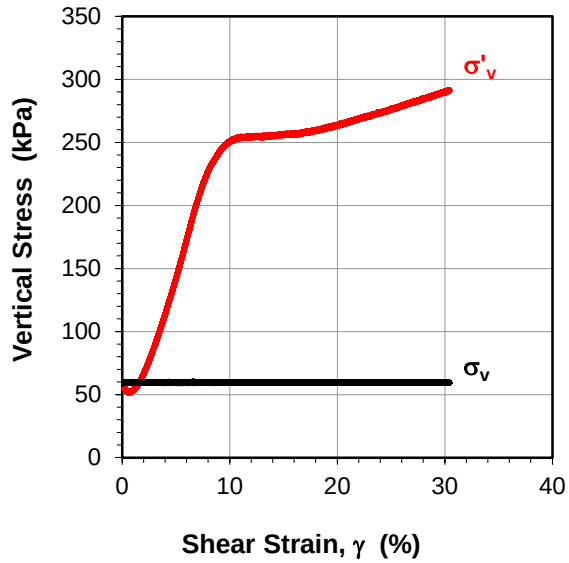
Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-001
		Borehole ID:	-
Sample No.:	3D	**Depth:**	6.00 m

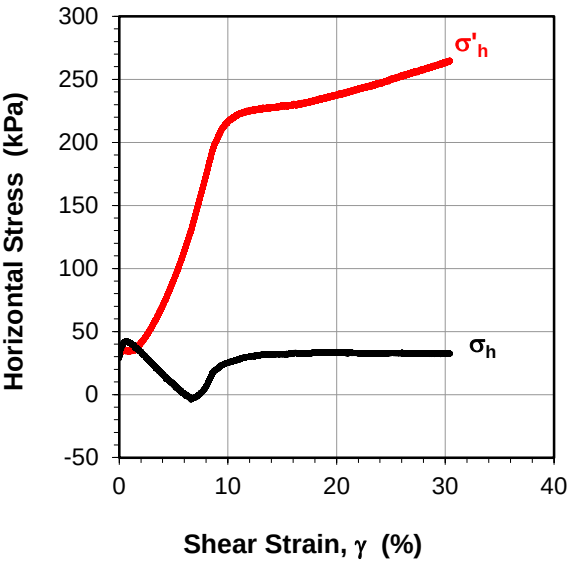
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Undrained Monotonic Shearing









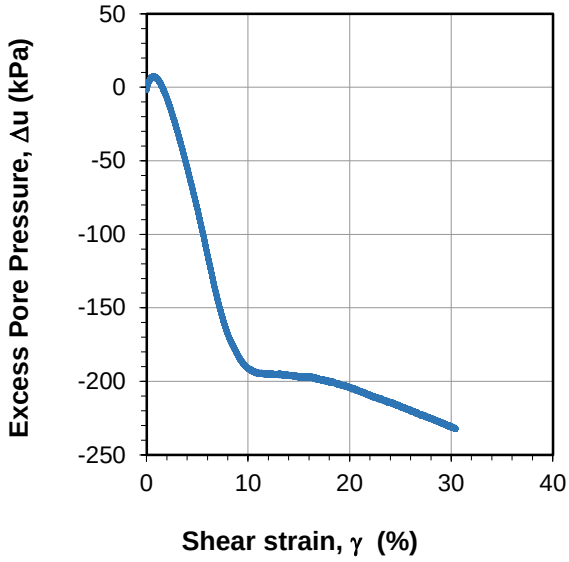
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

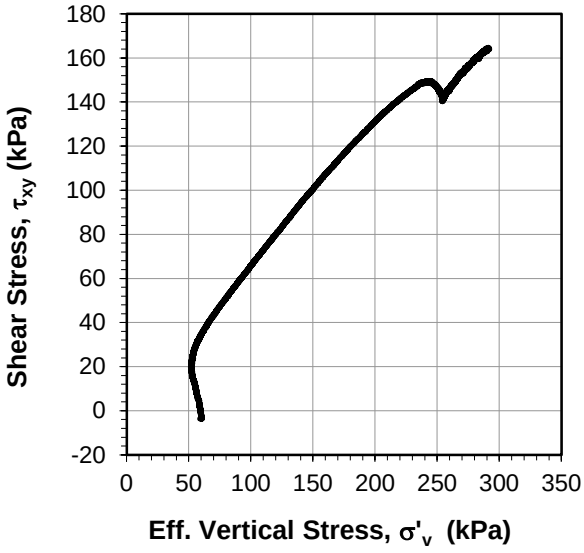
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-001
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Monotonic Shearing





BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-002
Borehole ID: -
Depth: 6.00 m

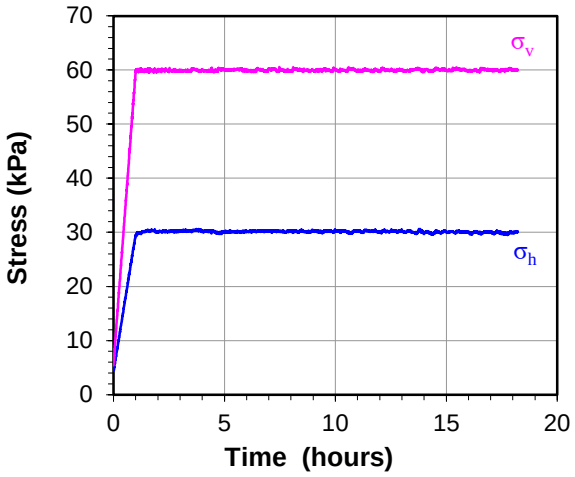
Test Details:		
Test ID:	4D-DSS-02	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Monotonic Shear Rate (%/hr)	5	

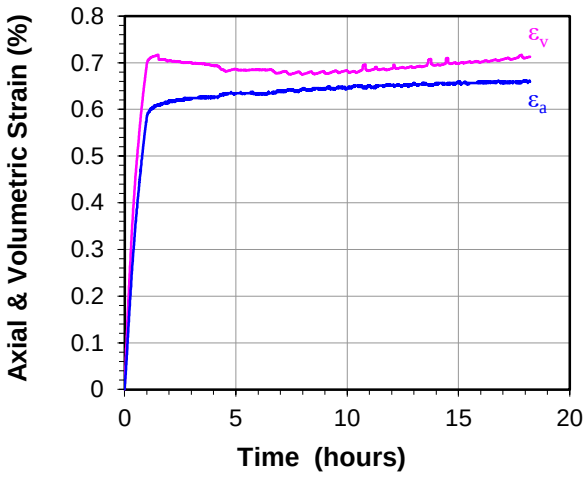
Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.73	1.75
Moisture Content (%) :	18.8 *	20.1
Tested By:	SF	
Date:	25/11/2019	
Checked By:	TC	
Date:	23/06/2020	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

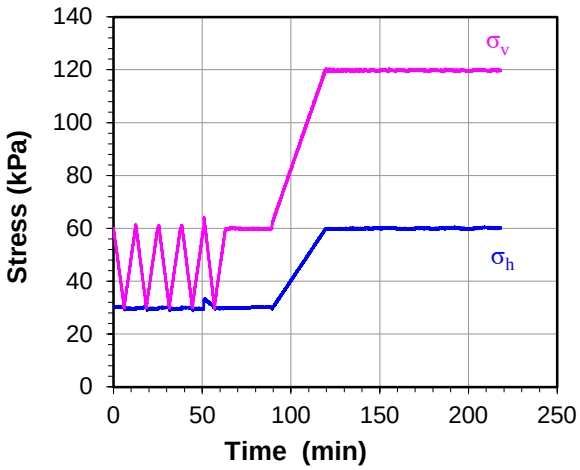
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

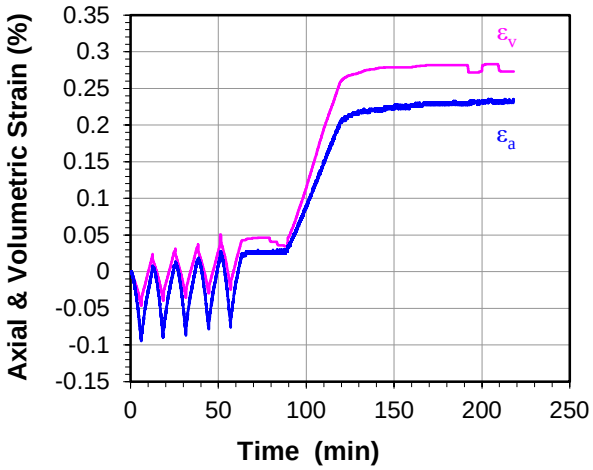
Step 1: Consolidation





Step 2: Drained Pre-shearing Stage 1 and Reconsolidation





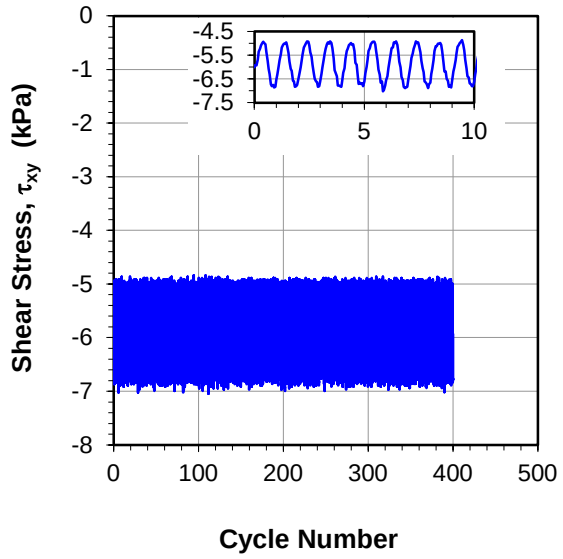
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

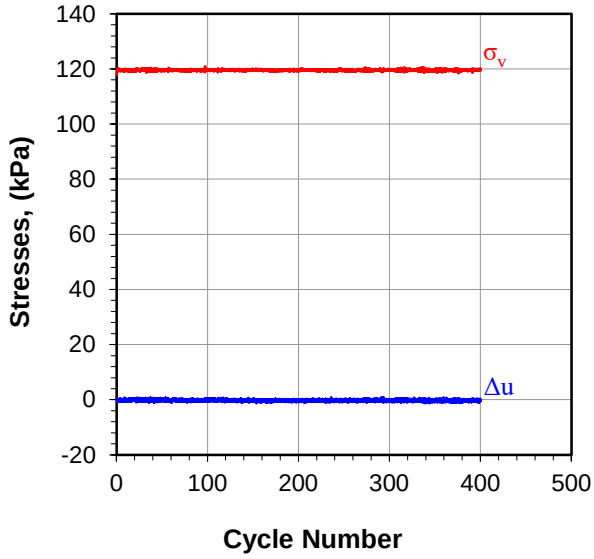
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

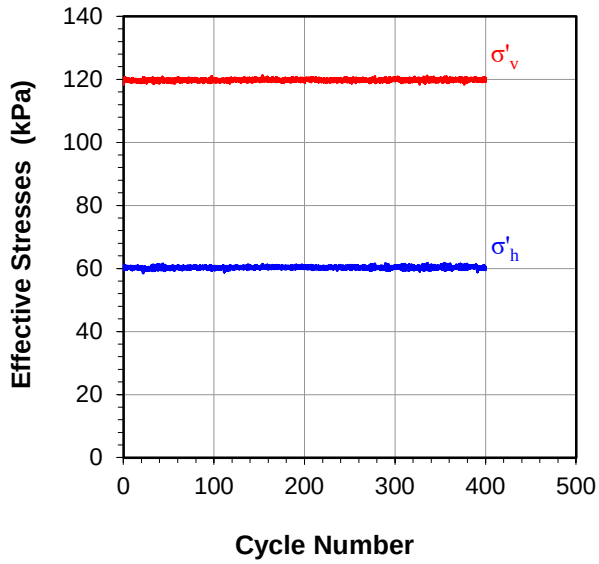
IPO Number: 2019-030
Sample ID: 2019-030-002
Borehole ID: -
Depth: 6.00 m

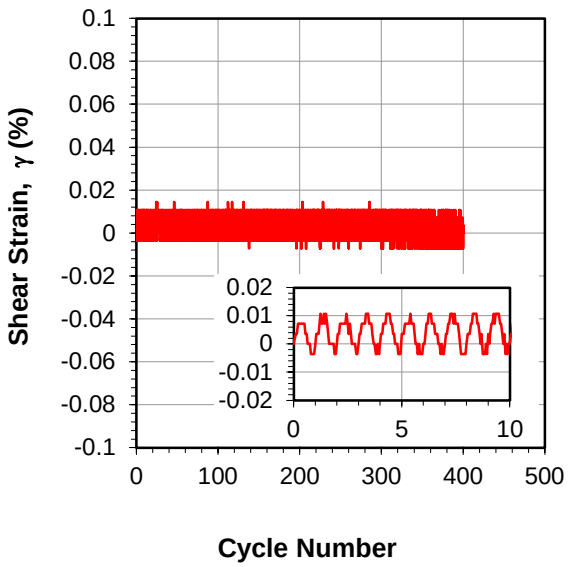
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 3: Drained Pre-shearing Stage 2









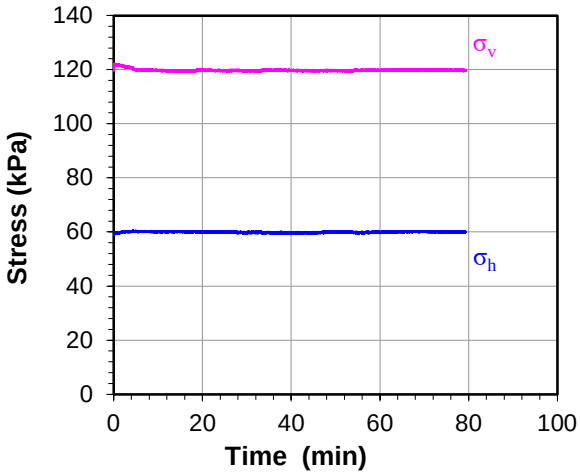
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

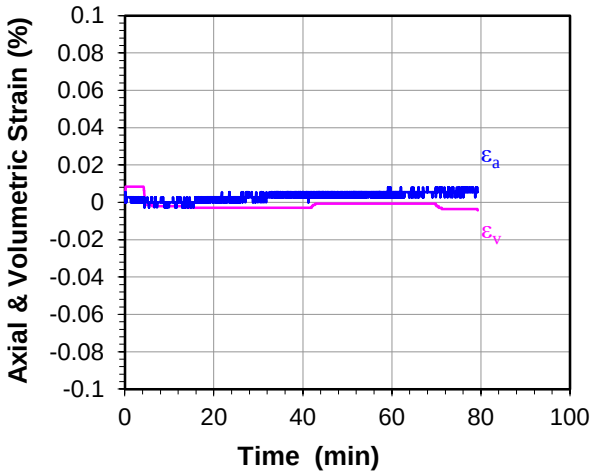
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-002
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 4: Reconsolidation and Pore Pressure Equalization





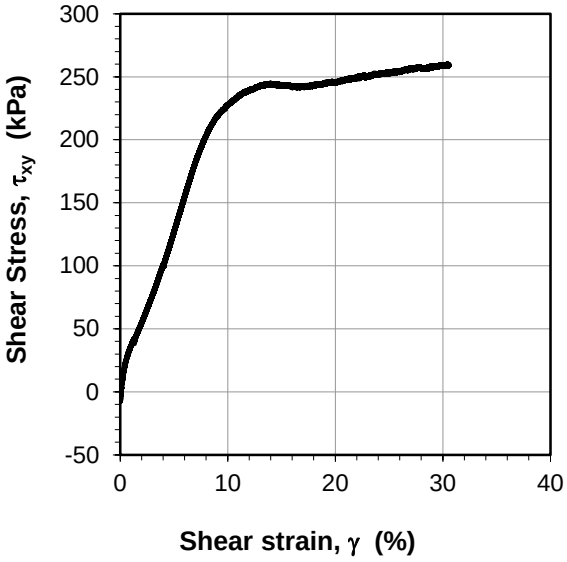
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

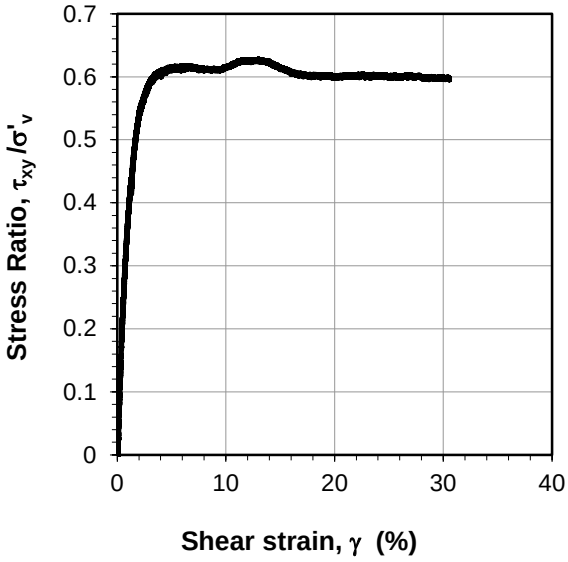
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

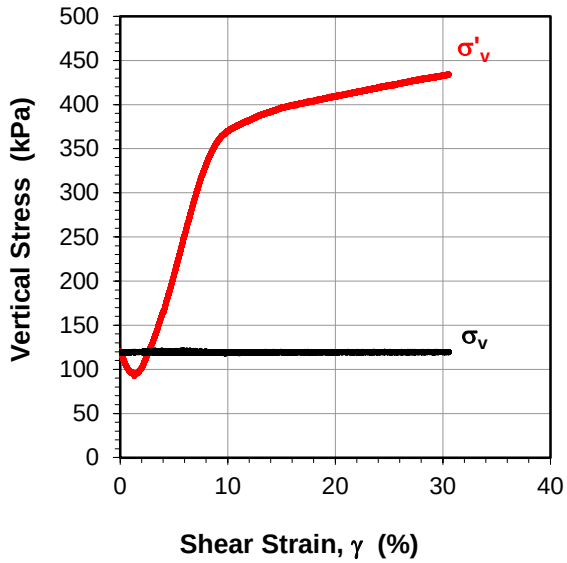
IPO Number: 2019-030
Sample ID: 2019-030-002
Borehole ID: -
Depth: 6.00 m

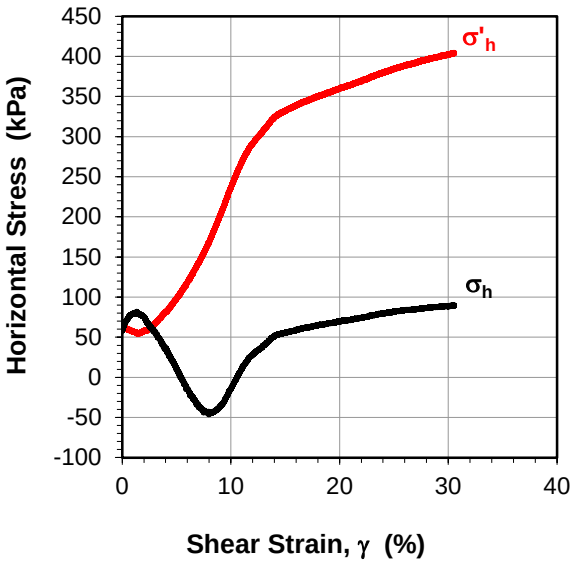
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Undrained Monotonic Shearing









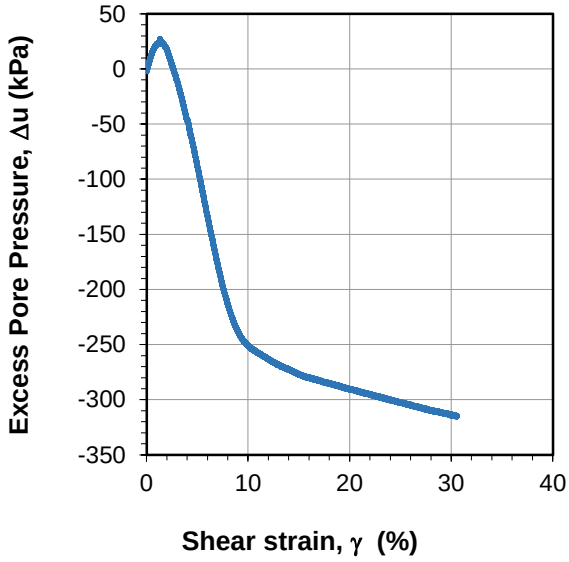
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

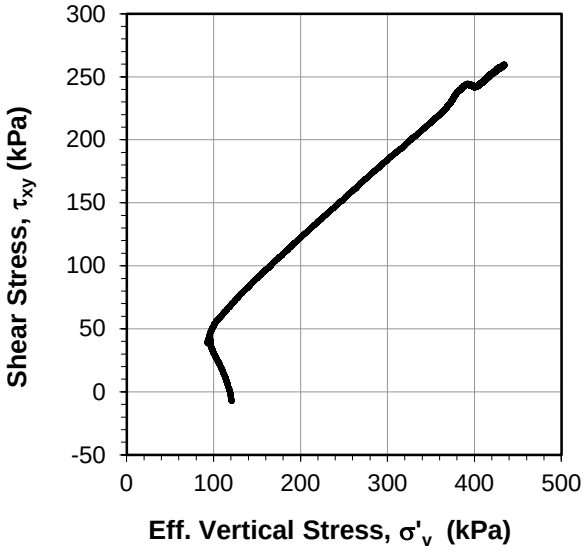
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-002
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Monotonic Shearing





BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-003
Borehole ID: -
Depth: 6.00 m

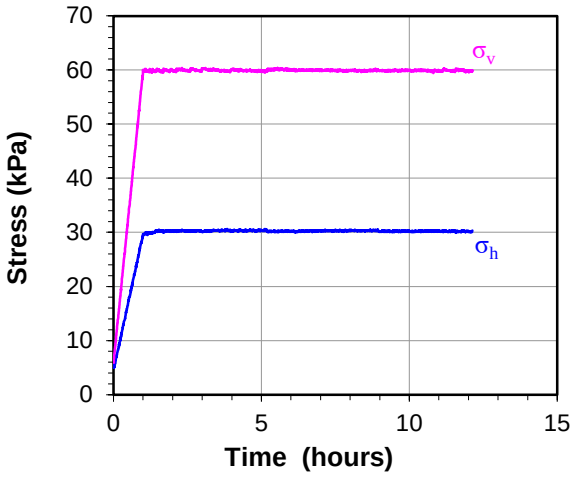
Test Details:		
Test ID:	3D-DSS-03	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Monotonic Shear Rate (%/hr)	2000	

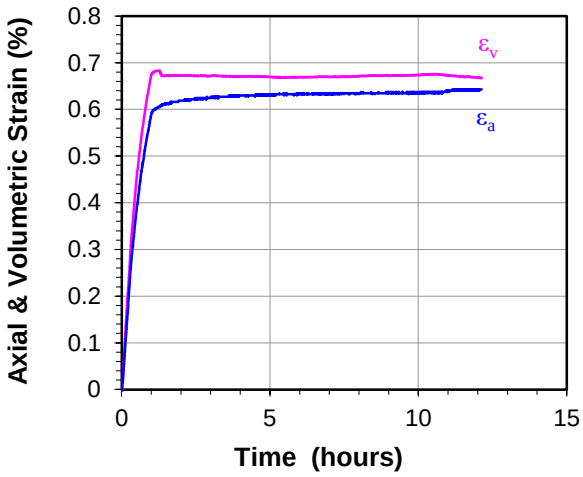
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.78	1.79
Moisture Content (%) :	18.1 *	19.5
Tested By:	SF	
Date:	27/11/2019	
Checked By:	TC	
Date:	23/06/2020	

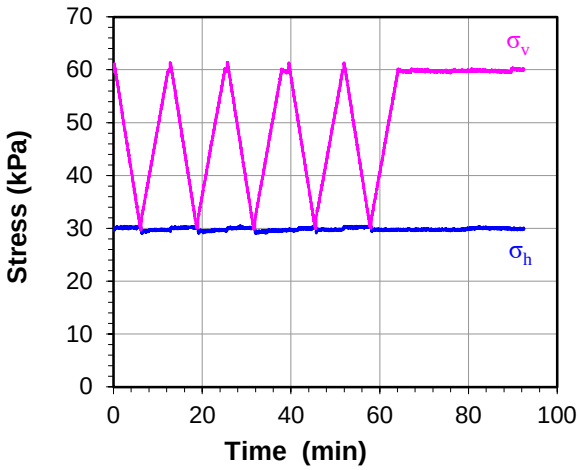
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

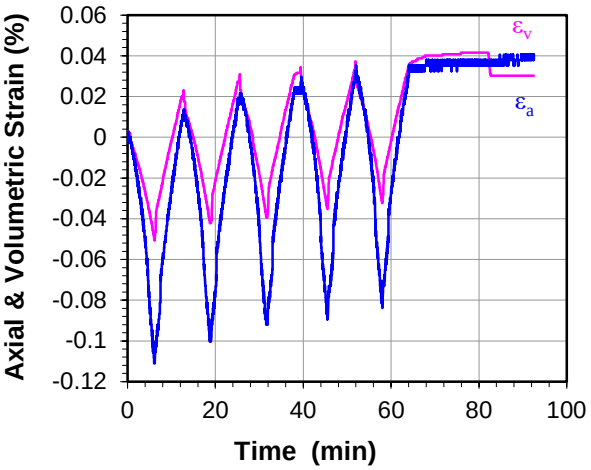
Step 1: Consolidation





Step 2: Drained Pre-shearing Stage 1 and Reconsolidation





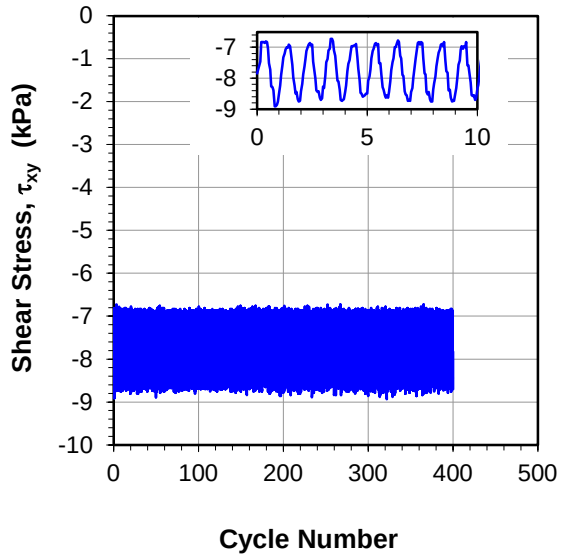
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

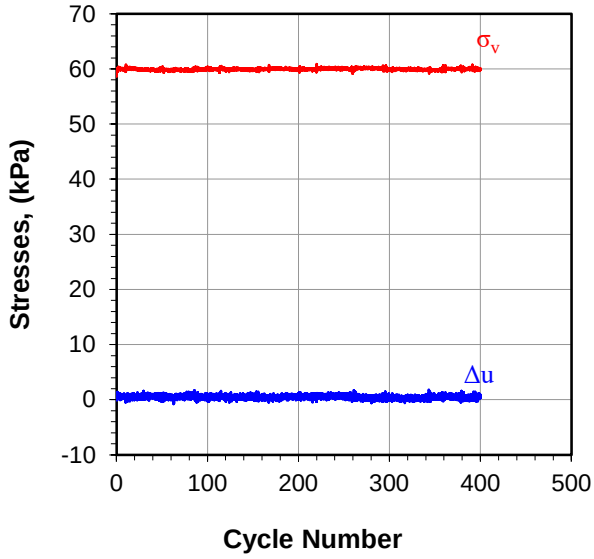
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

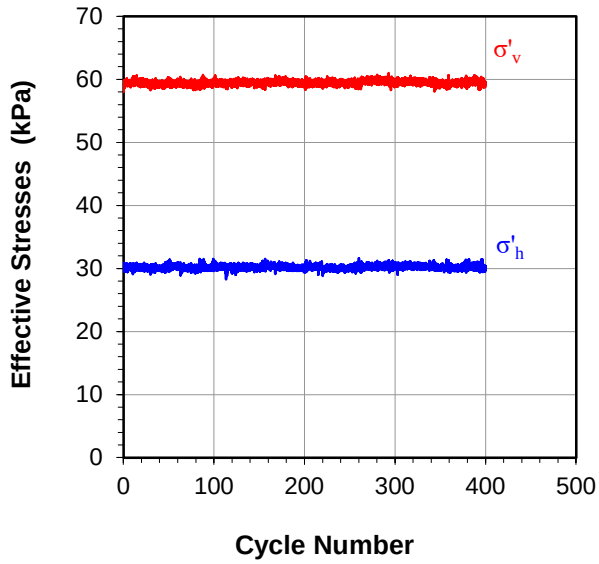
IPO Number: 2019-030
Sample ID: 2019-030-003
Borehole ID: -
Depth: 6.00 m

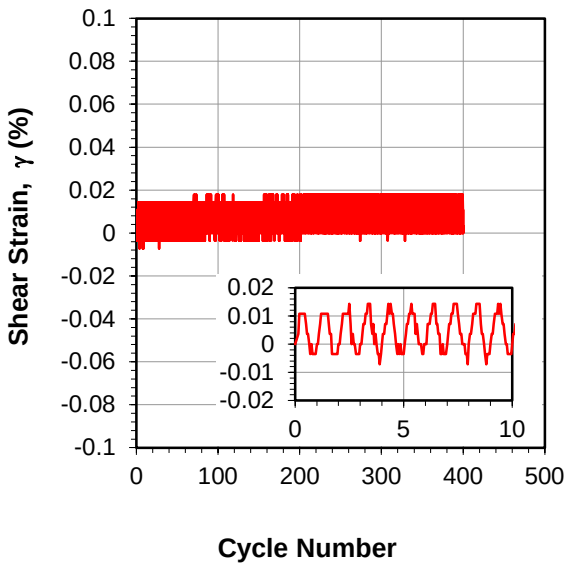
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 3: Drained Pre-shearing Stage 2









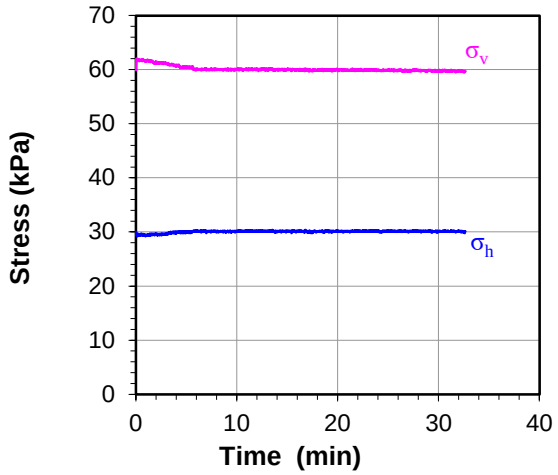
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

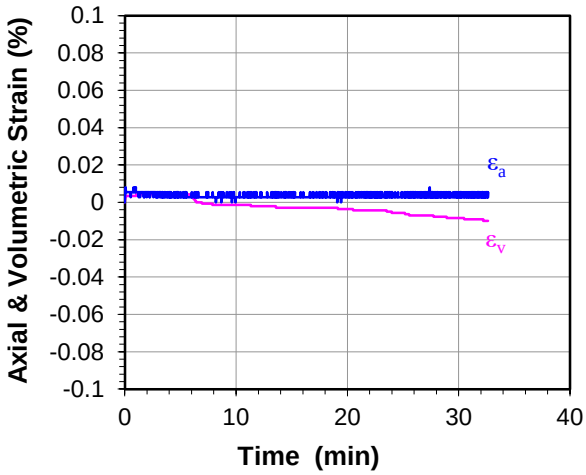
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-003
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 4: Reconsolidation and Pore Pressure Equalization

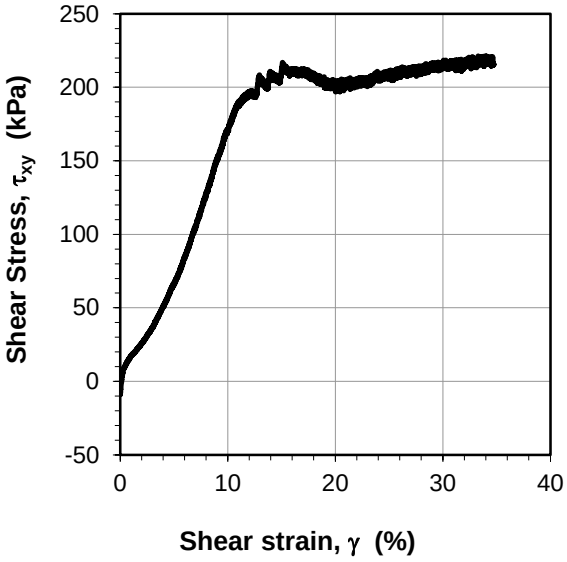


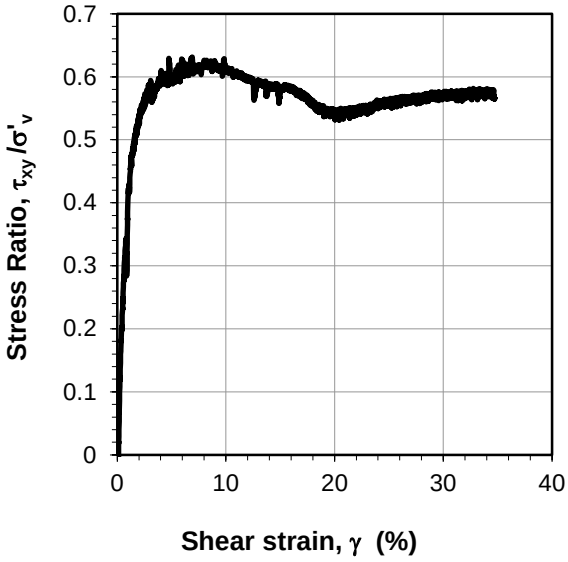


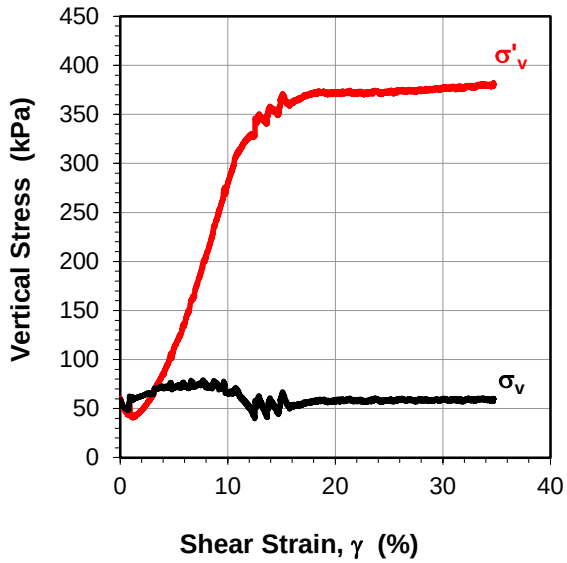
Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-003
		Borehole ID:	-
Sample No.:	3D	**Depth:**	6.00 m

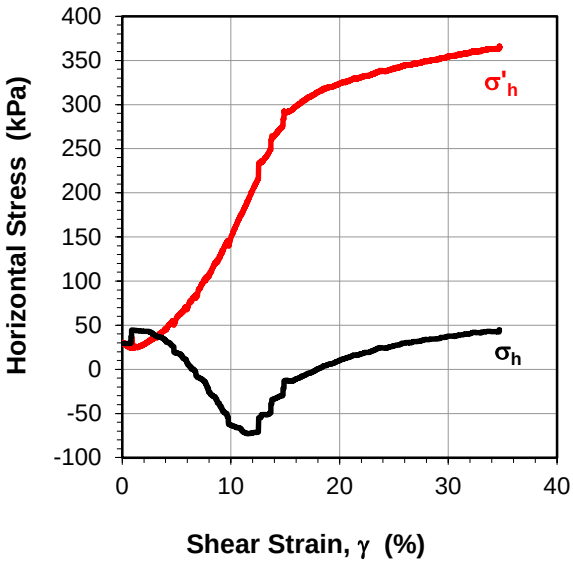
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Undrained Monotonic Shearing









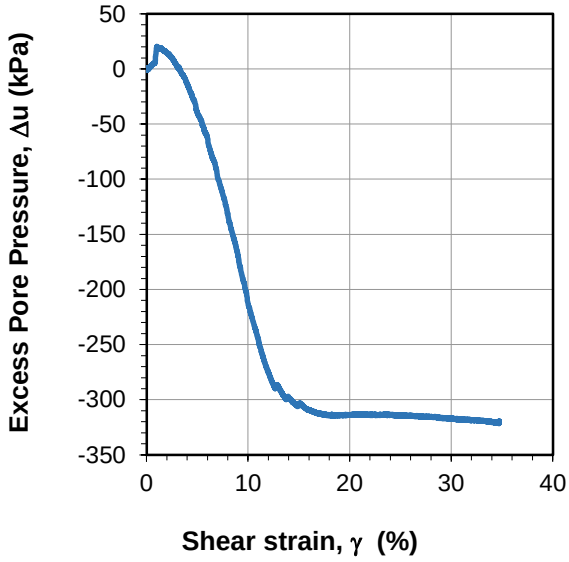
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

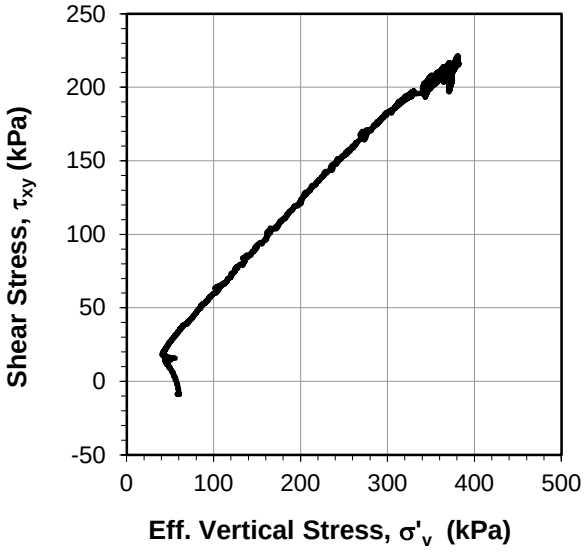
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-003
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Monotonic Shearing





BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-004
Borehole ID: -
Depth: 6.00 m

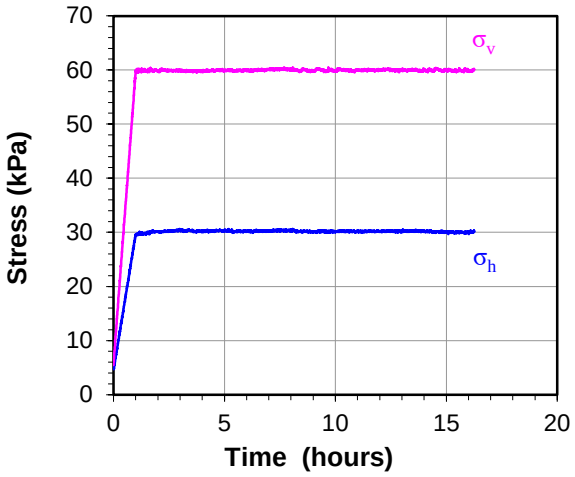
Test Details:		
Test ID:	4D-DSS-04	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Monotonic Shear Rate (%/hr)	2000	

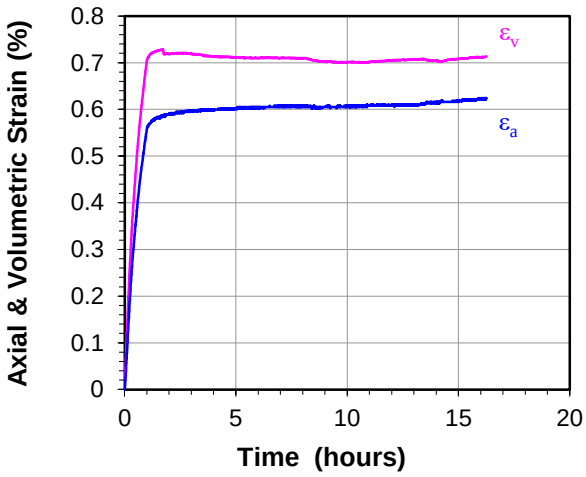
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.72	1.73
Moisture Content (%) :	20.1 *	19.9
Tested By:	SF	
Date:	02/12/2019	
Checked By:	TC	
Date:	23/06/2020	

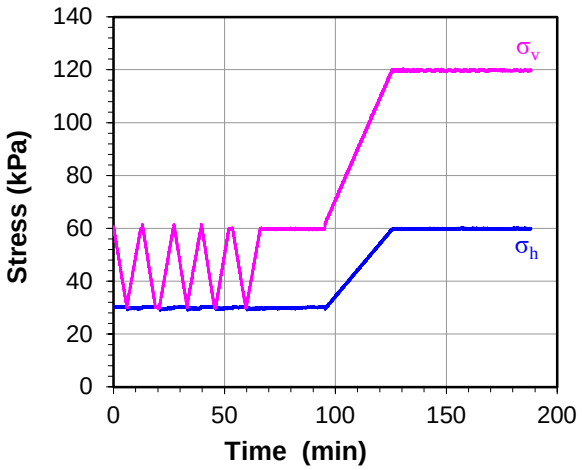
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

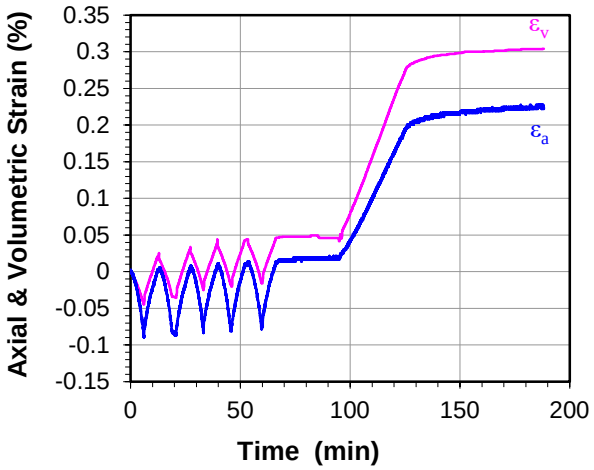
Step 1: Consolidation





Step 2: Drained Pre-shearing Stage 1 and Reconsolidation





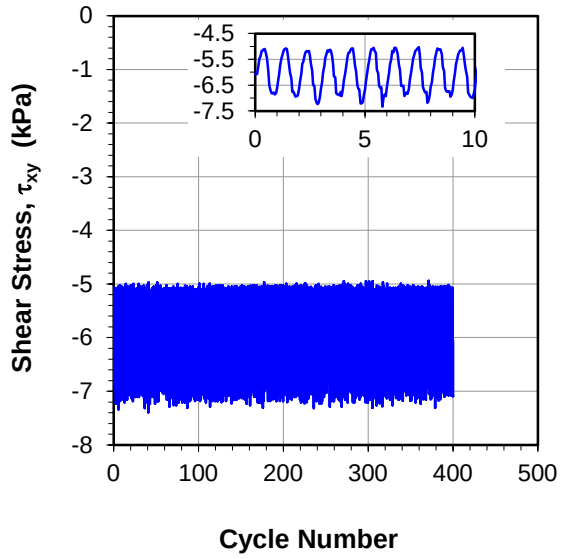
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

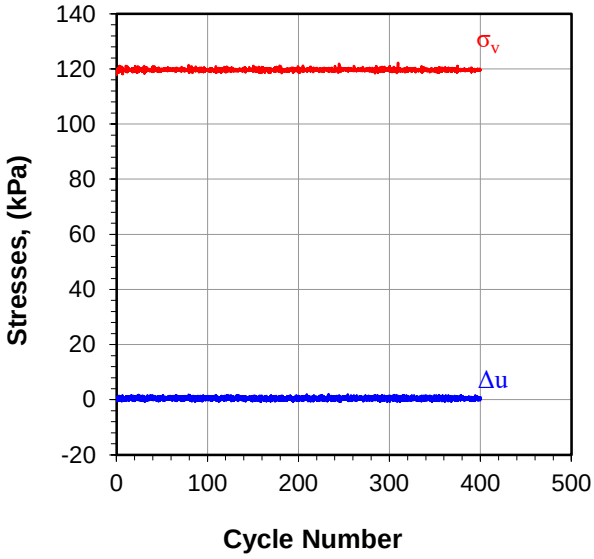
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

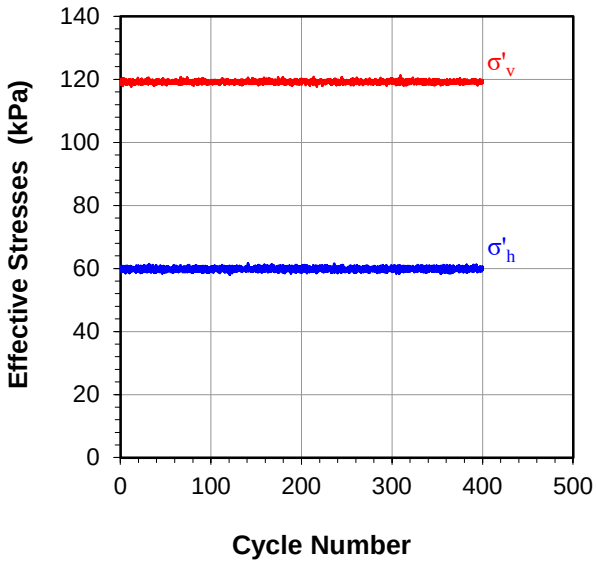
IPO Number: 2019-030
Sample ID: 2019-030-004
Borehole ID: -
Depth: 6.00 m

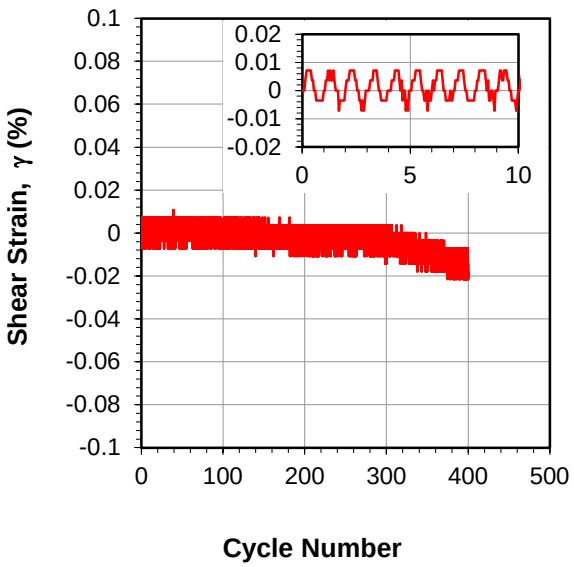
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 3: Drained Pre-shearing Stage 2









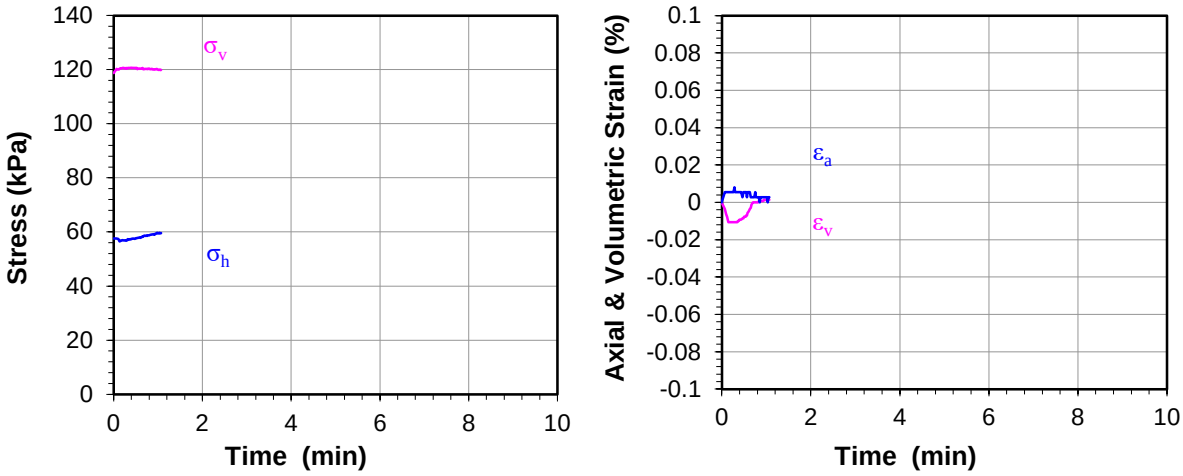
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-004
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 4: Reconsolidation and Pore Pressure Equalization



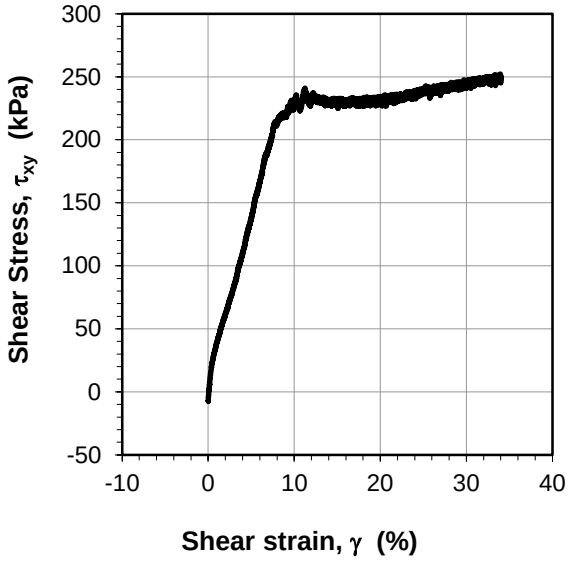
Note: Consolidation data after one minute is not available due to data loss.

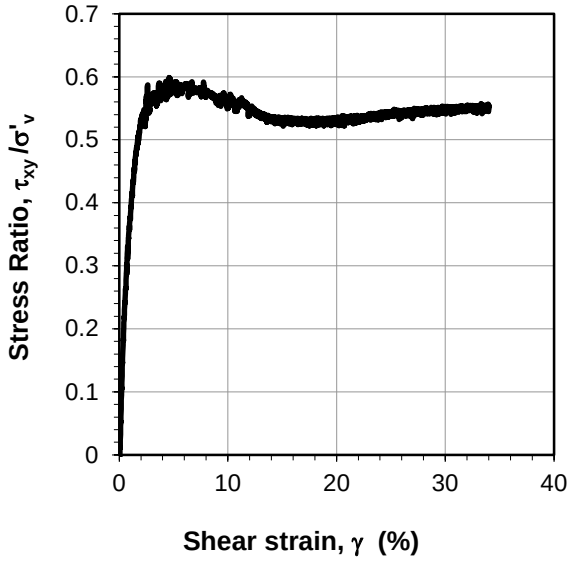
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

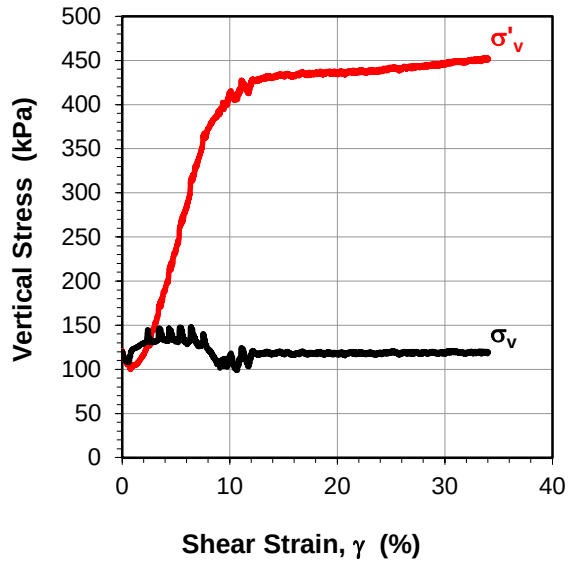
IPO Number: 2019-030
Sample ID: 2019-030-004
Borehole ID: -
Depth: 6.00 m

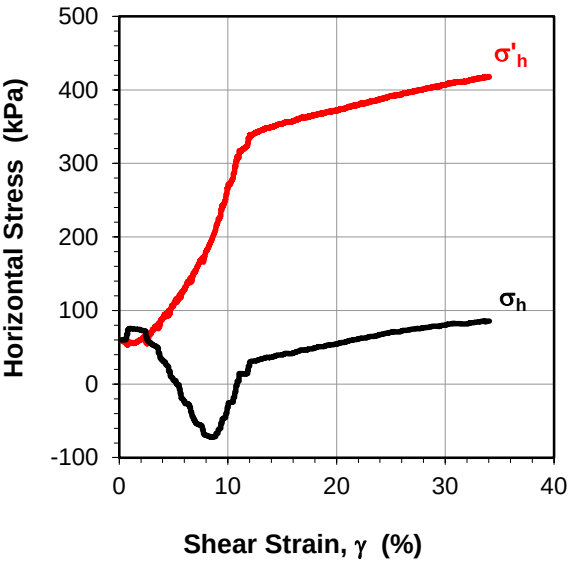
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Undrained Monotonic Shearing









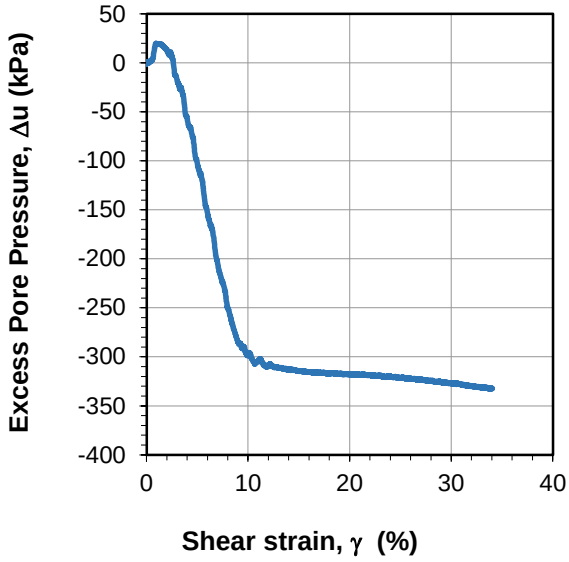
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

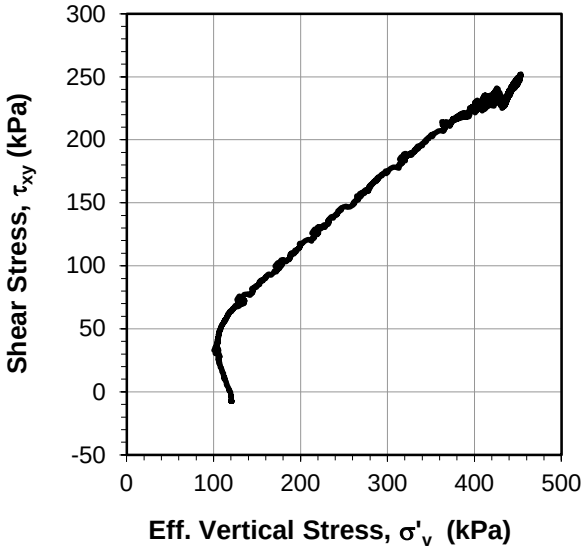
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-004
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-17870

Step 5: Monotonic Shearing





BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Monotonic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-005
Borehole ID: -
Depth: 6.00 m

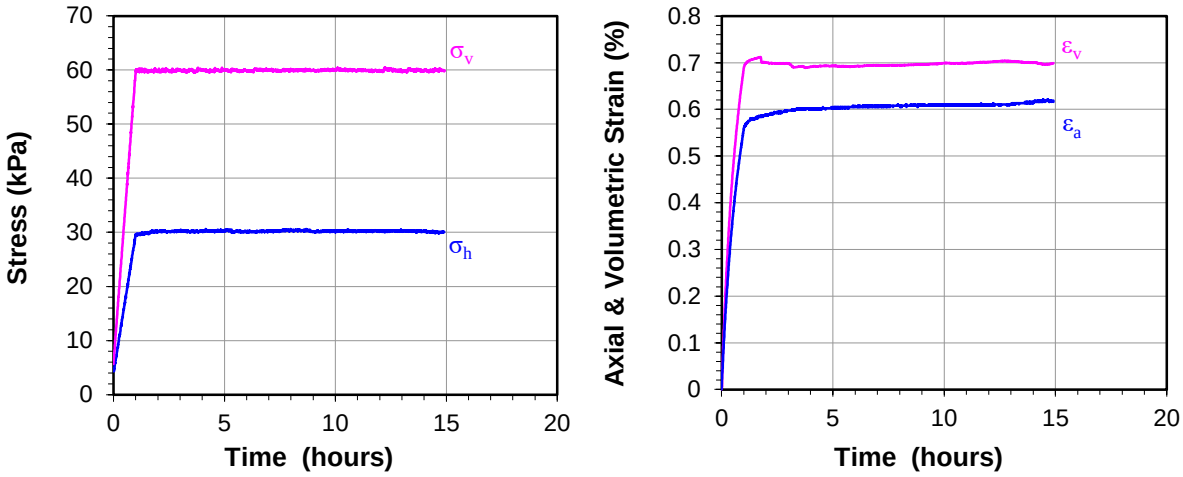
Test Details:		
Test ID:	3E-DSS-05R	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	0 to 80	

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.73	1.74
Moisture Content (%) :	19.8 *	19.8
Tested By:	SF	
Date:	13/12/2019	
Checked By:	TC	
Date:	23/06/2020	

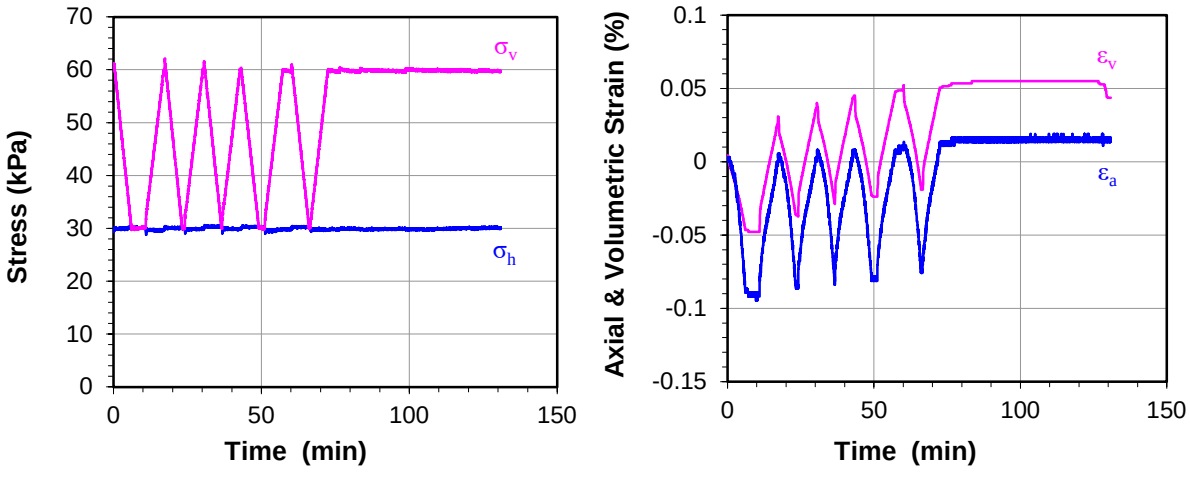
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



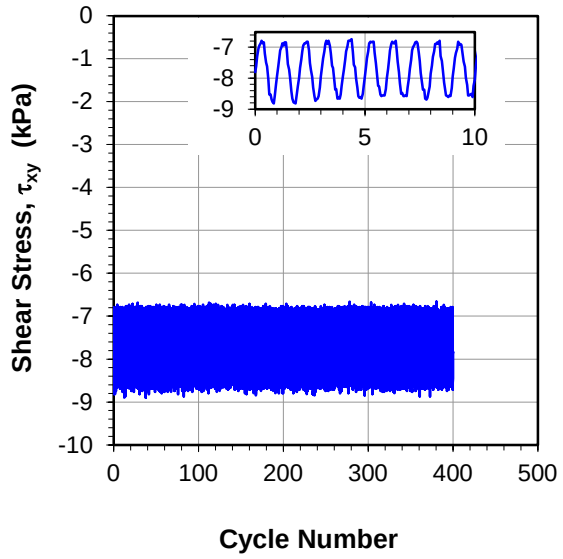
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

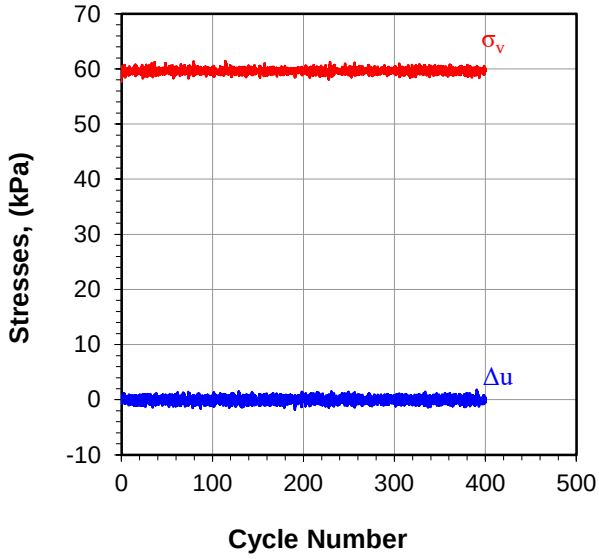
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

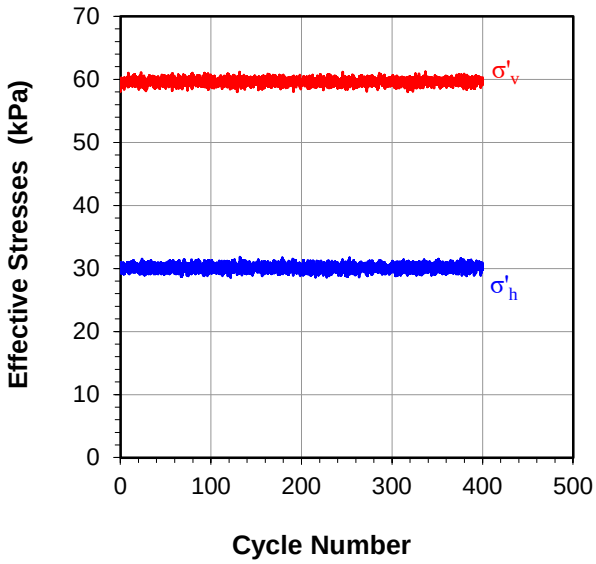
IPO Number: 2019-030
Sample ID: 2019-030-005
Borehole ID: -
Depth: 6.00 m

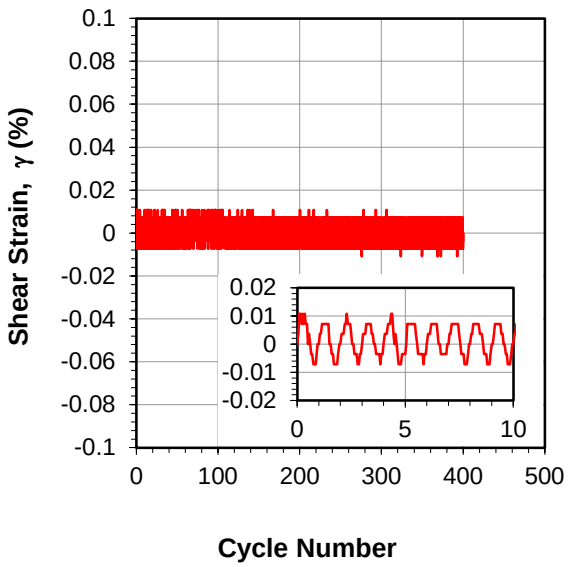
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









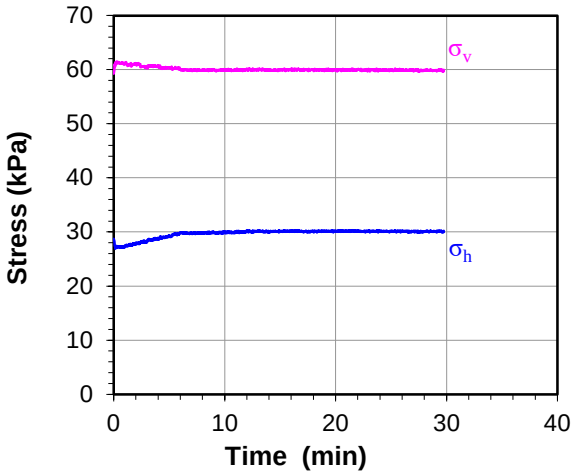
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

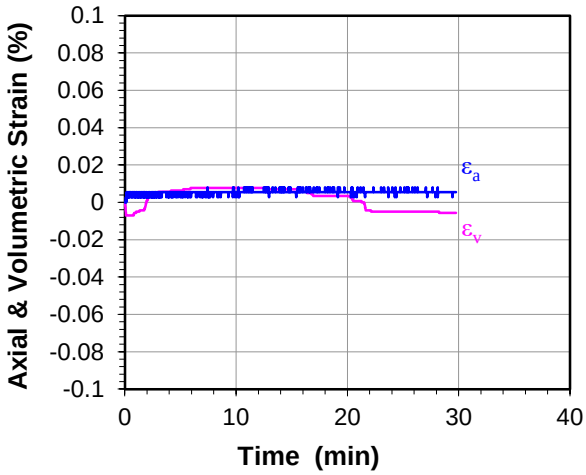
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-005
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





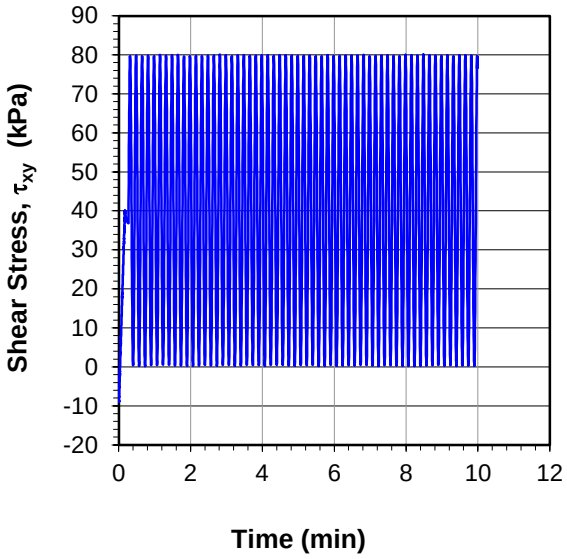
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

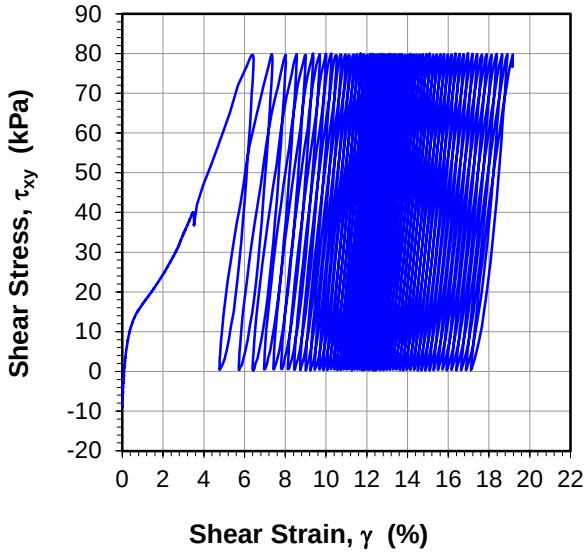
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

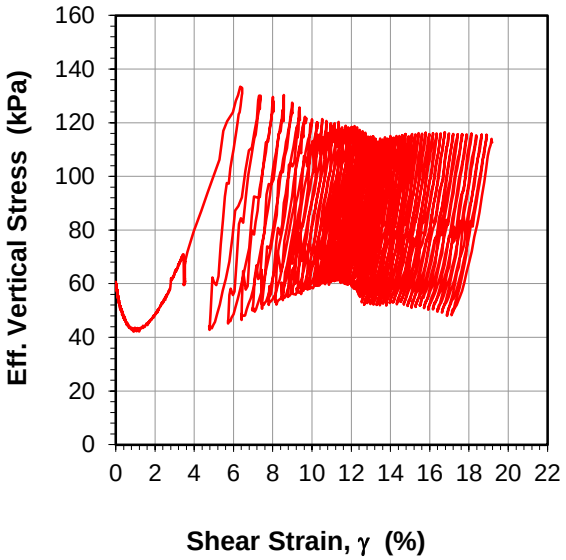
IPO Number: 2019-030
Sample ID: 2019-030-005
Borehole ID: -
Depth: 6.00 m

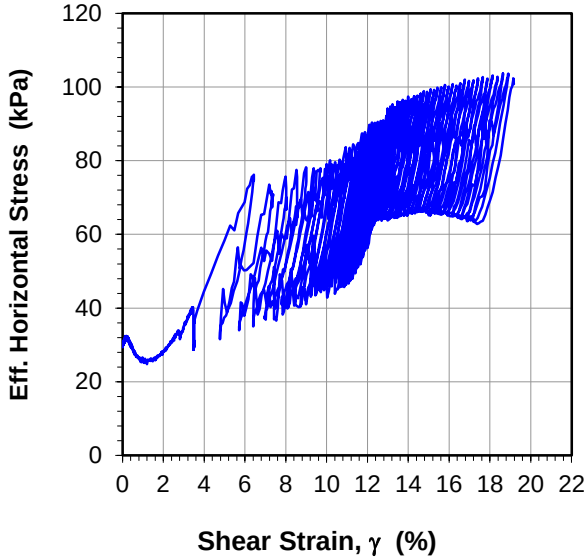
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









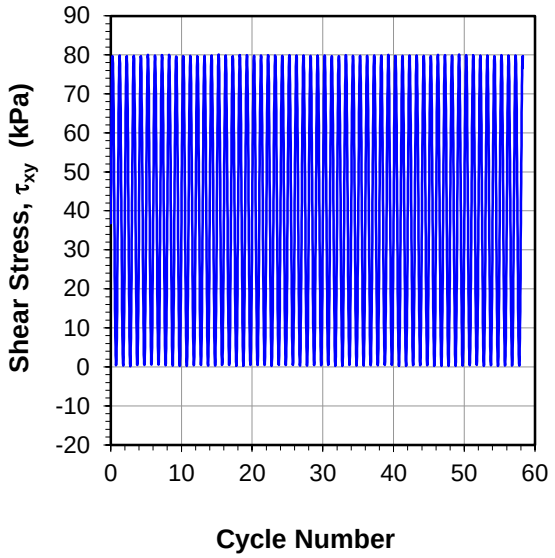
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

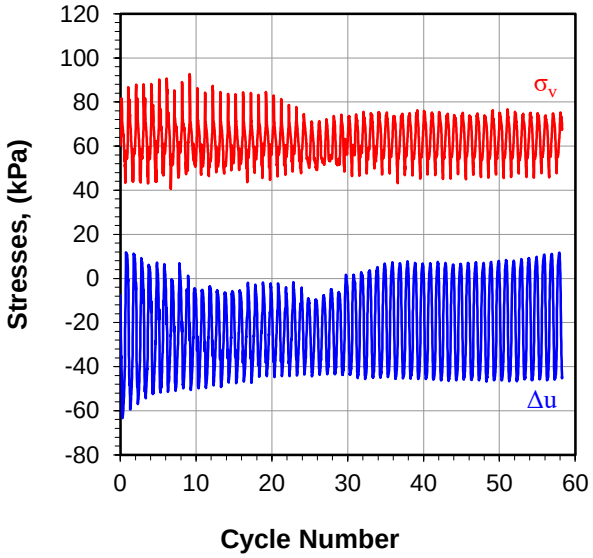
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

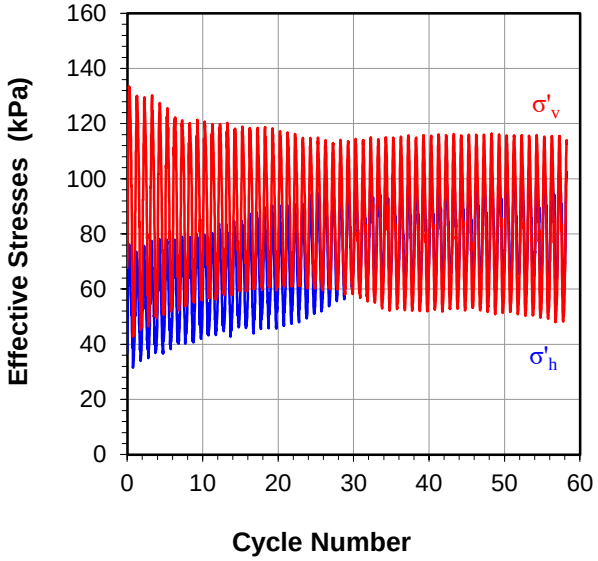
IPO Number: 2019-030
Sample ID: 2019-030-005
Borehole ID: -
Depth: 6.00 m

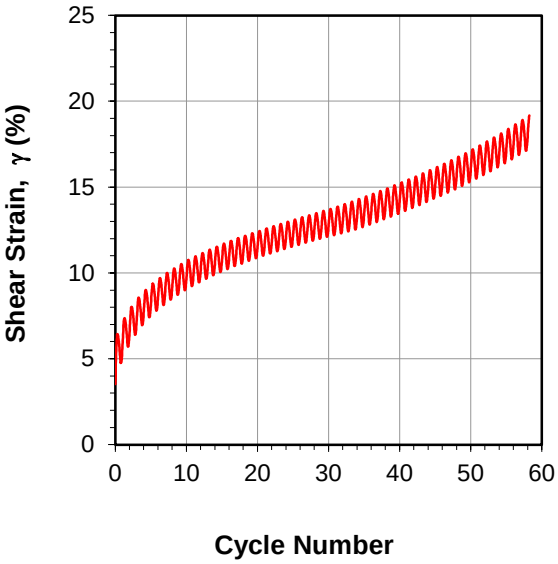
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







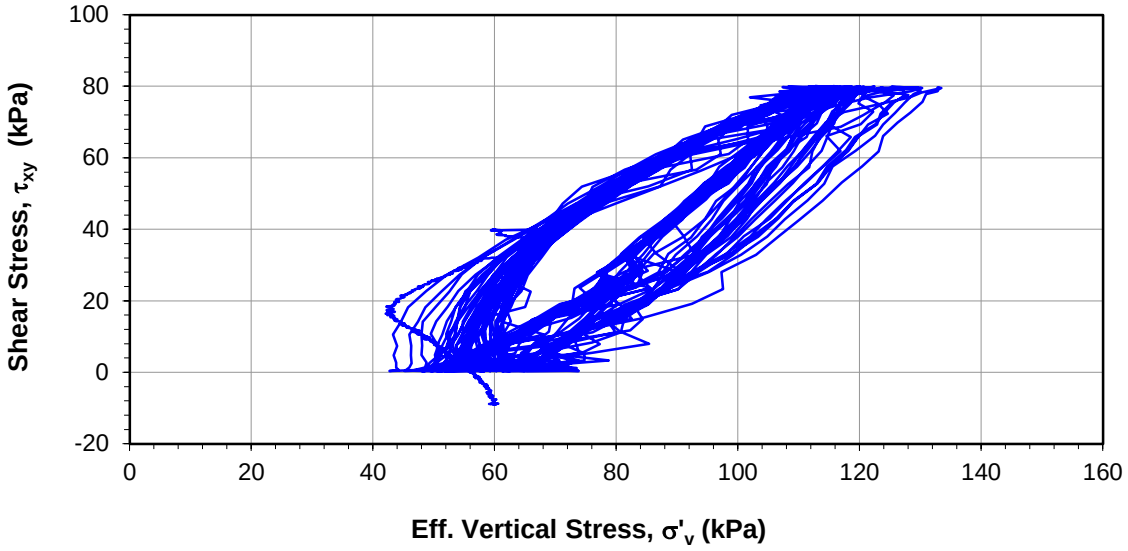


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-005
		Borehole ID:	-
Sample No.:	2D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

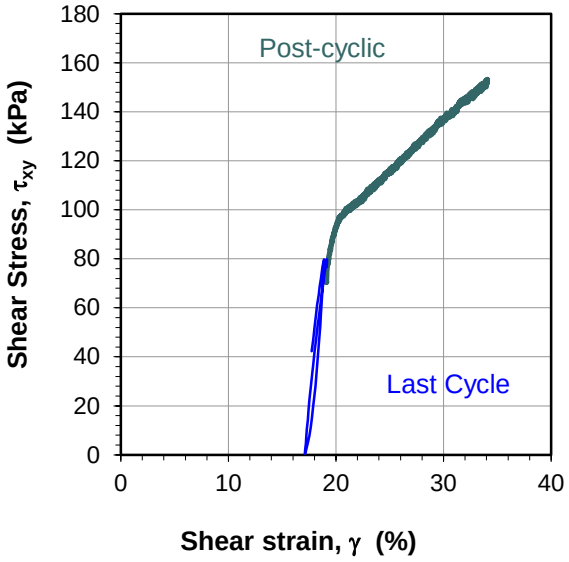
Step 5: Undrained Cyclic Shearing Stage

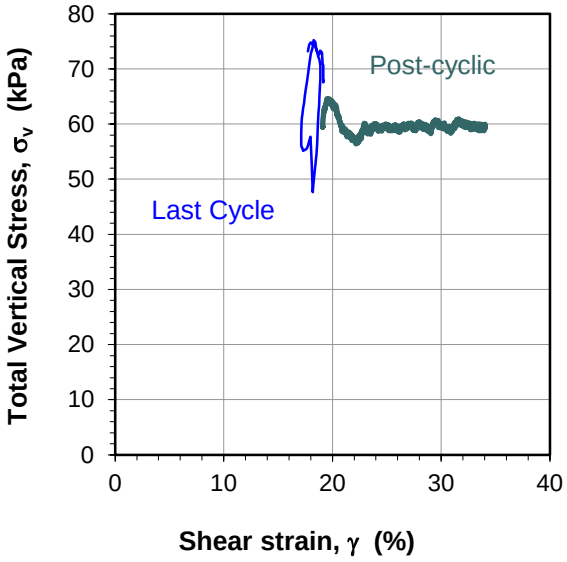


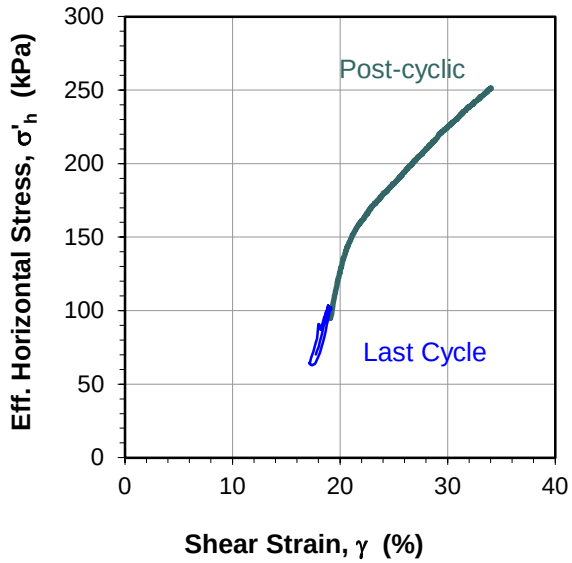
Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-005
		Borehole ID:	-
Sample No.:	2D	**Depth:**	6.00 m

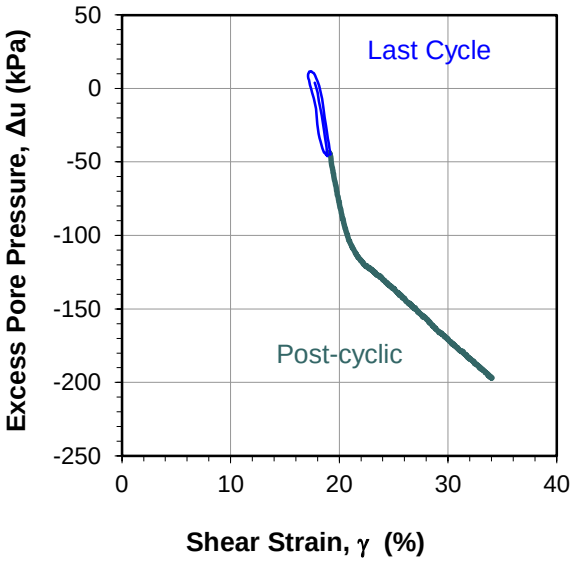
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

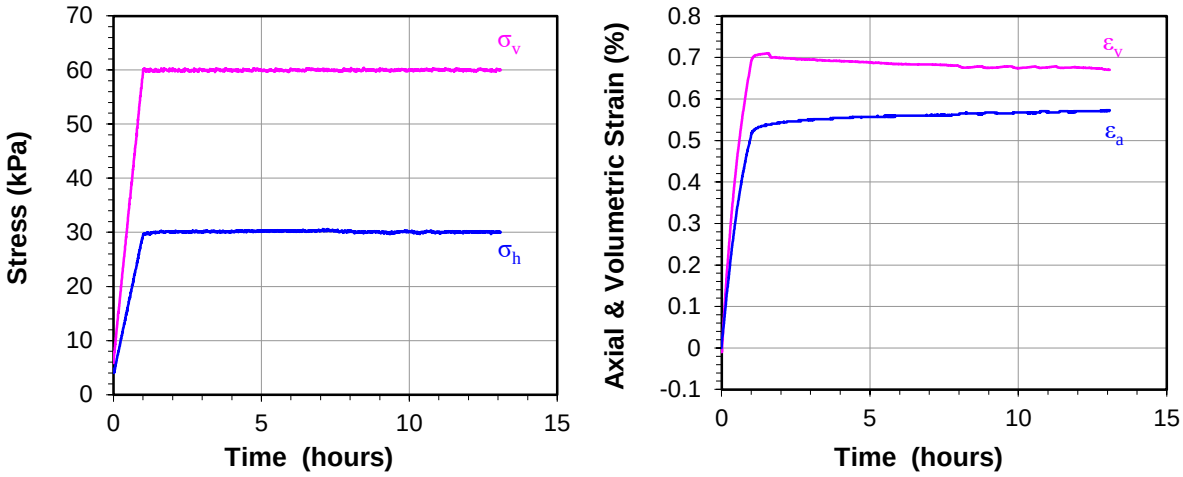
Test Details:		
Test ID:	3E-DSS-06	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	0 to 80	

Sample Details:	Initial	Final
Sample Diameter (mm)30/(	70.0	-
Sample Height (mm) :	37.2	37.0
Dry Density (t/m^3) :	1.70	1.71
Moisture Content (%) :	21.0 *	20.9
Tested By:	SF	
Date:	09/12/2019	
Checked By:	TC	
Date:	23/06/2020	

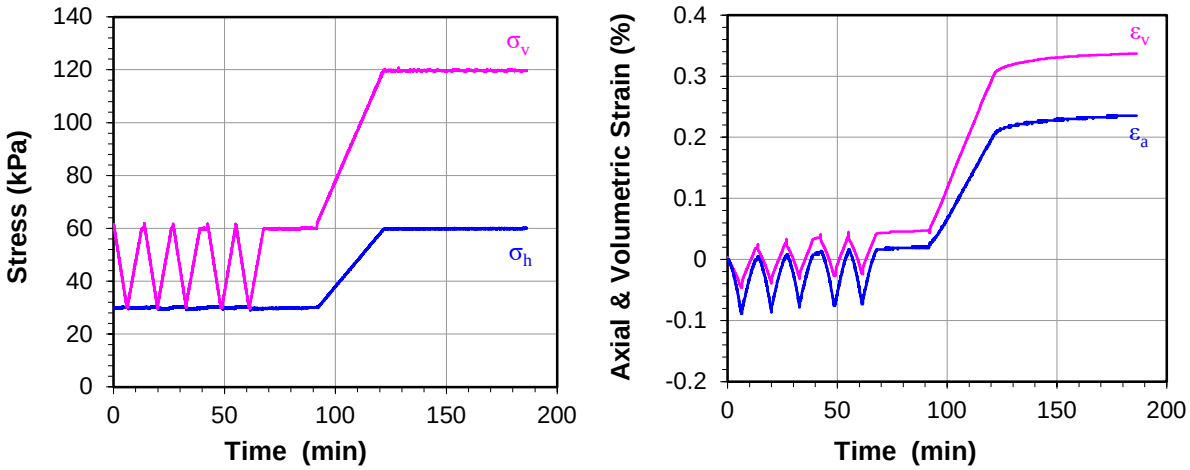
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



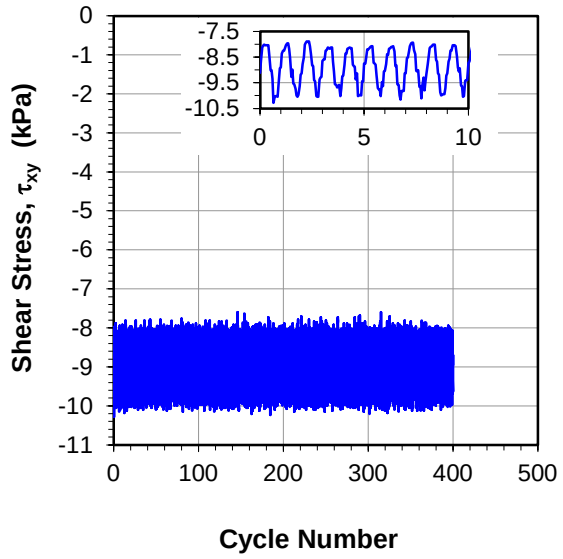
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

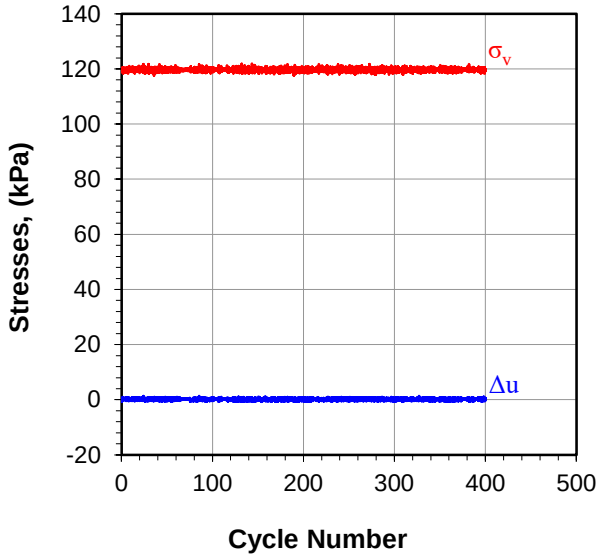
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

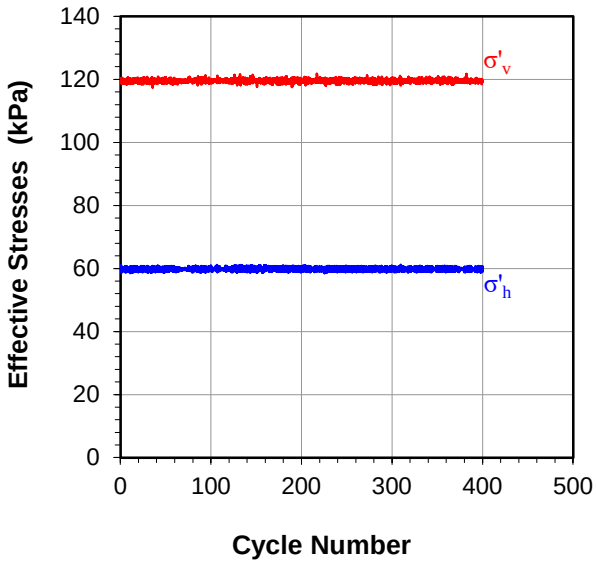
IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

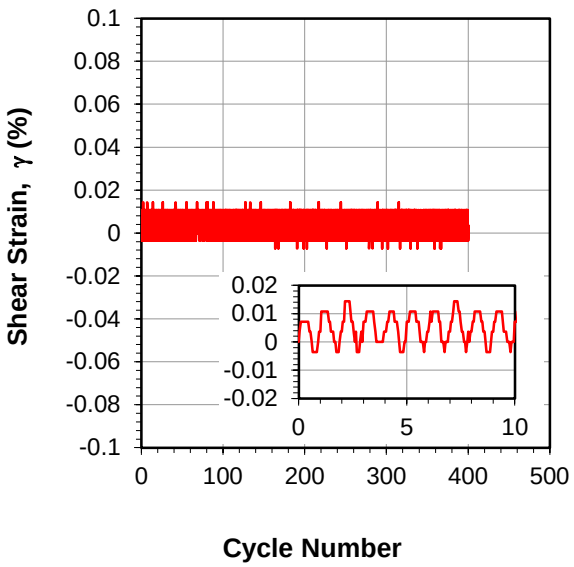
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









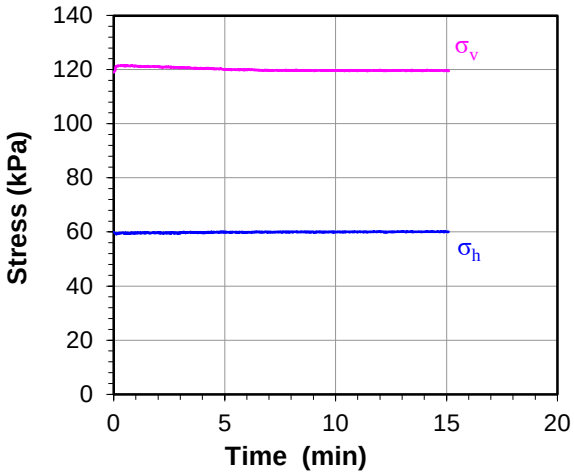
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

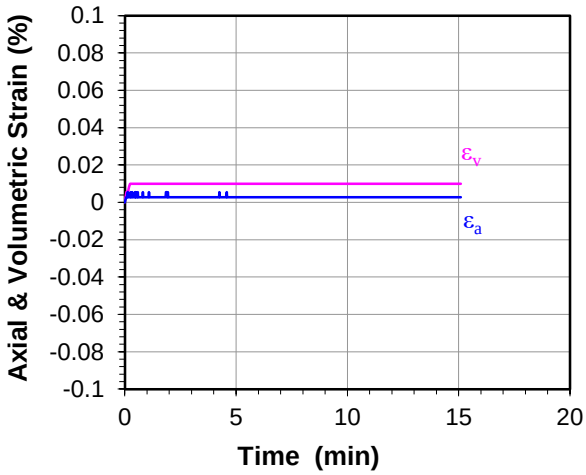
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





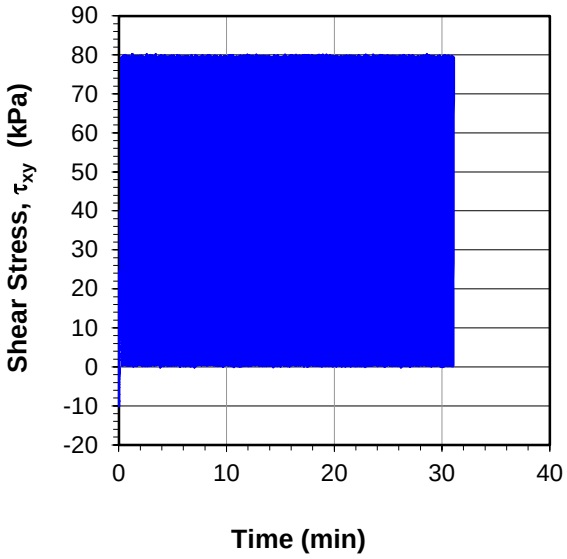
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

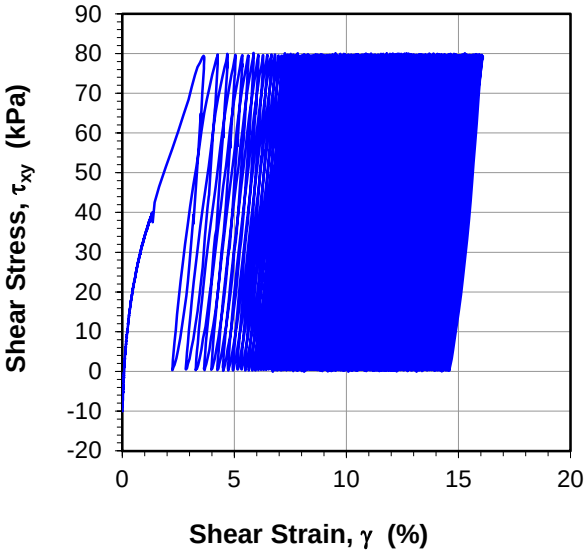
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

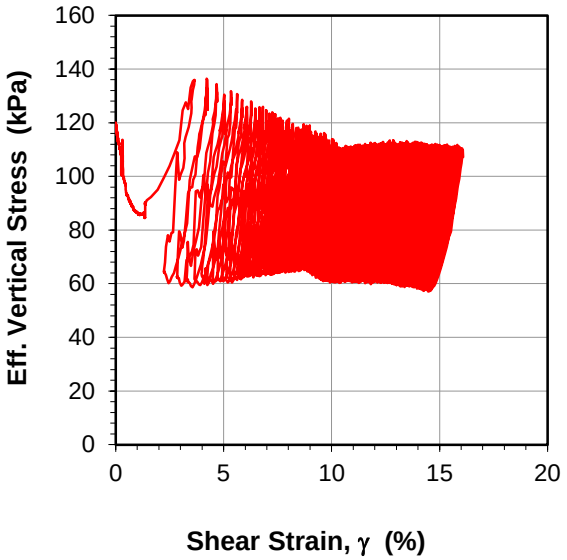
IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

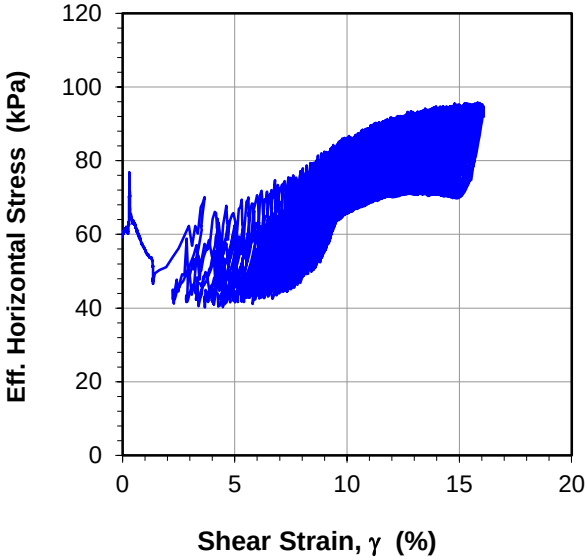
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









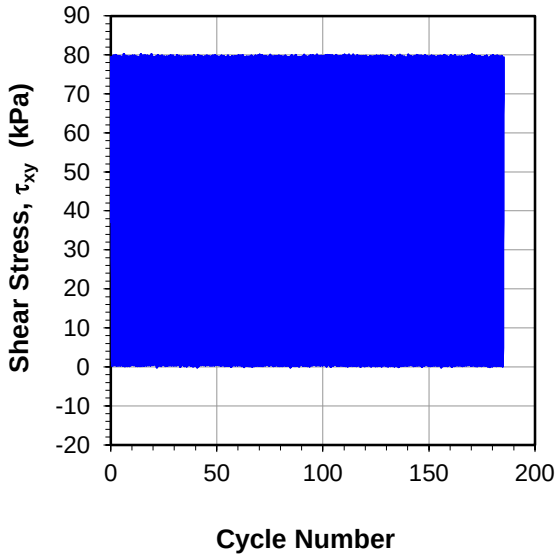
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

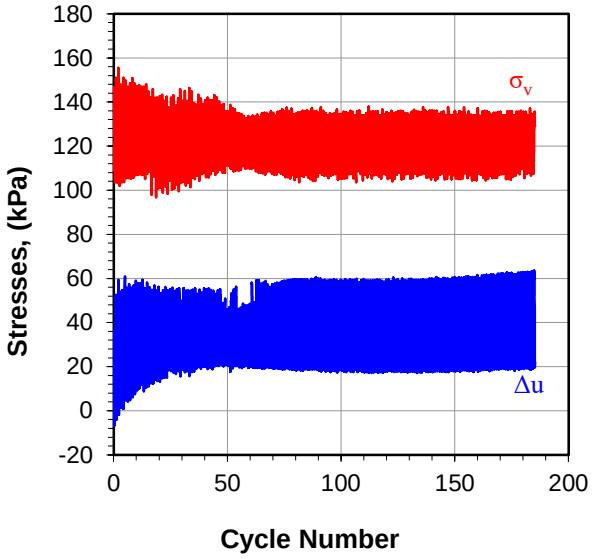
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

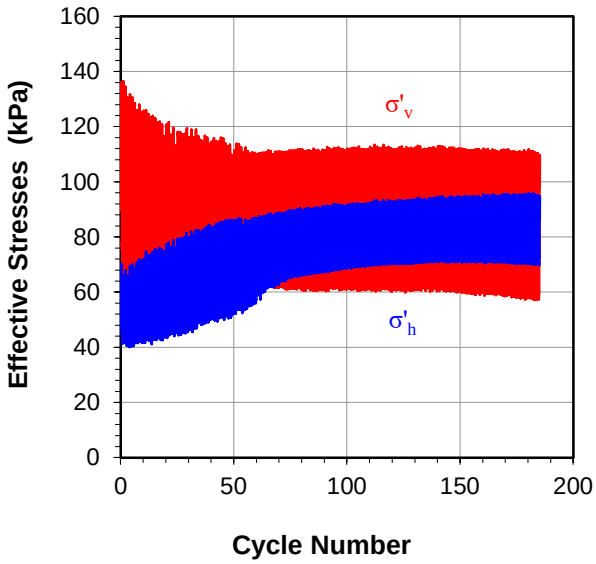
IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

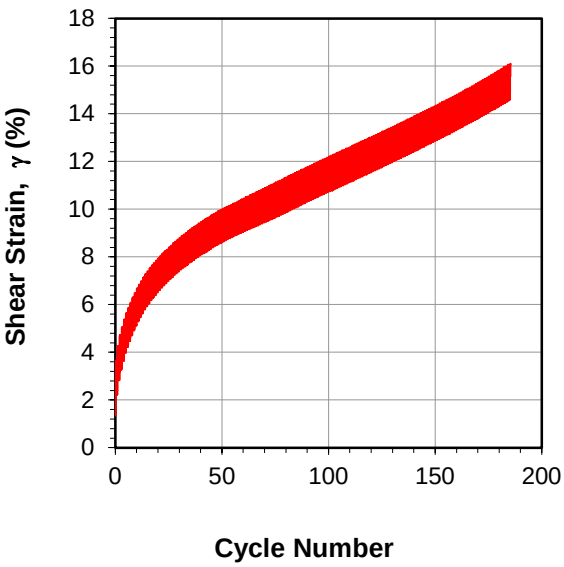
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







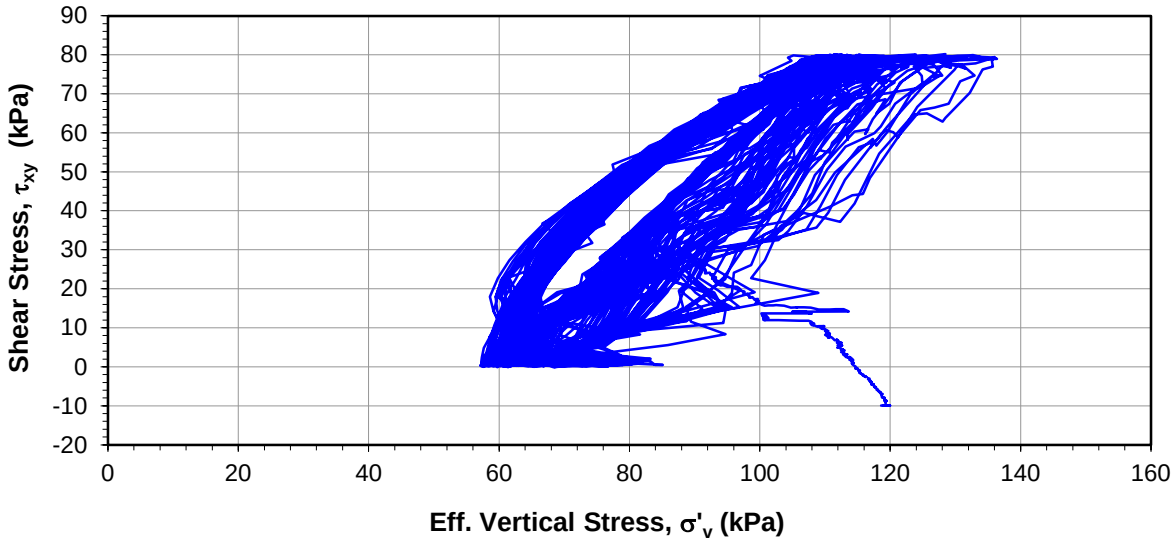


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-006
		Borehole ID:	-
Sample No.:	3E	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage

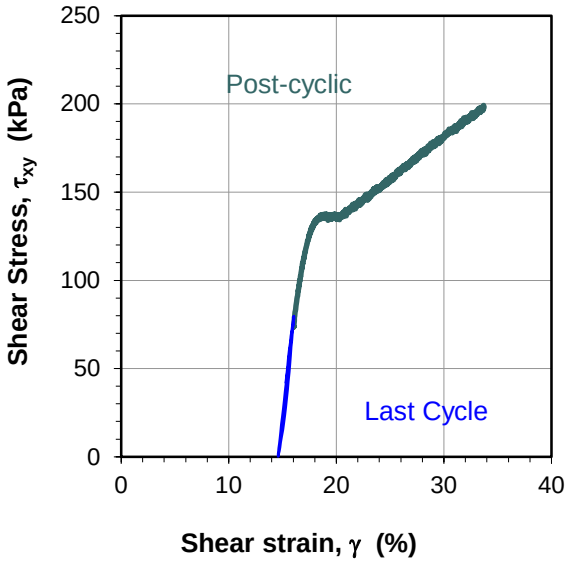


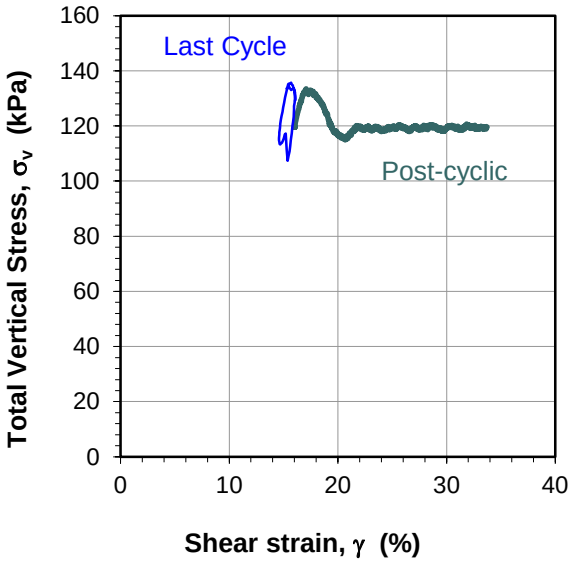
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

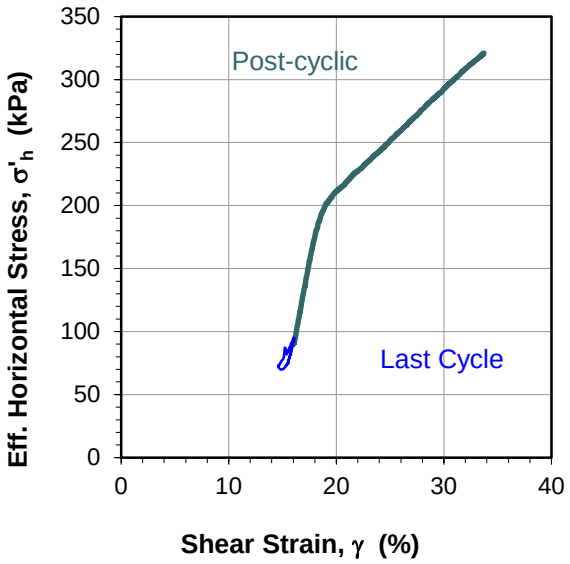
IPO Number: 2019-030
Sample ID: 2019-030-006
Borehole ID: -
Depth: 6.00 m

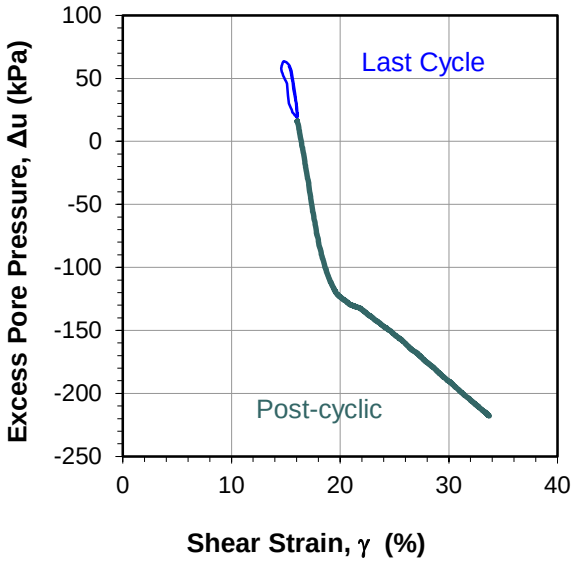
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

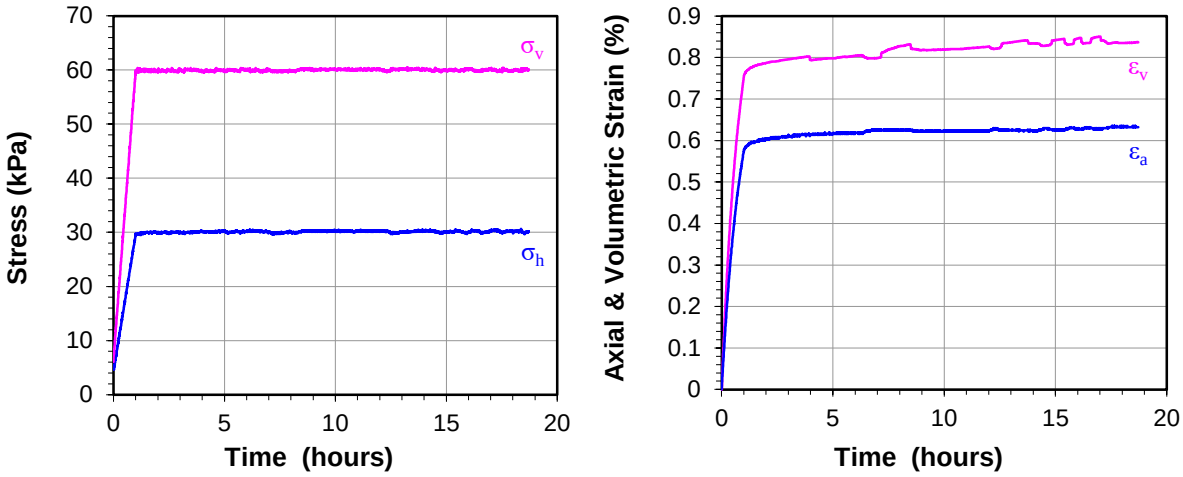
Test Details:		
Test ID:	3D-DSS-07	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	-45 to 45	

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.76	1.77
Moisture Content (%) :	18.1 *	19.6
Tested By:	SF	
Date:	06/12/2019	
Checked By:	TC	
Date:	23/06/2020	

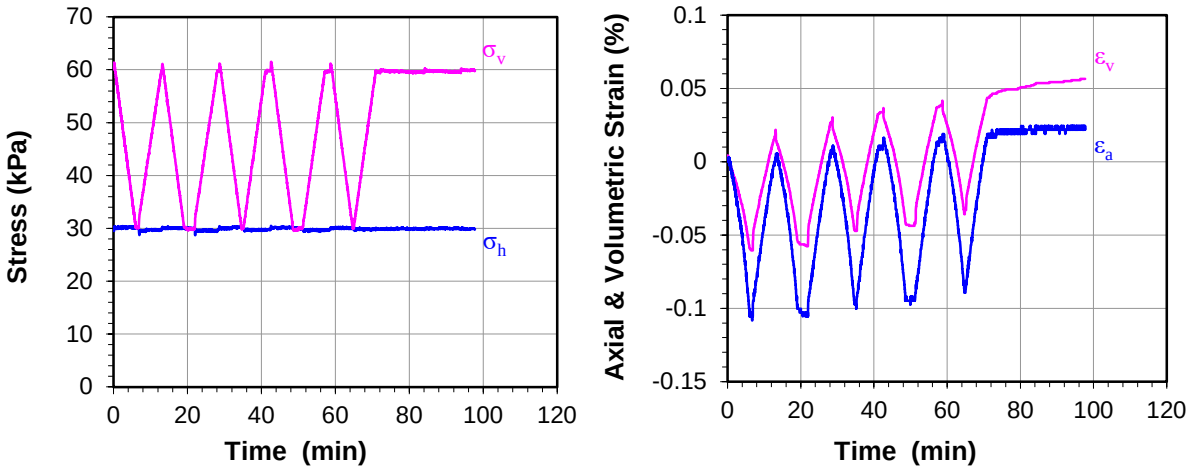
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



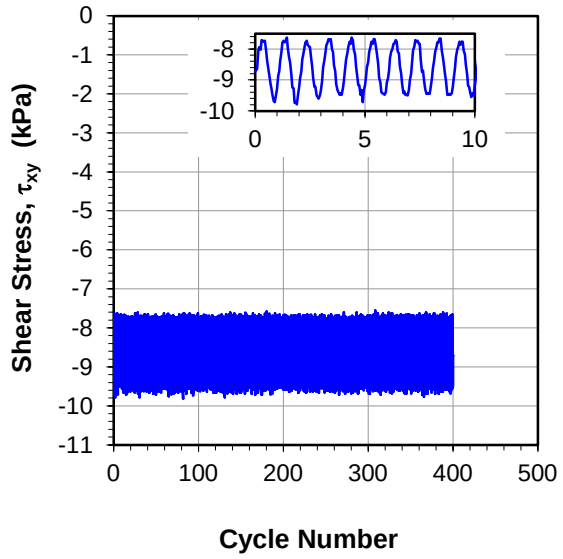
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

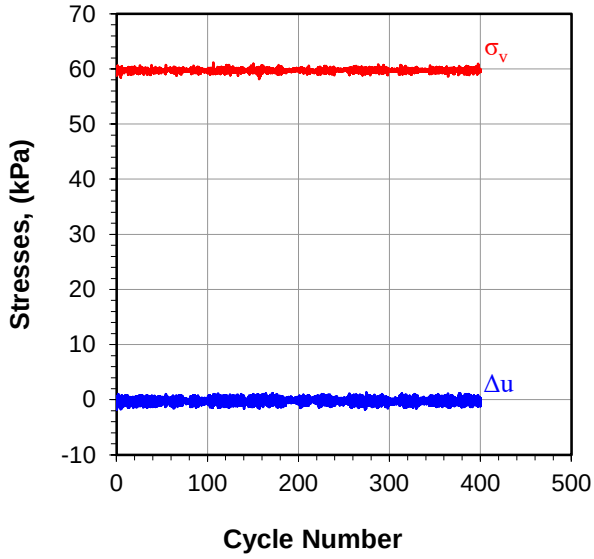
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

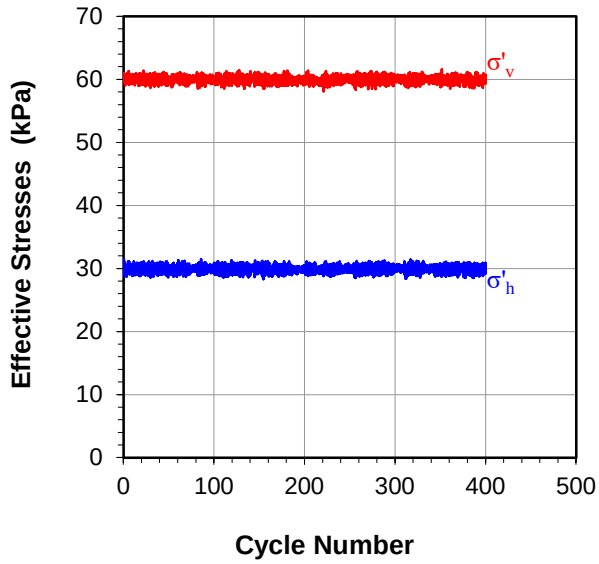
IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

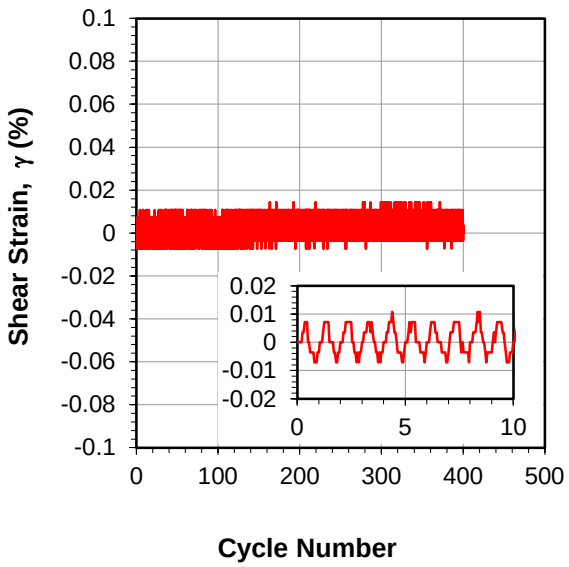
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









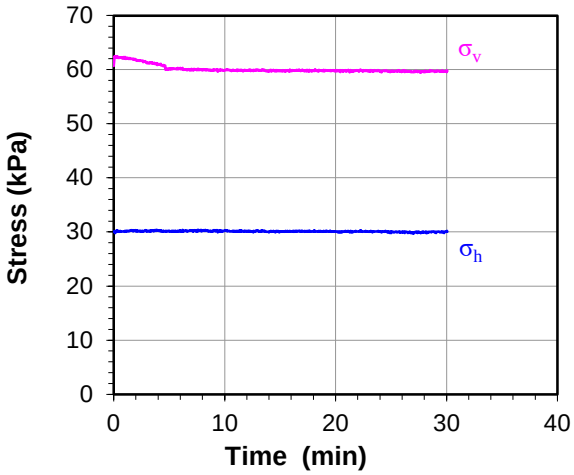
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

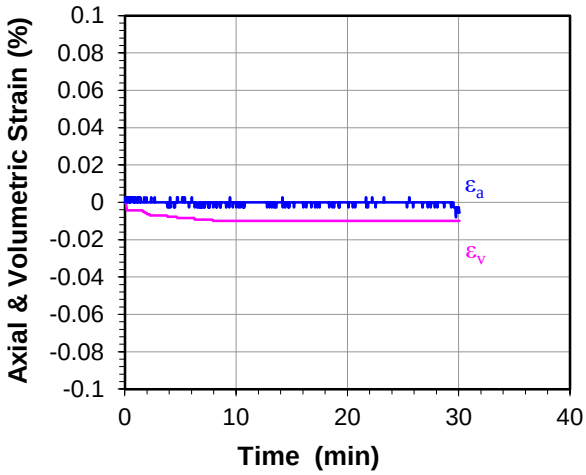
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





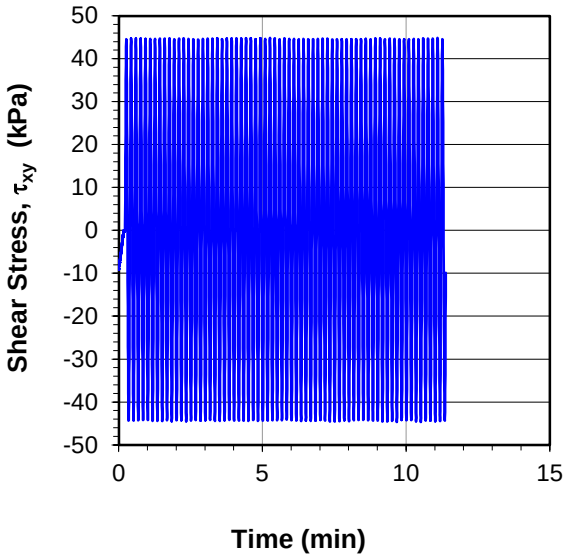
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

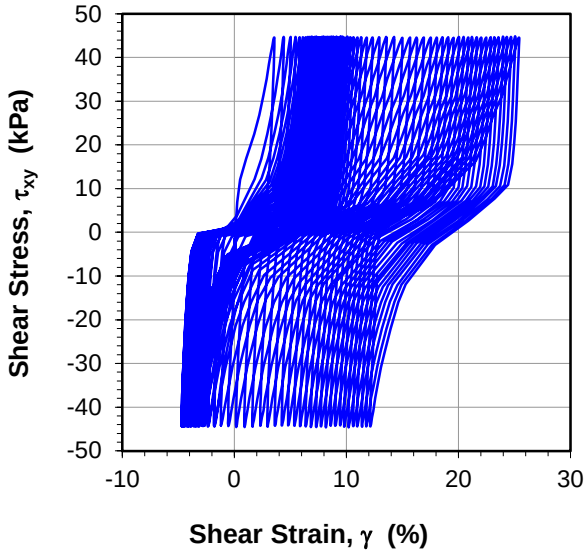
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

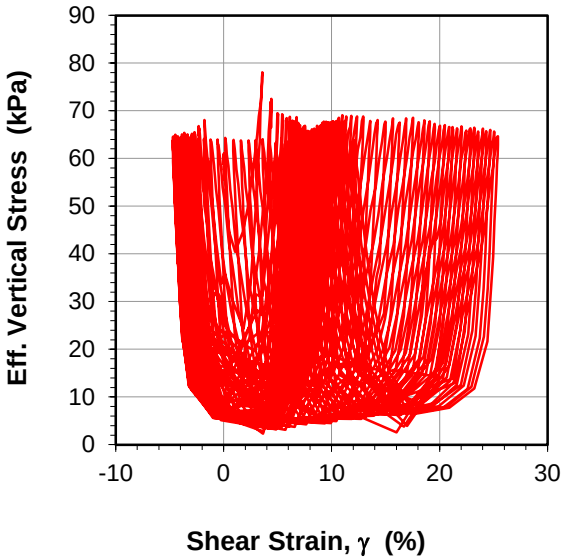
IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

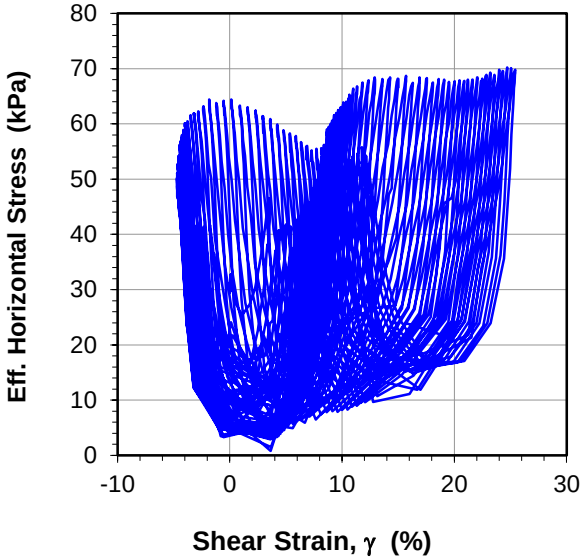
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









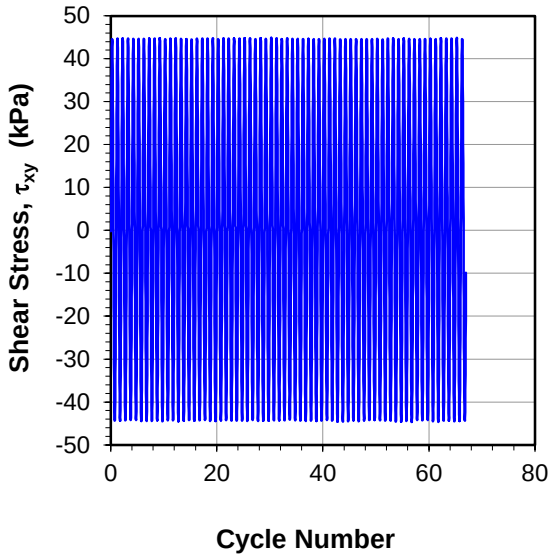
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

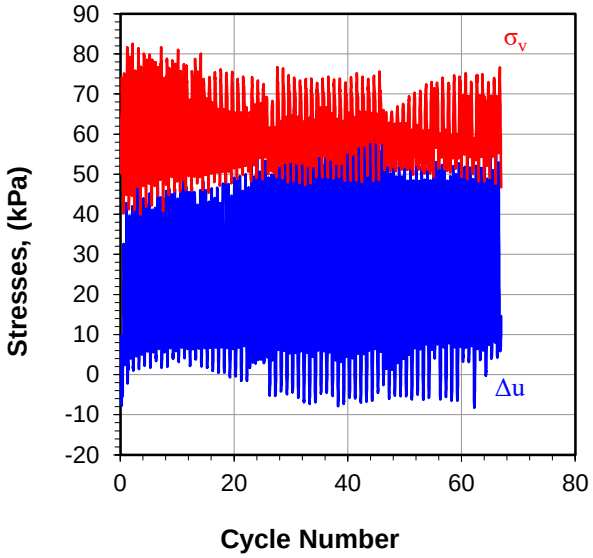
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

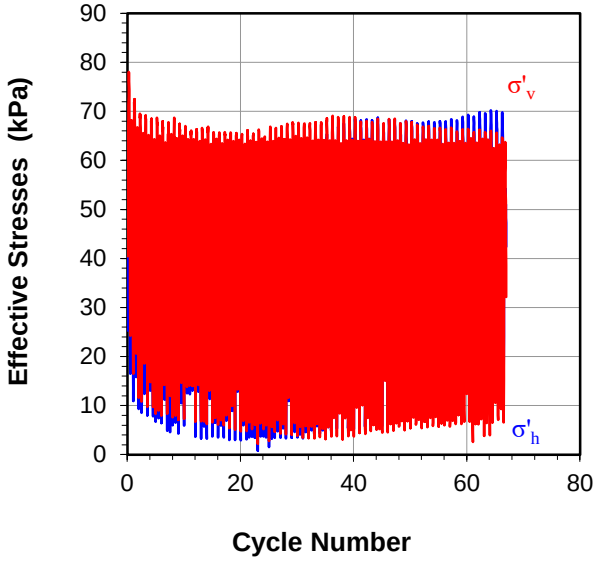
IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

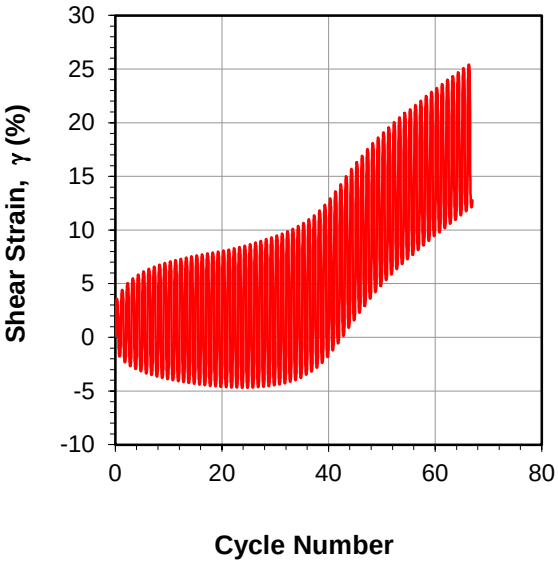
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







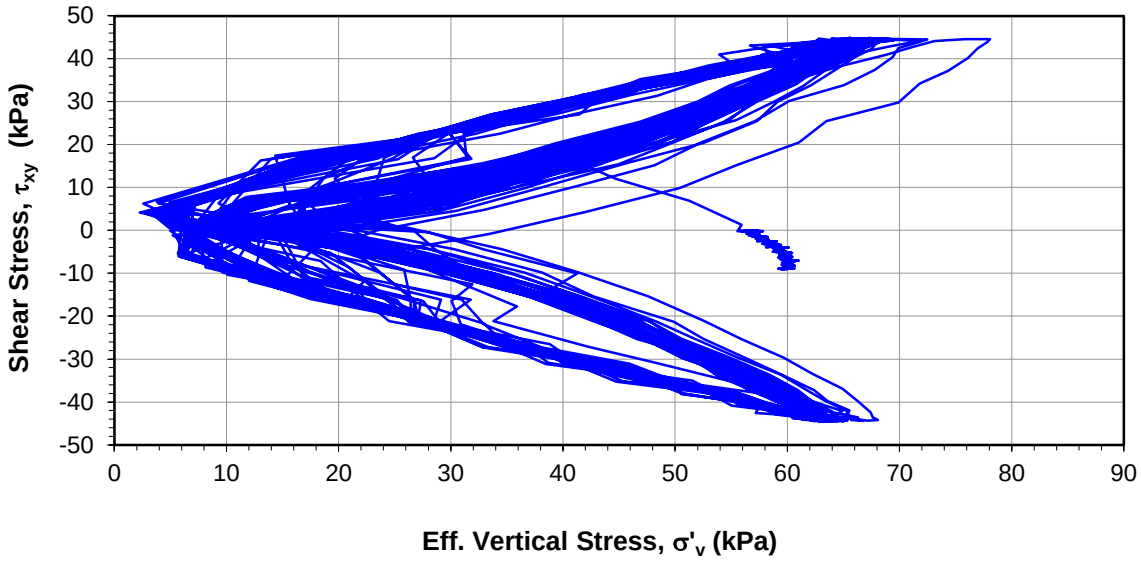


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-007
		Borehole ID:	-
Sample No.:	3D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post cyclic Shearing



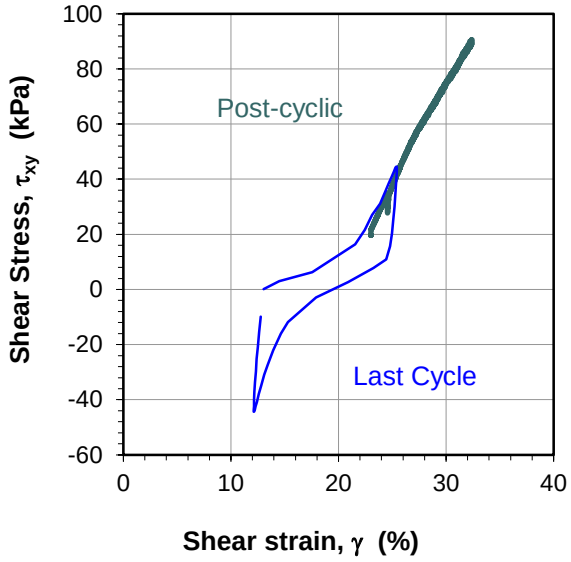
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

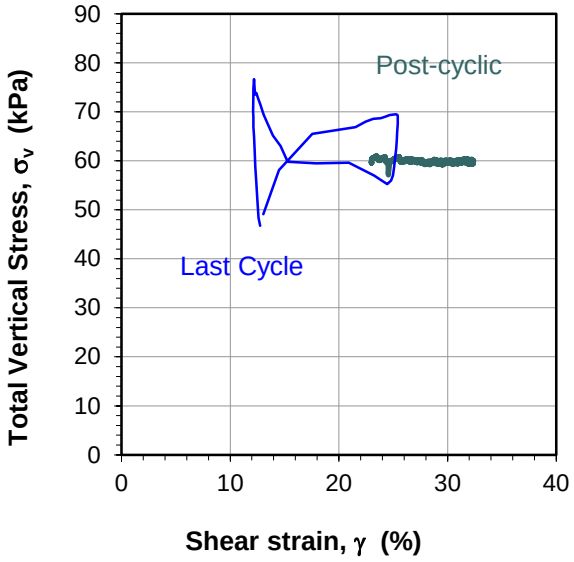
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3D

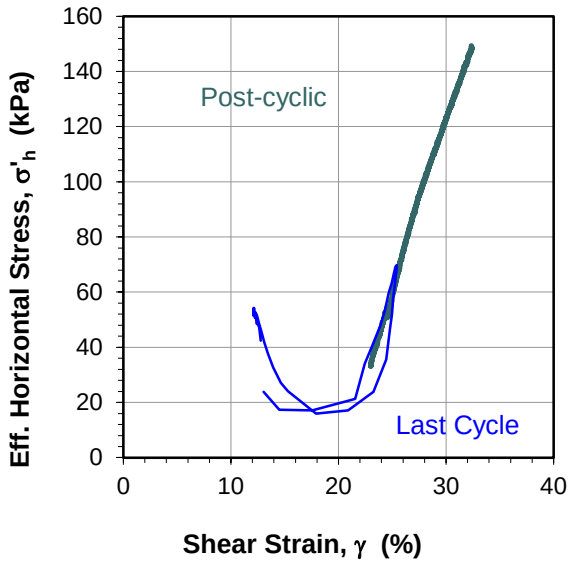
IPO Number: 2019-030
Sample ID: 2019-030-007
Borehole ID: -
Depth: 6.00 m

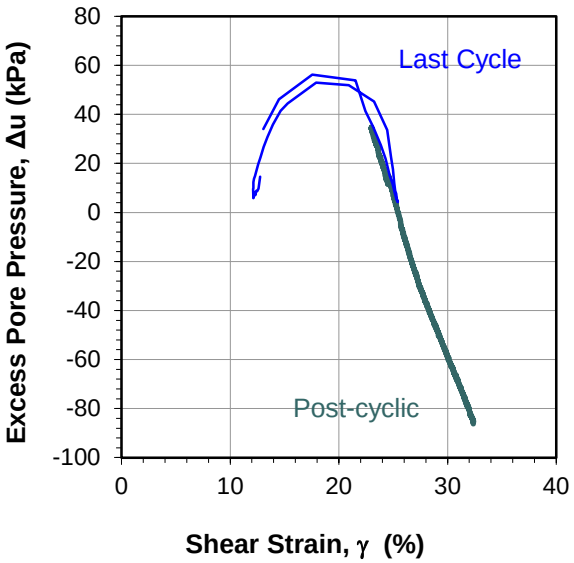
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

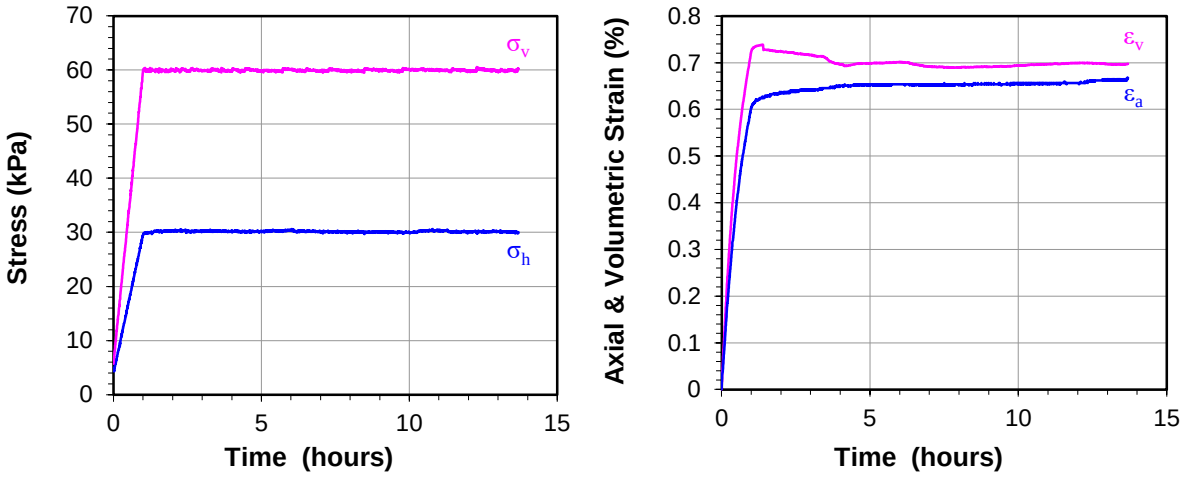
Test Details:		
Test ID:	4D-DSS-08	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	-45 to 45	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

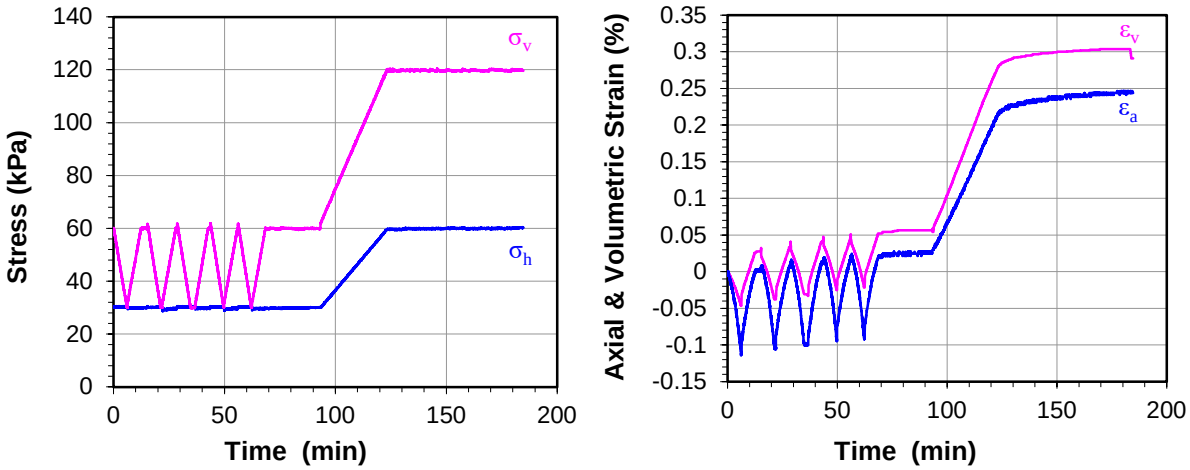
Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.72	1.74
Moisture Content (%) :	19.5	20.3
Tested By:	SF	
Date:	10/12/2019	
Checked By:	TC	
Date:	23/06/2020	

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



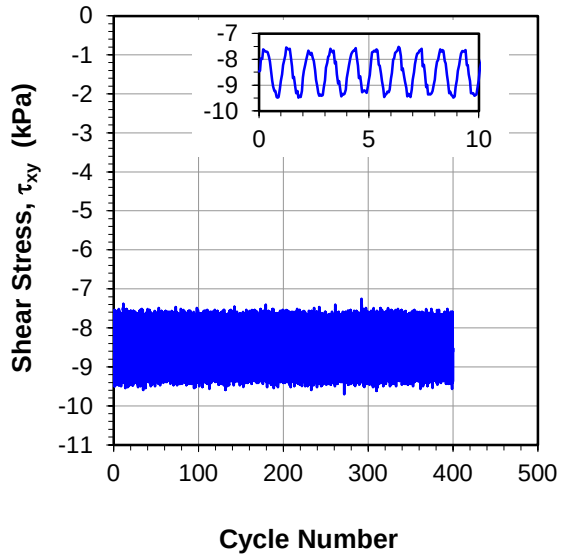
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

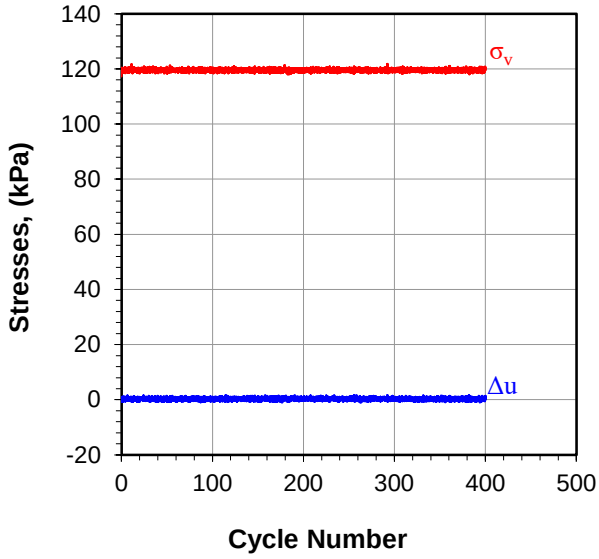
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

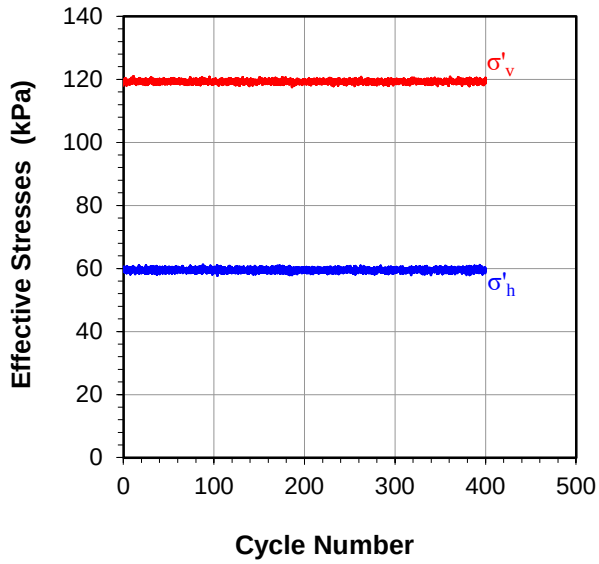
IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

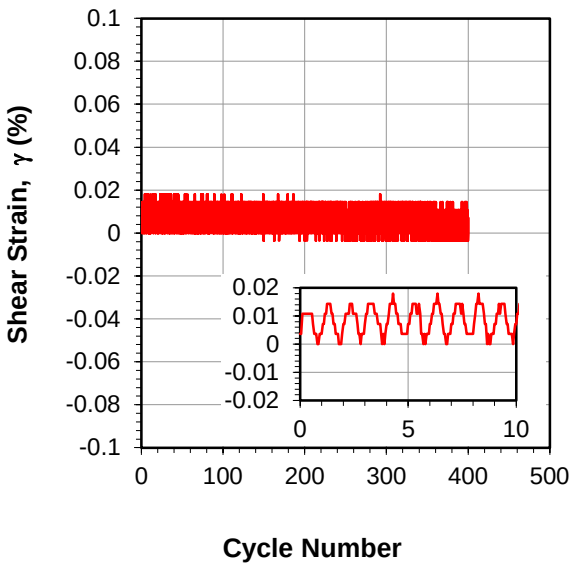
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









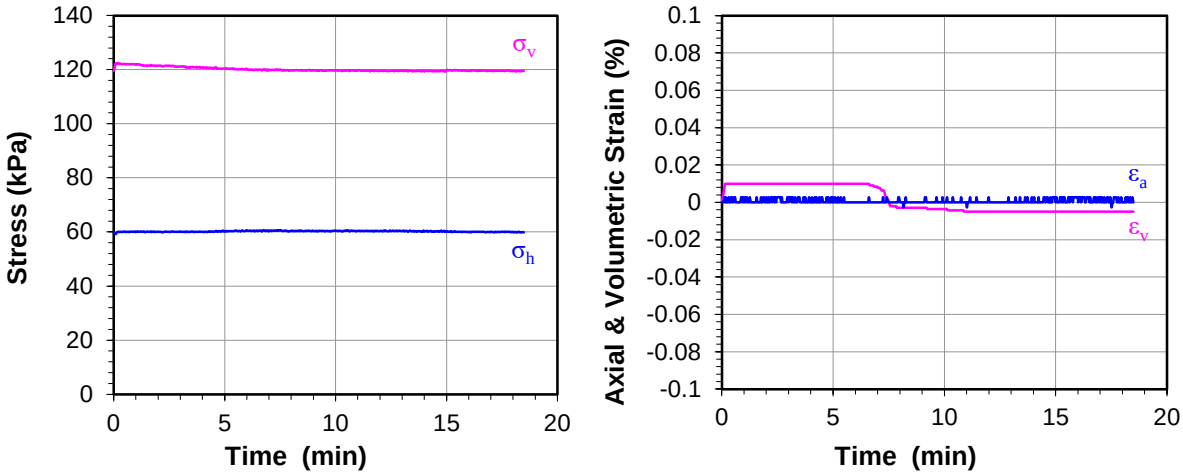
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization



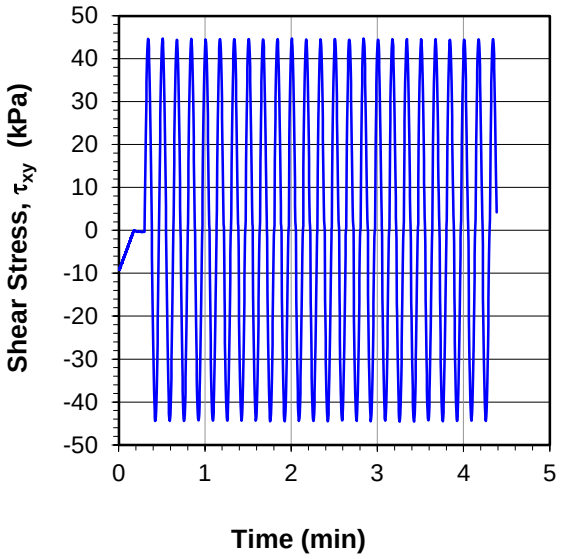
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

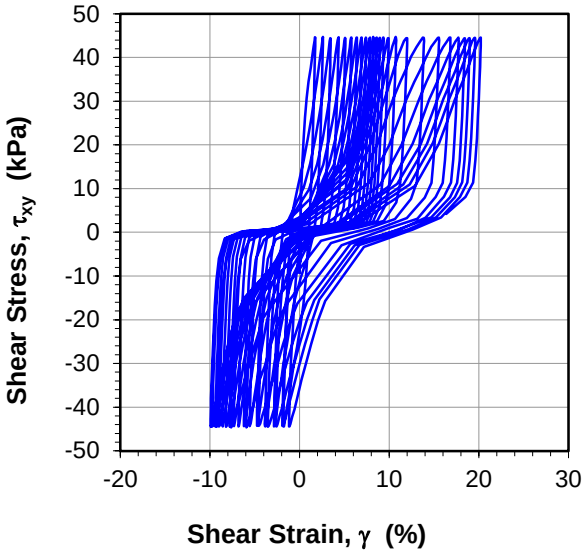
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

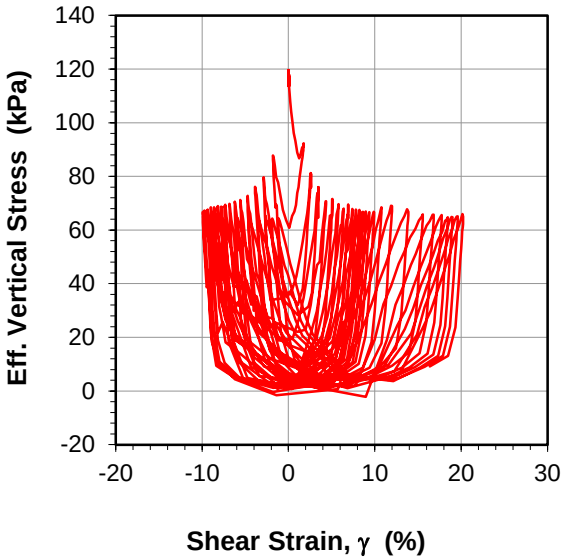
IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

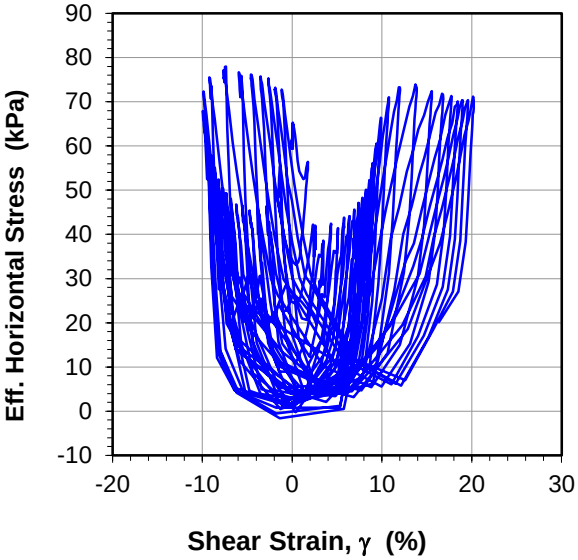
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









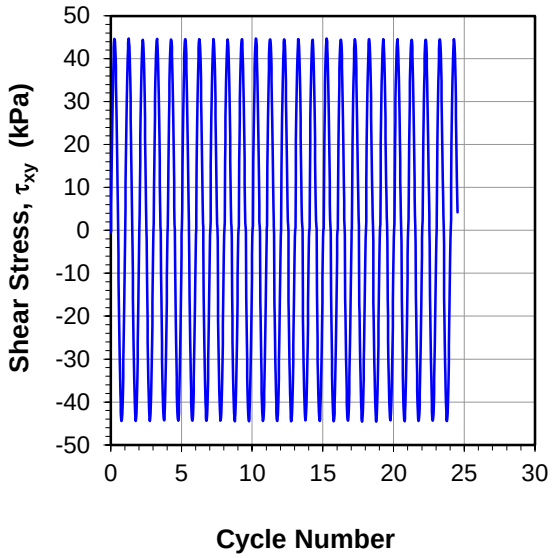
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

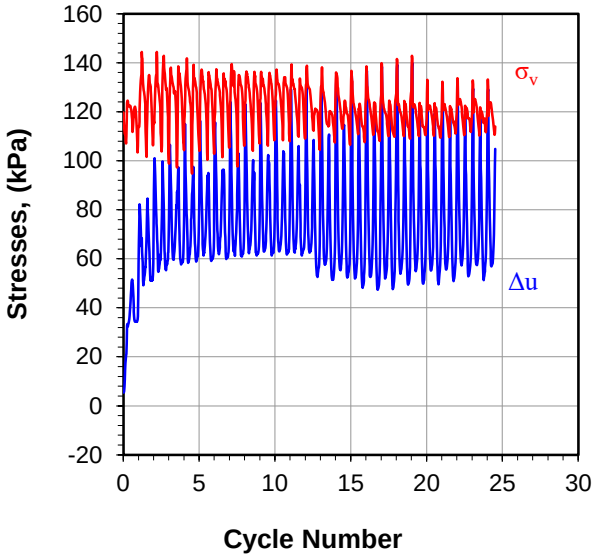
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

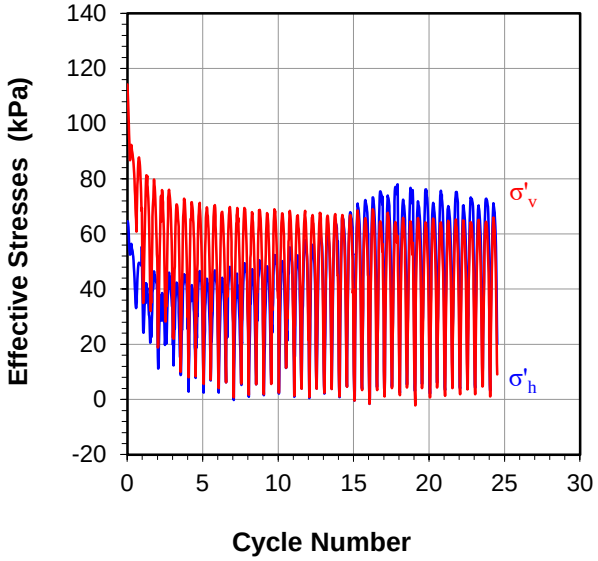
IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

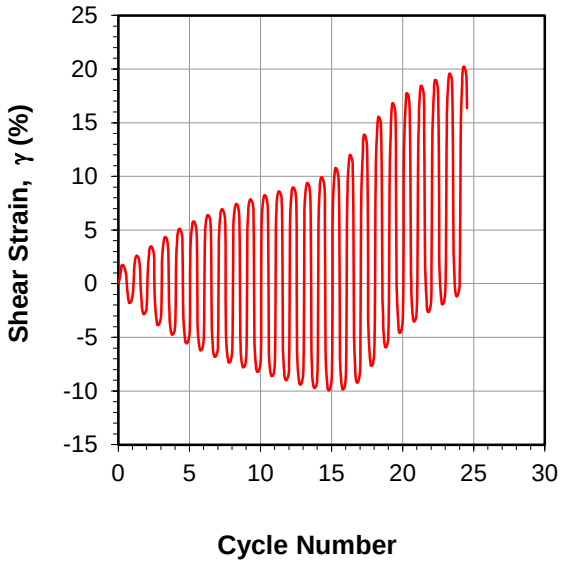
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







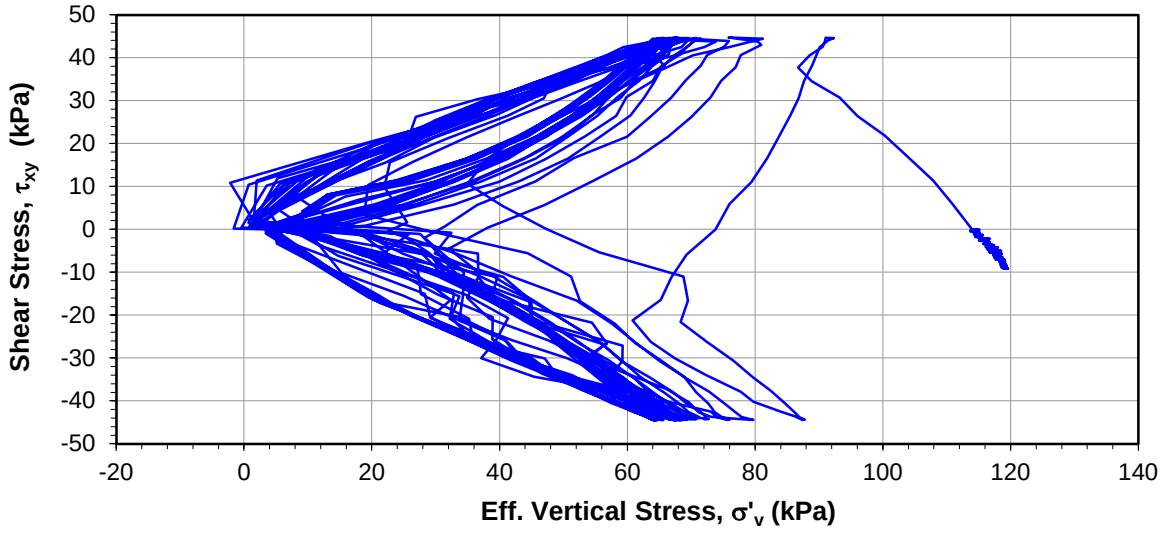


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-008
		Borehole ID:	-
Sample No.:	4D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage

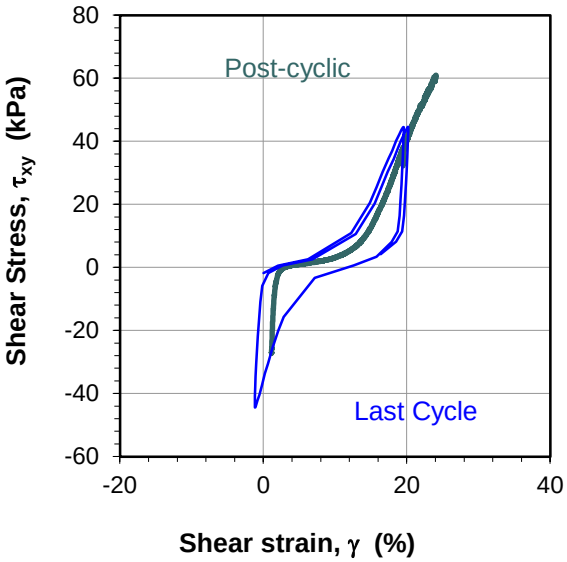


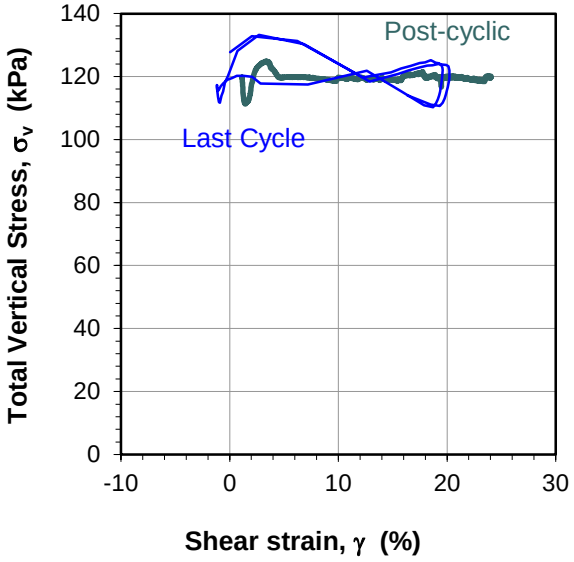
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 4D

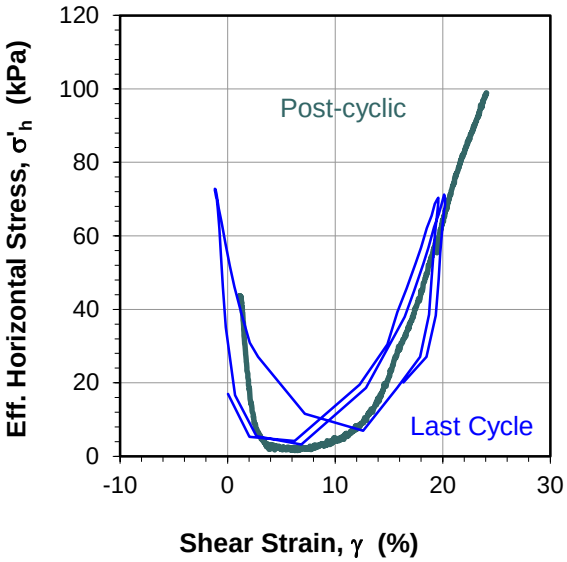
IPO Number: 2019-030
Sample ID: 2019-030-008
Borehole ID: -
Depth: 6.00 m

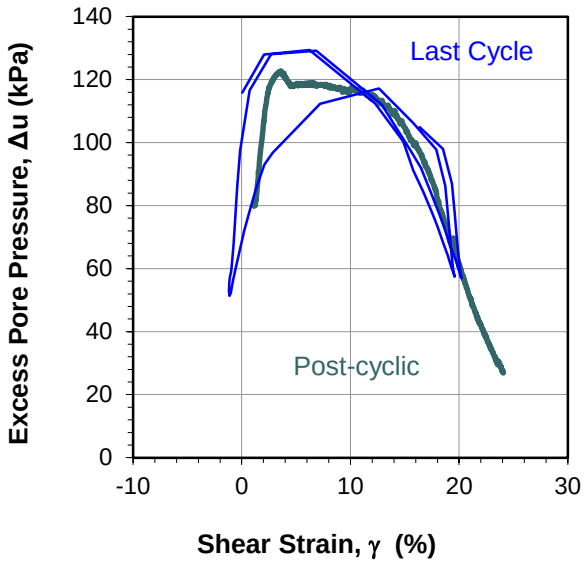
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

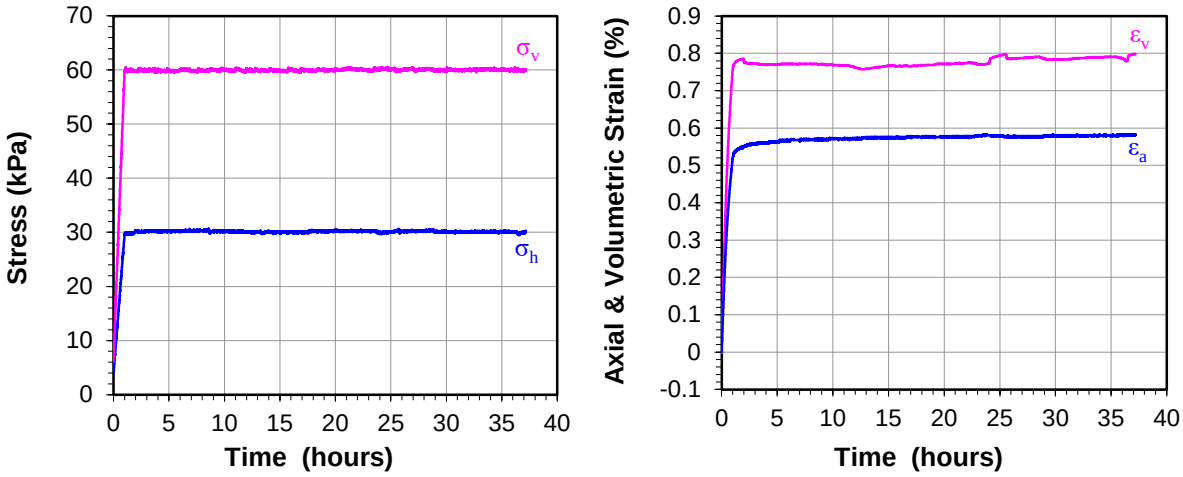
Test Details:		
Test ID:	2D-DSS-09	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	0 to 150	

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	37.0
Dry Density (t/m^3) :	1.72	1.74
Moisture Content (%) :	20.2 *	20.5
Tested By:	SF	
Date:	16/12/2019	
Checked By:	TC	
Date:	23/06/2020	

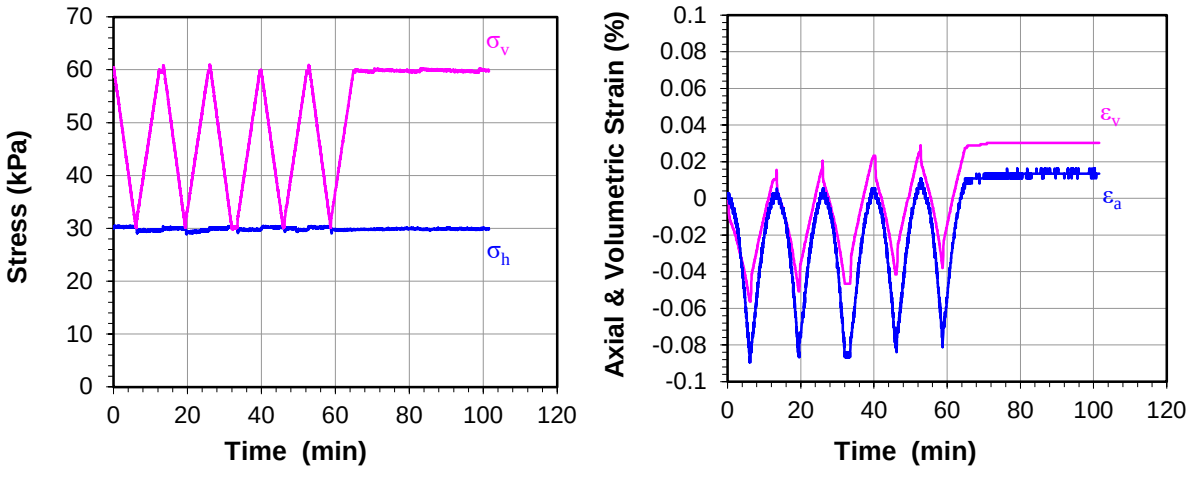
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



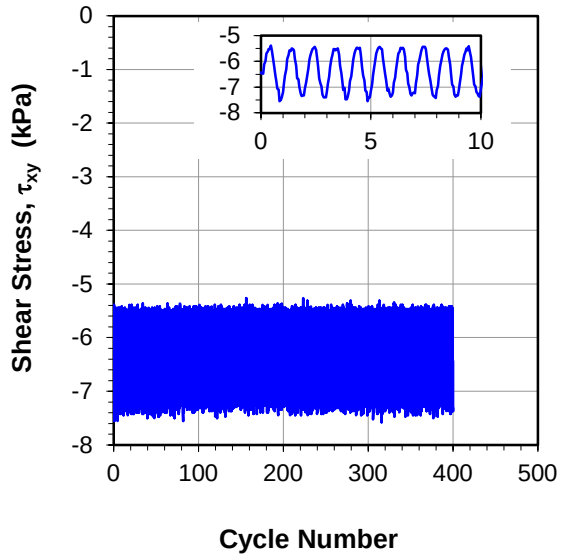
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

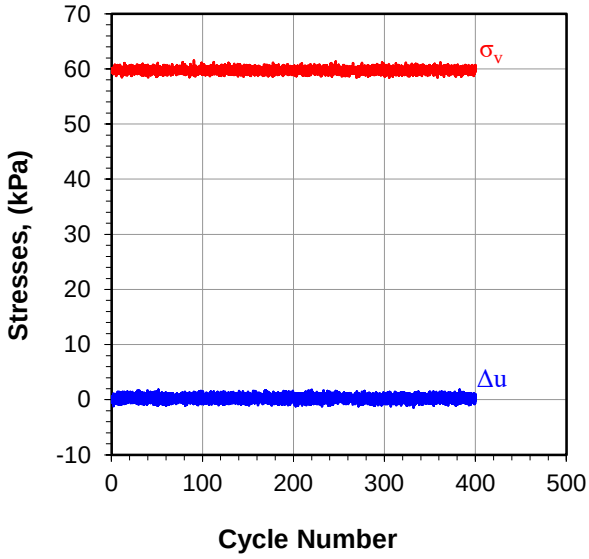
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

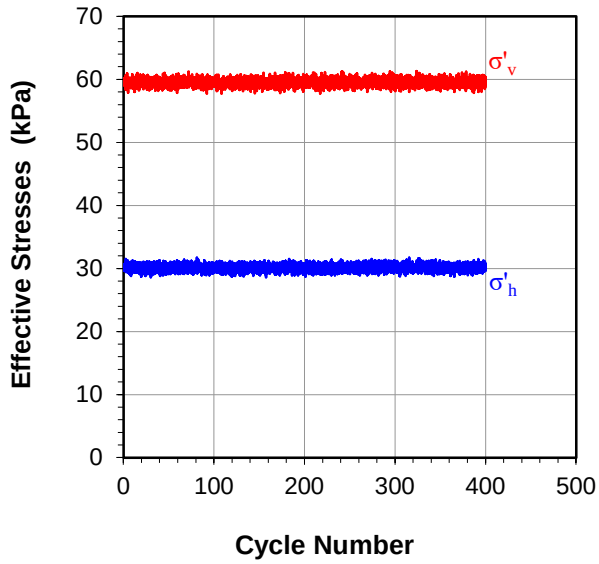
IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

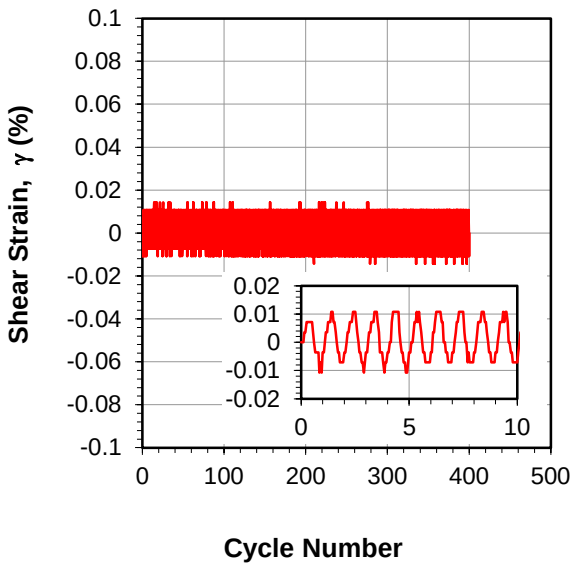
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









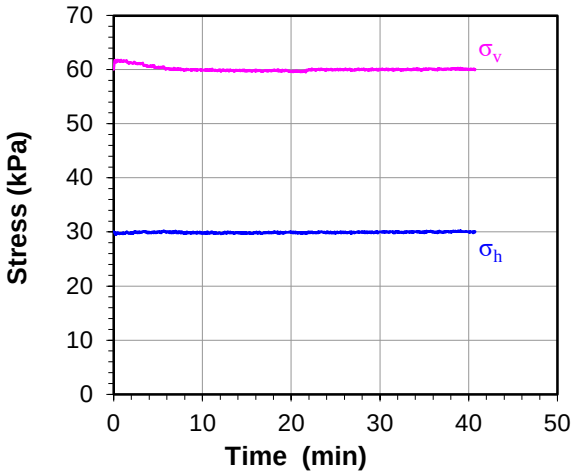
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

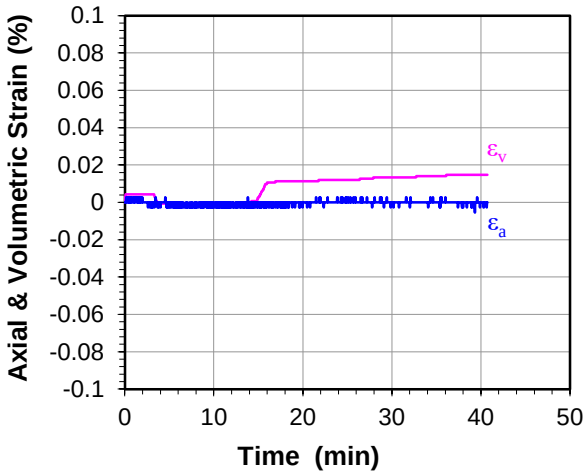
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





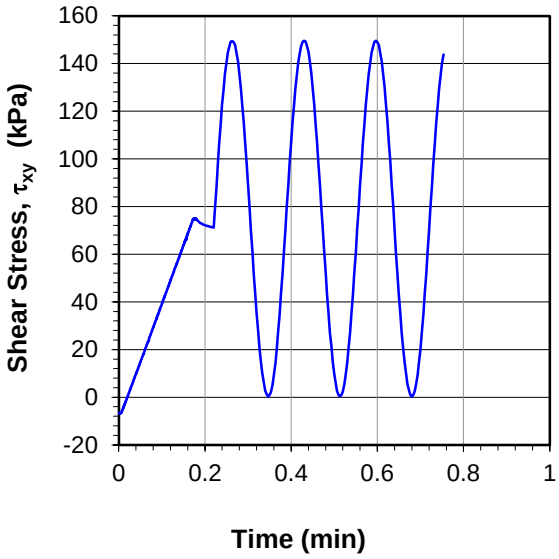
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

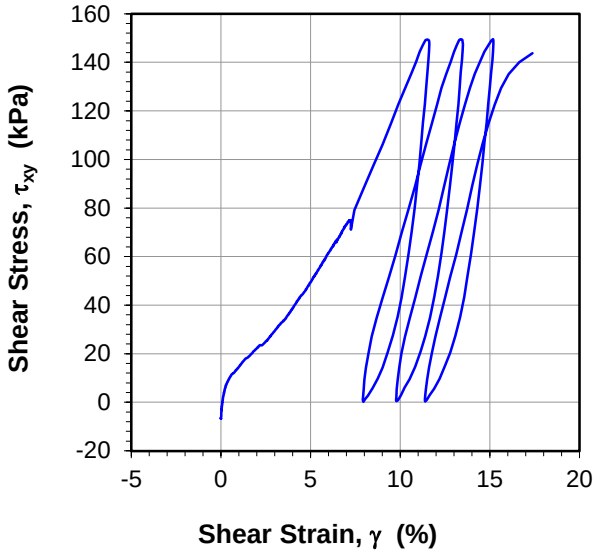
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

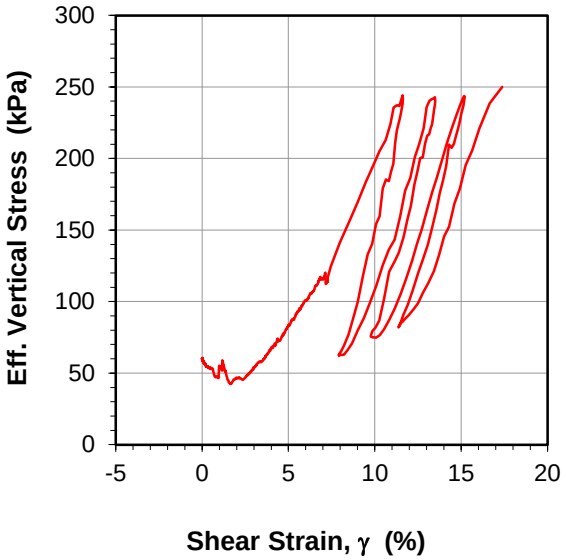
IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

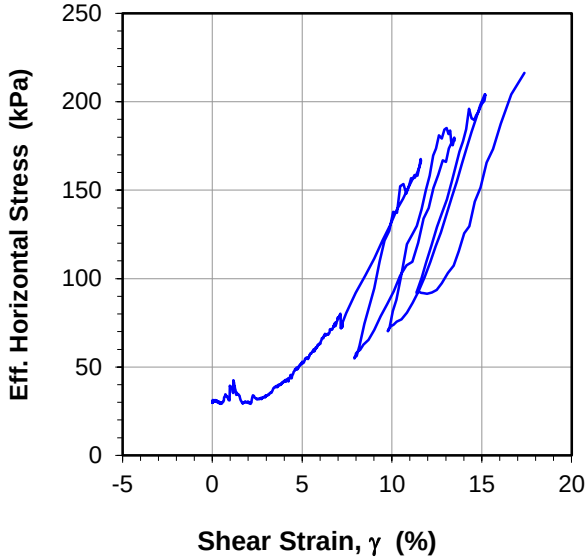
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









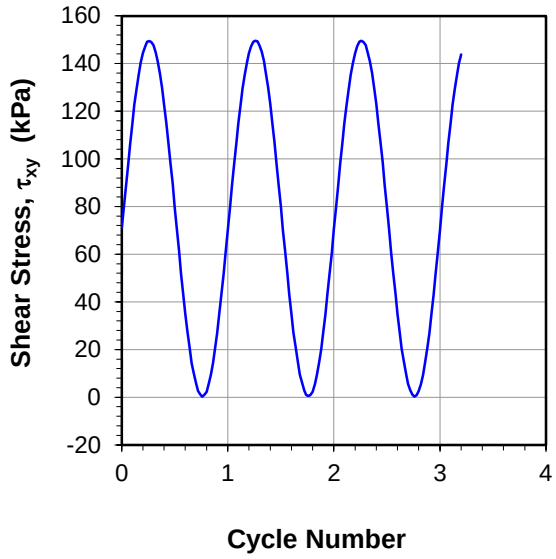
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

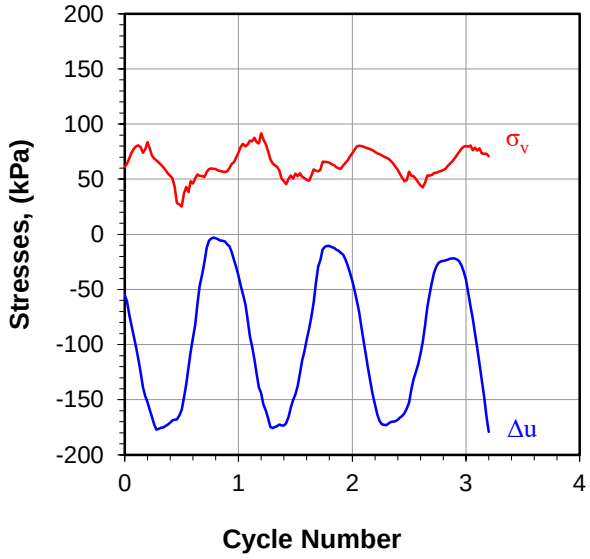
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

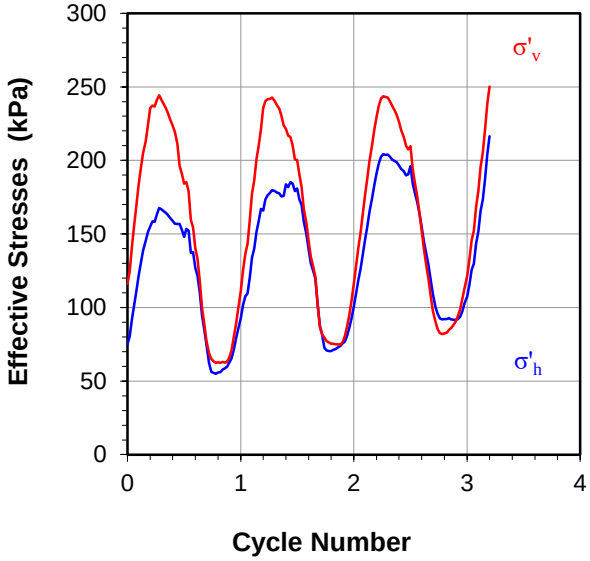
IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

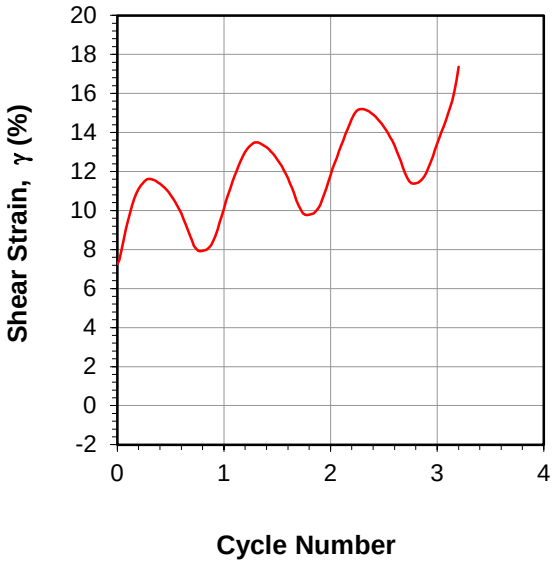
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







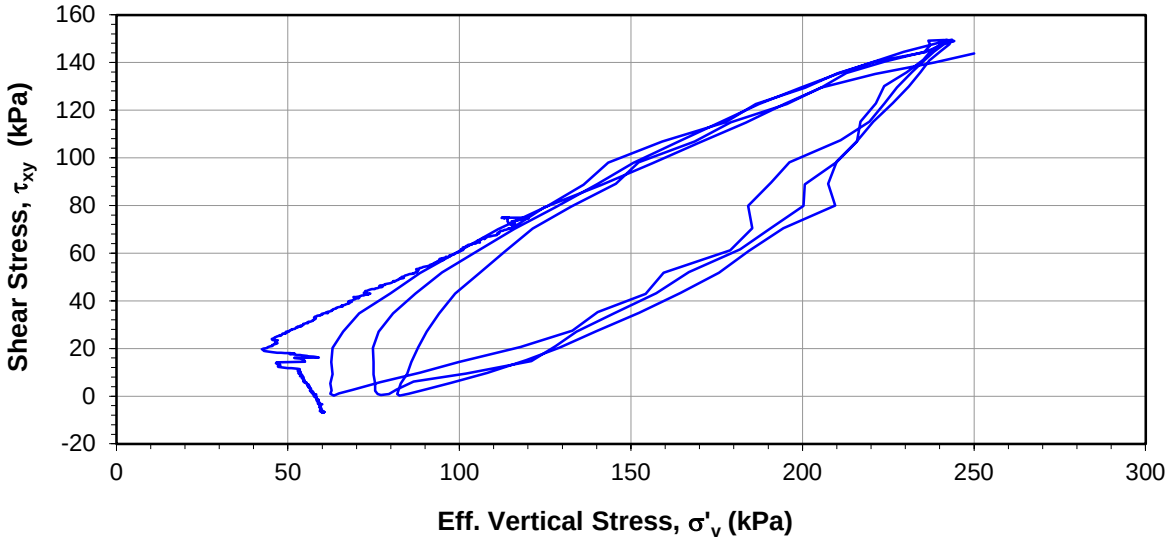


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-009
		Borehole ID:	-
Sample No.:	2D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained cyclic Shearing Stage

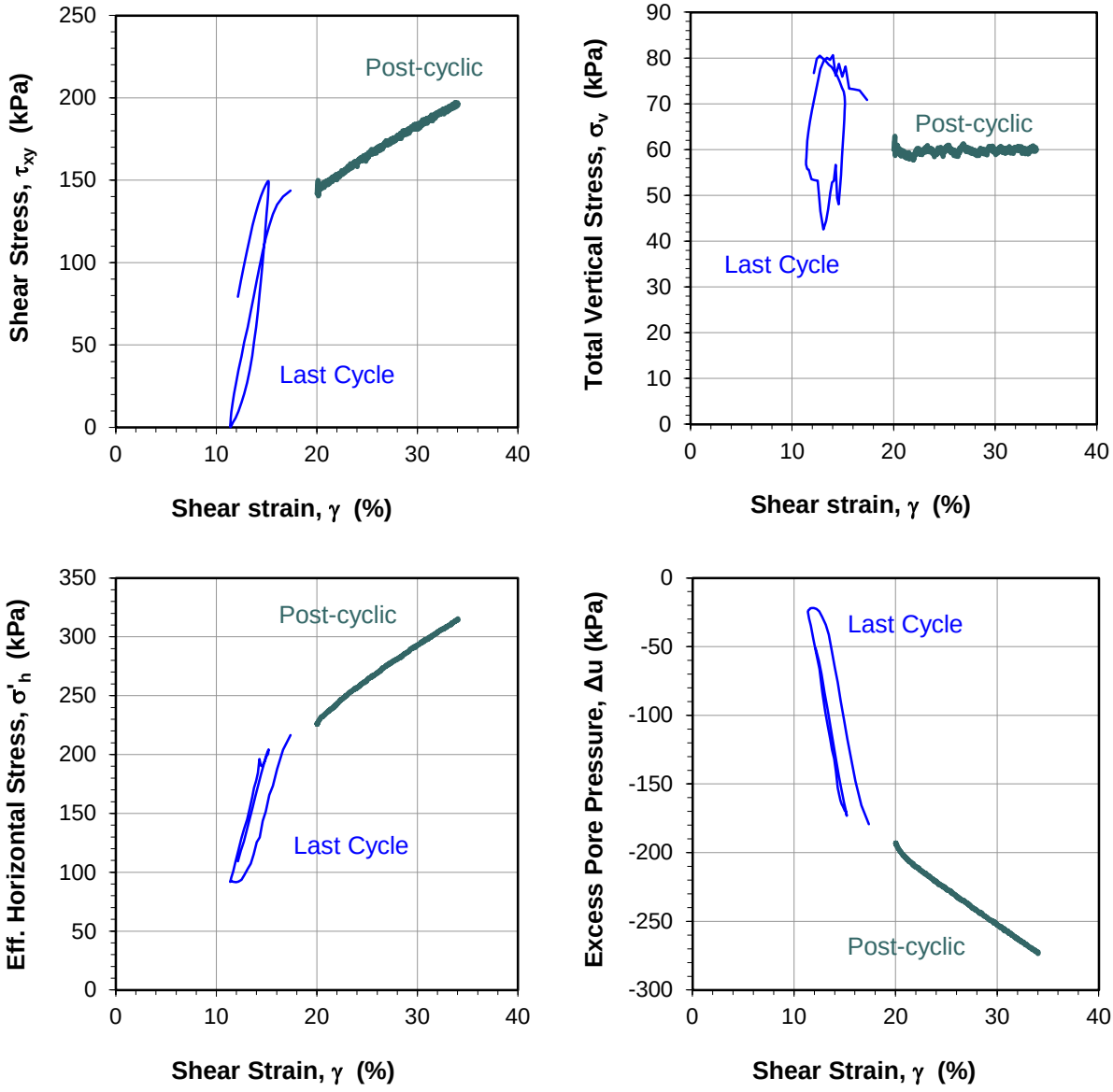


Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-009
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

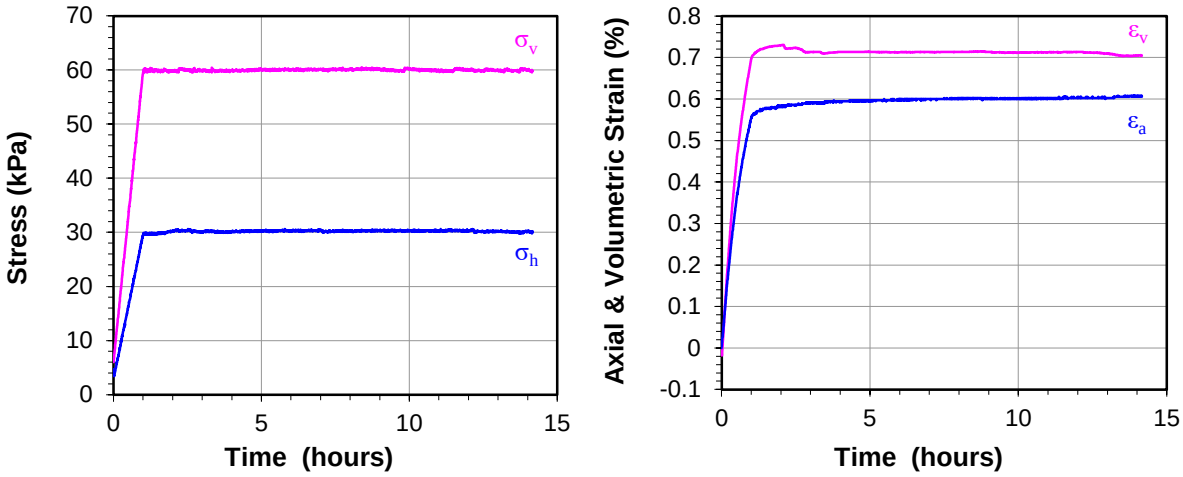
Test Details:		
Test ID:	2D-DSS-10	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120	60
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	0 to 140	

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.66	1.67
Moisture Content (%) :	21.7 *	20.2
Tested By:	SF	
Date:	17/12/2019	
Checked By:	TC	
Date:	23/06/2020	

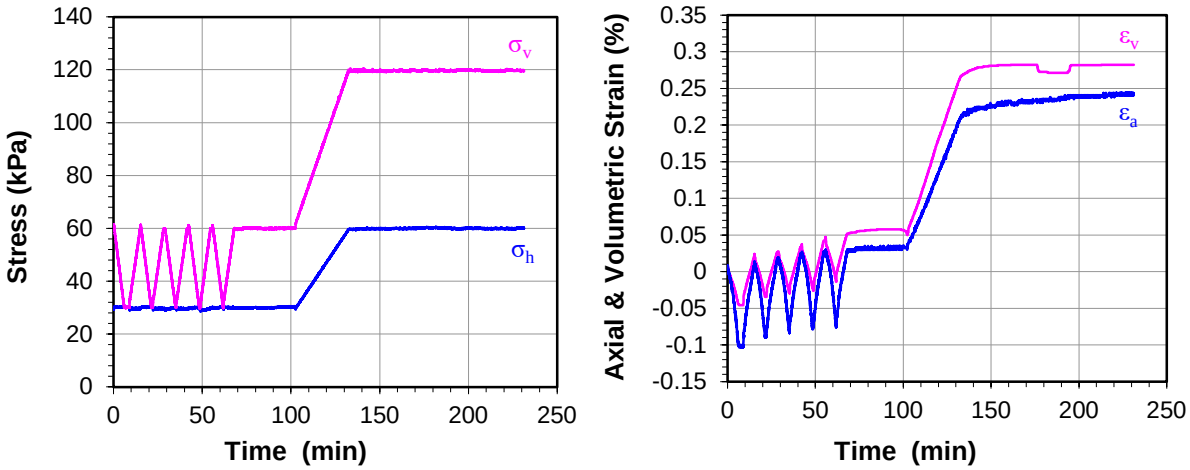
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



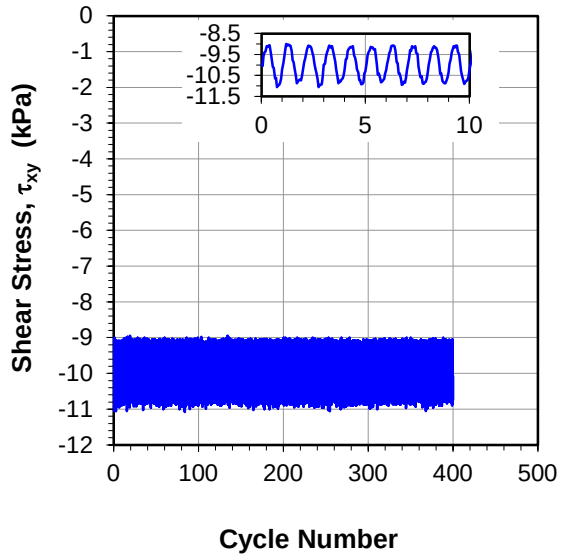
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

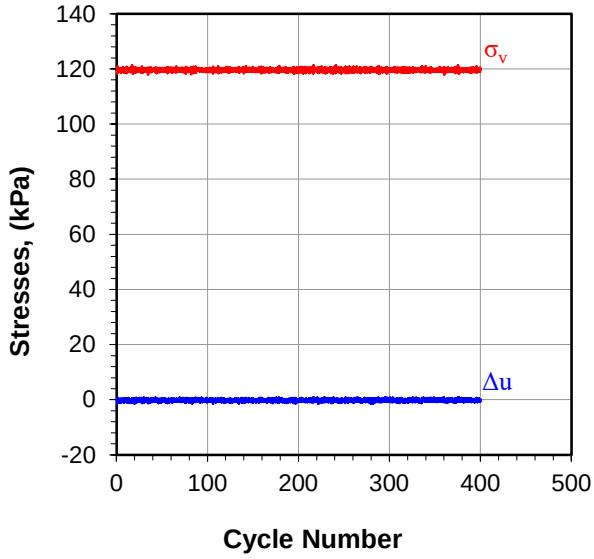
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

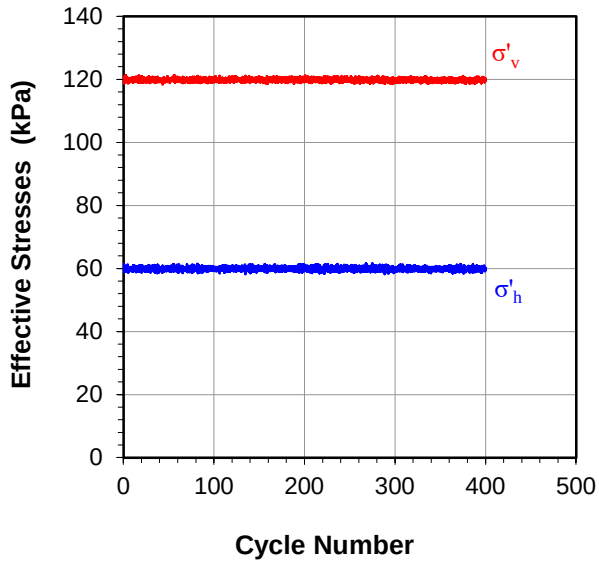
IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

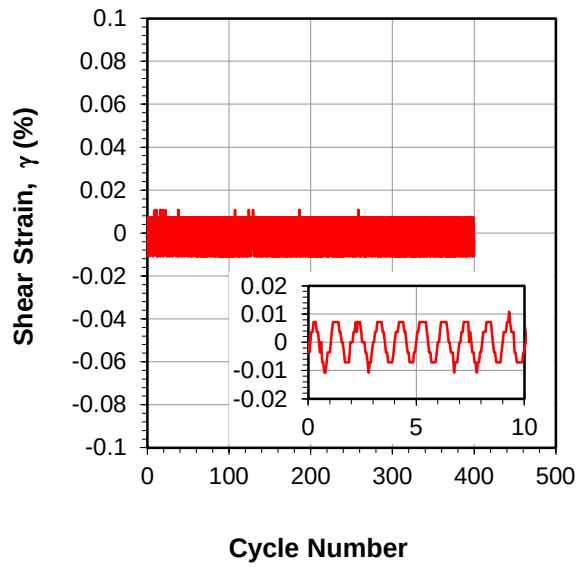
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









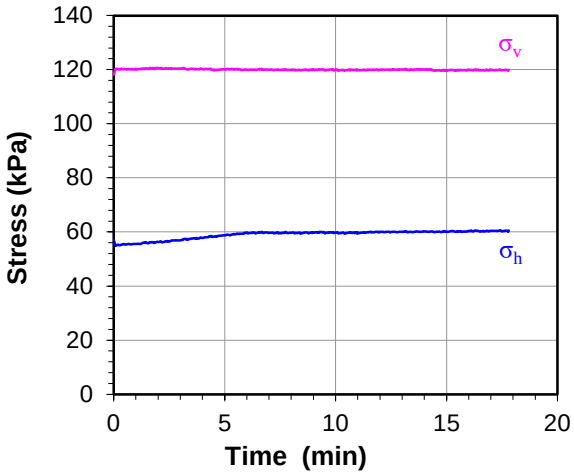
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

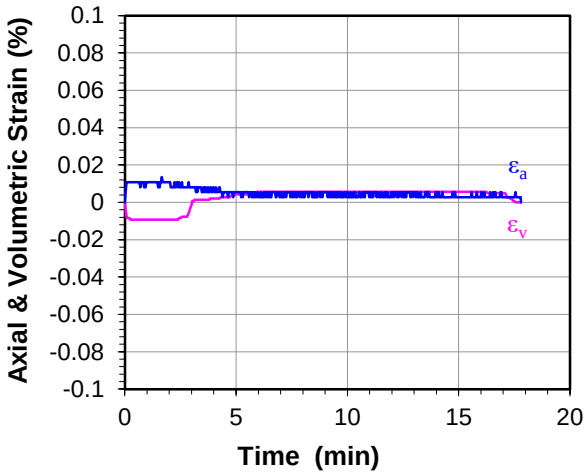
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization



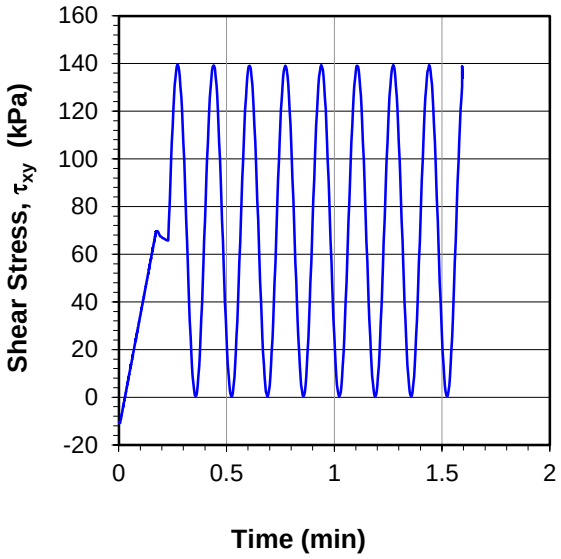


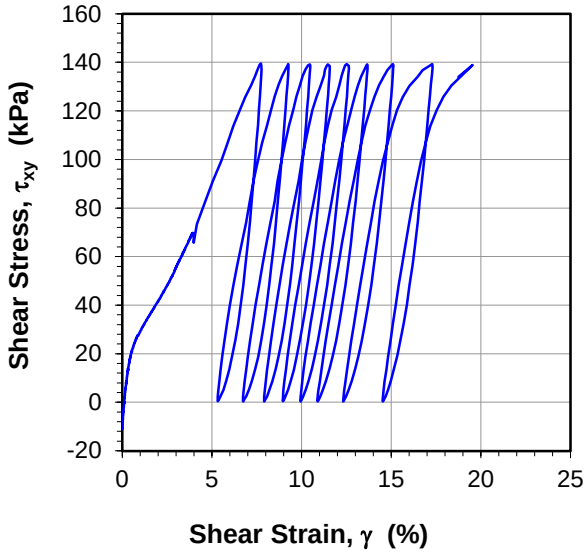
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

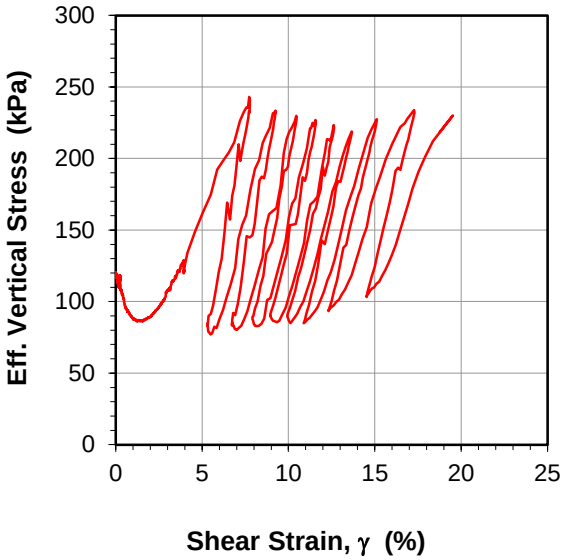
IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

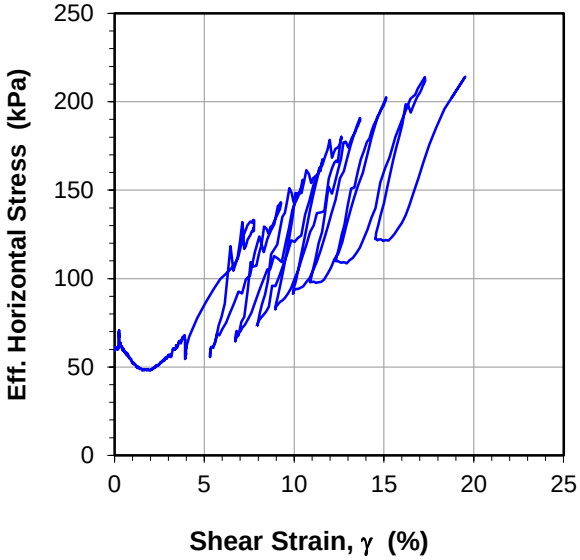
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









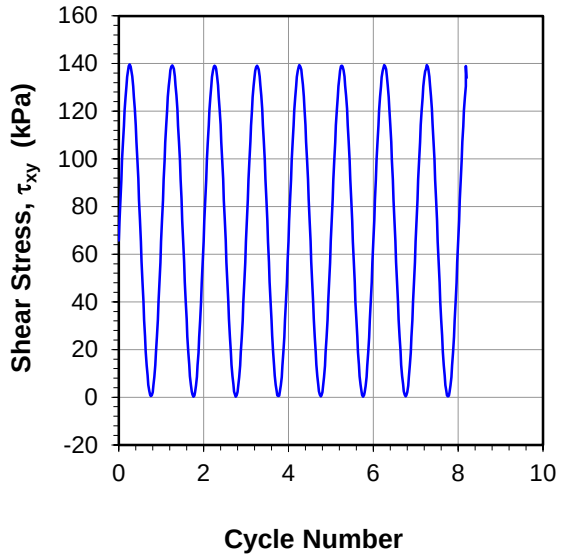
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

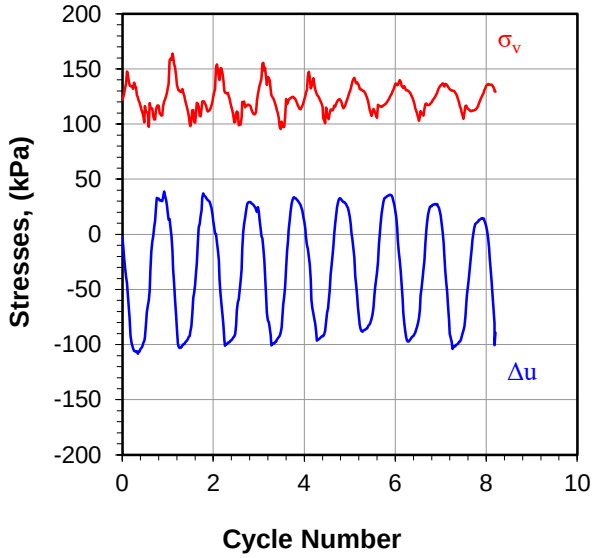
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

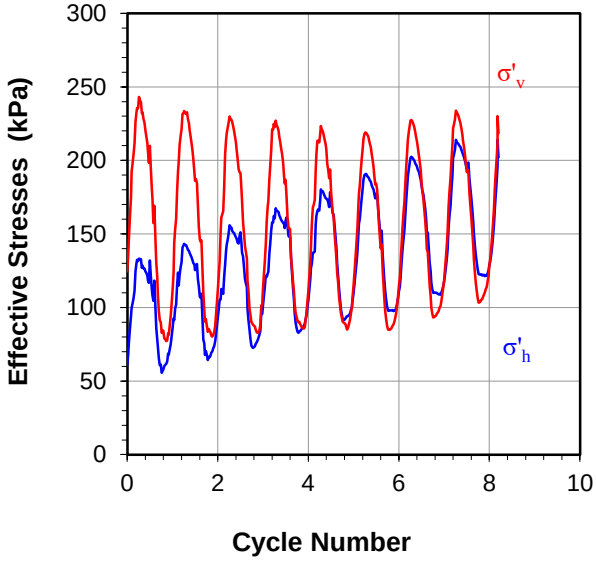
IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

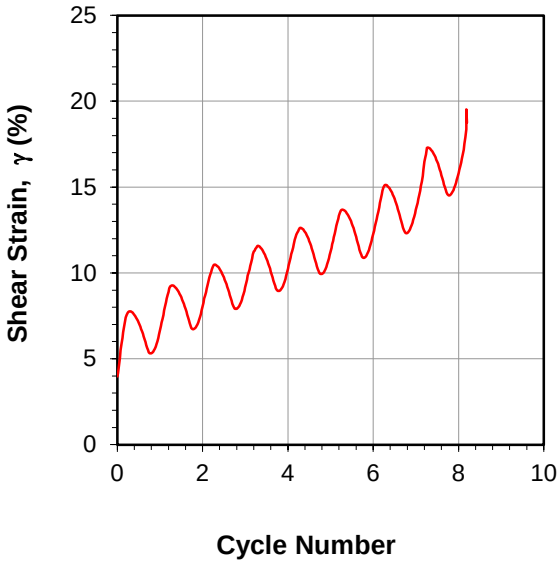
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







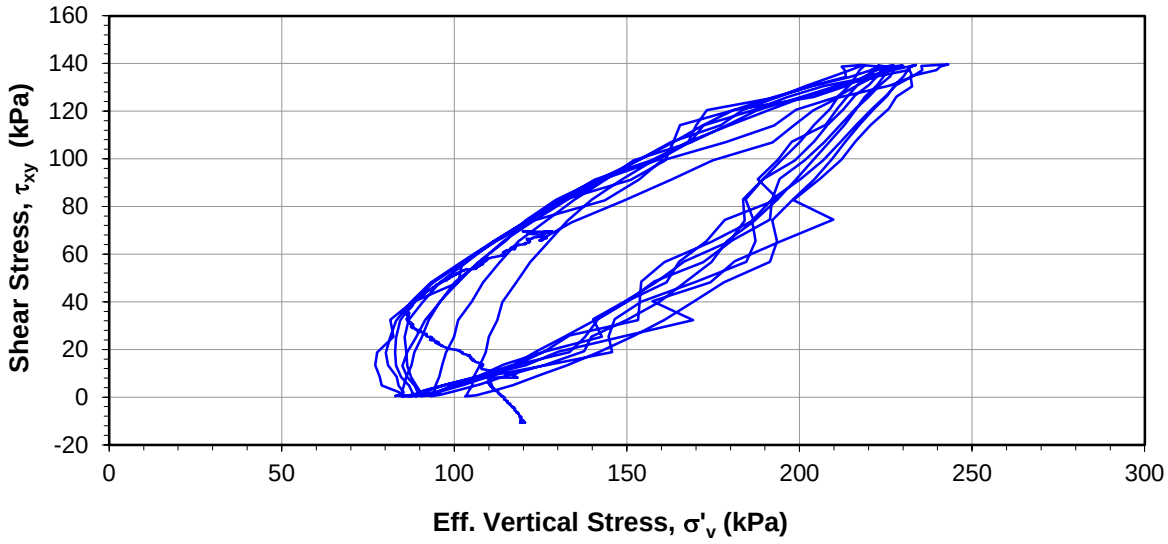


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-010
		Borehole ID:	-
Sample No.:	2D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage



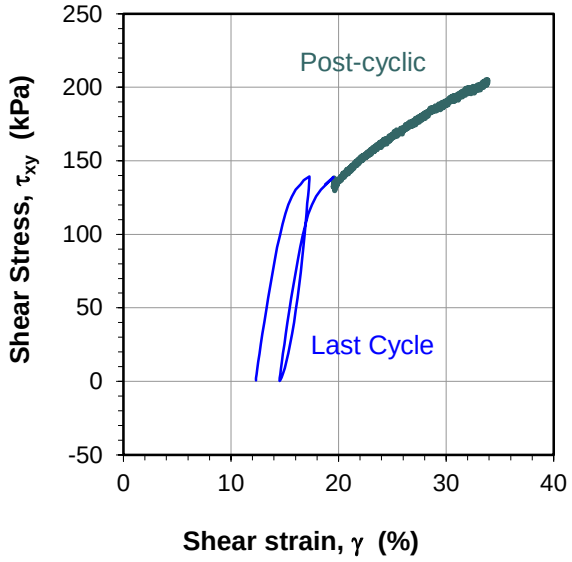
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

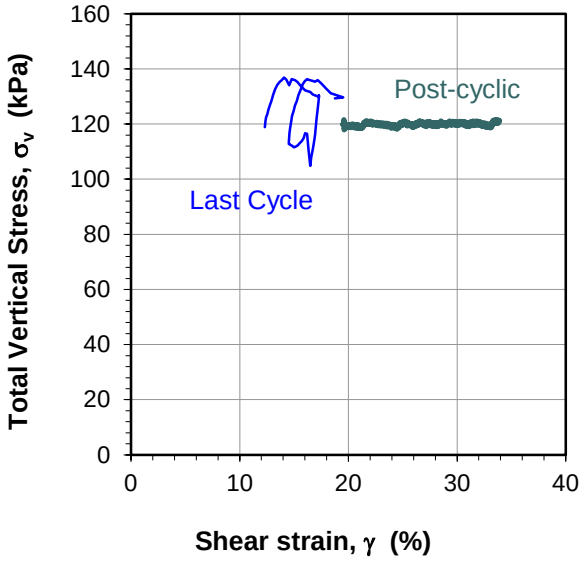
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

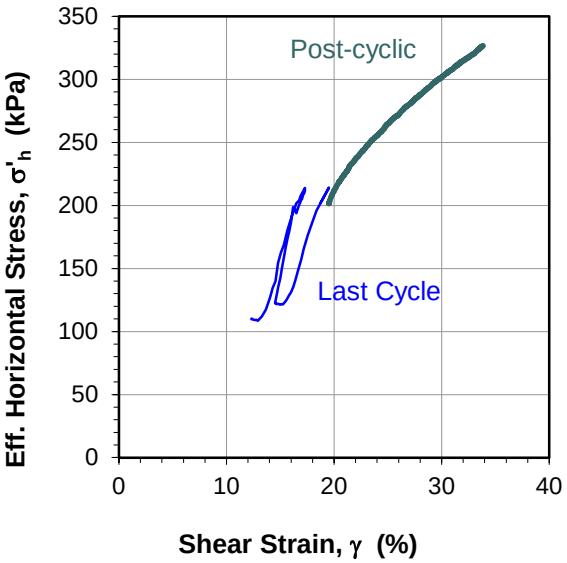
IPO Number: 2019-030
Sample ID: 2019-030-010
Borehole ID: -
Depth: 6.00 m

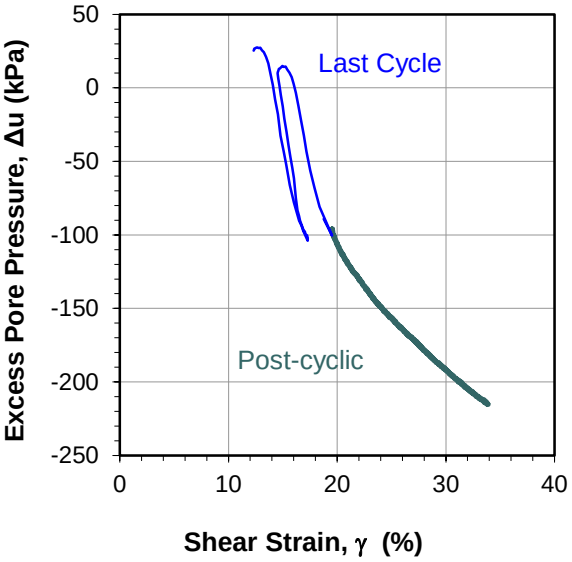
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

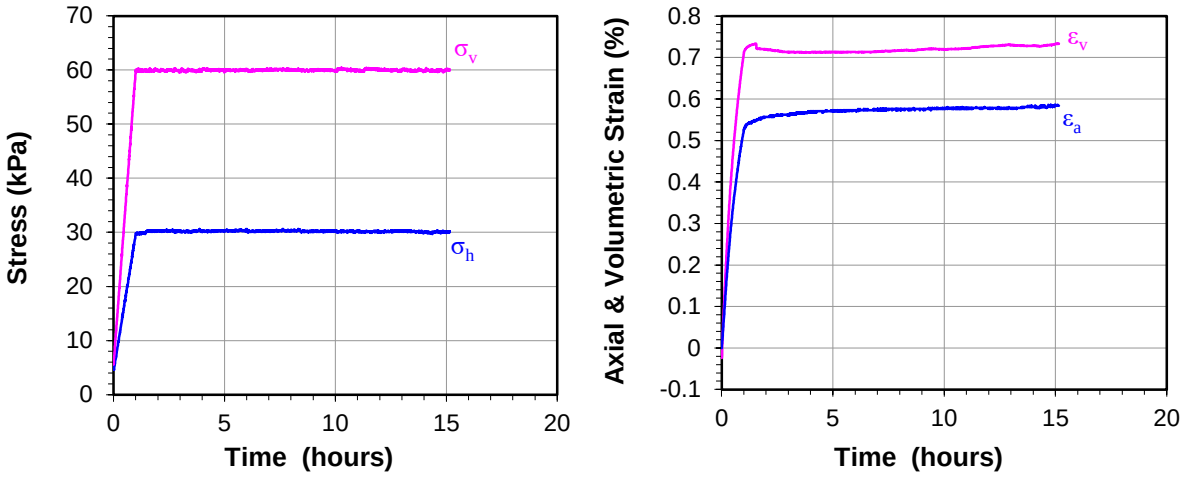
Test Details:		
Test ID:	2D-DSS-11	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	60	30
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	-100 to 100	

Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	37.0
Dry Density (t/m^3) :	1.70	1.71
Moisture Content (%) :	21.3 *	19.9
Tested By:	SF	
Date:	17/12/2019	
Checked By:	TC	
Date:	23/06/2020	

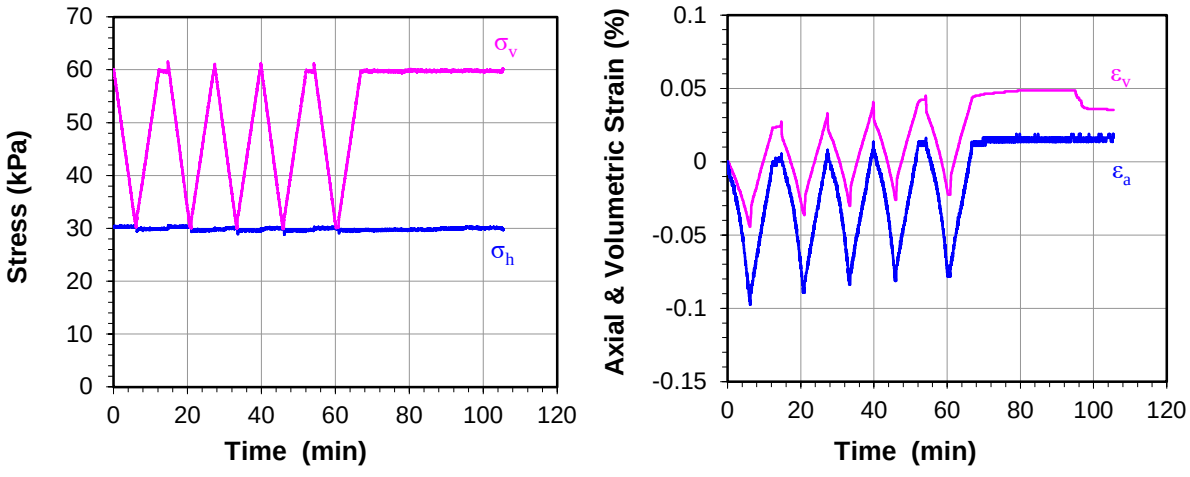
*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



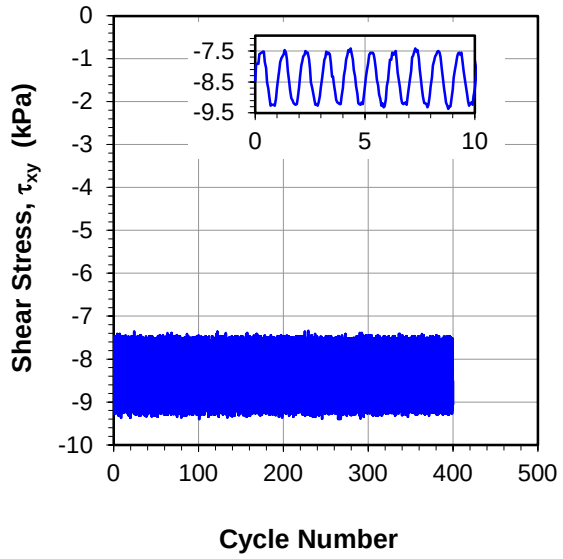
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

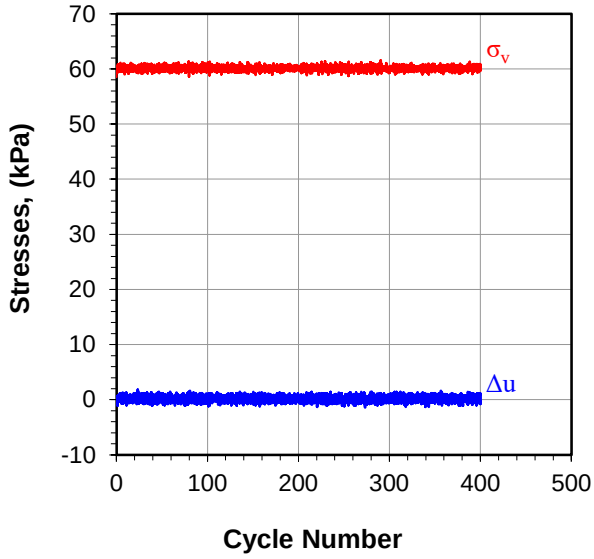
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

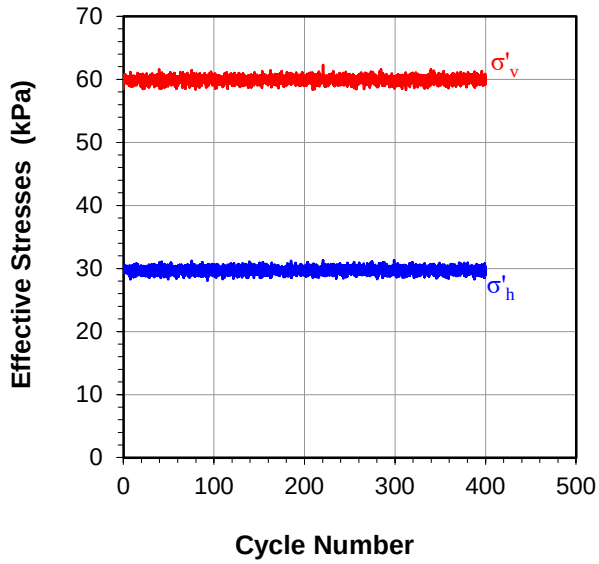
IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

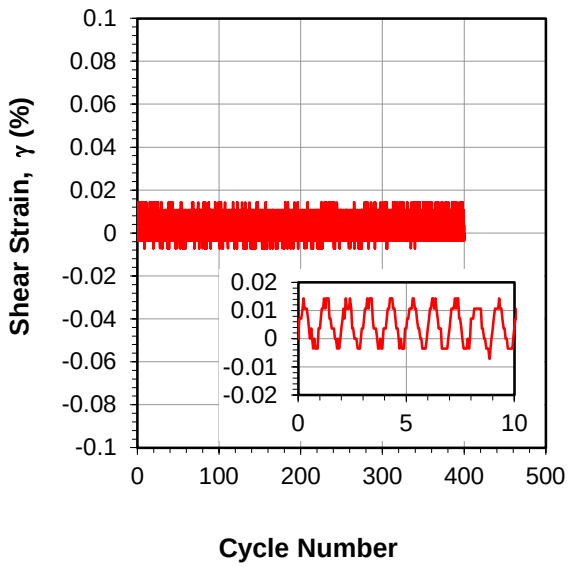
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









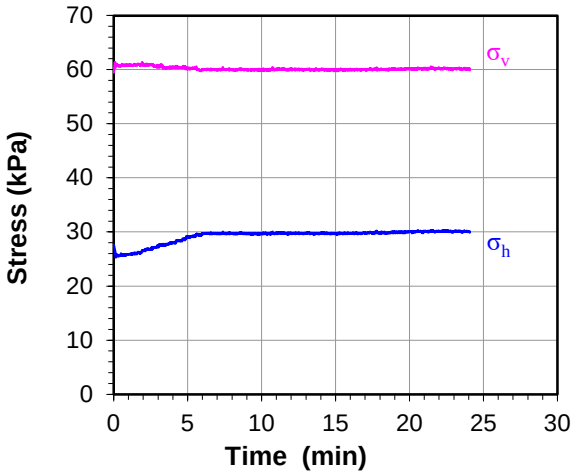
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

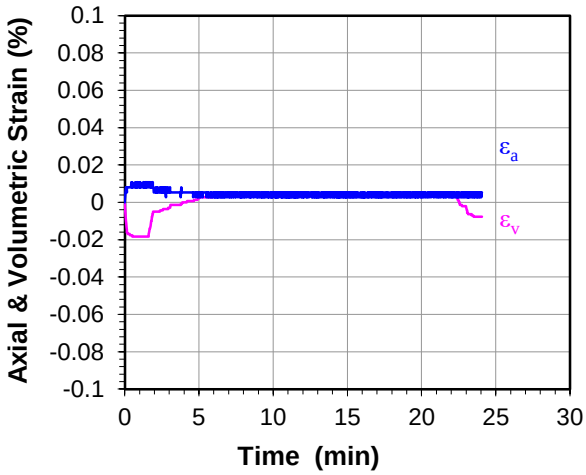
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





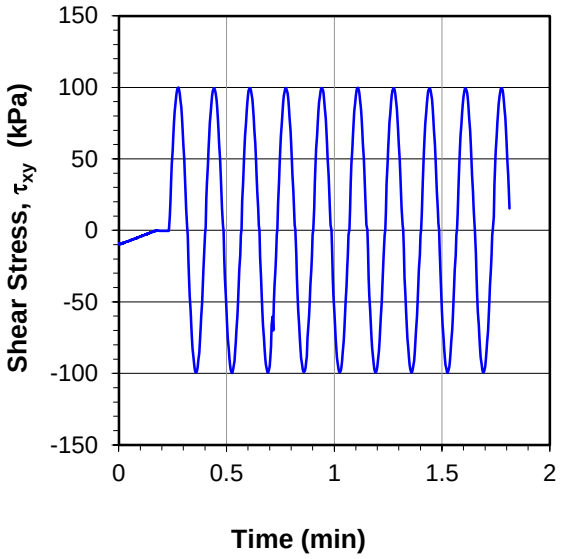
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

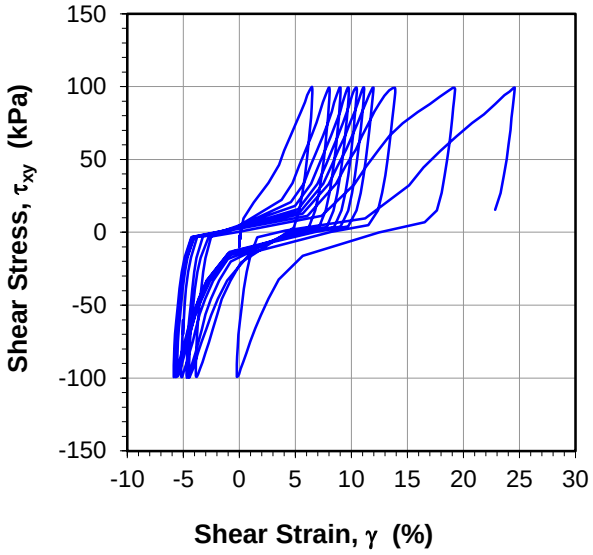
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

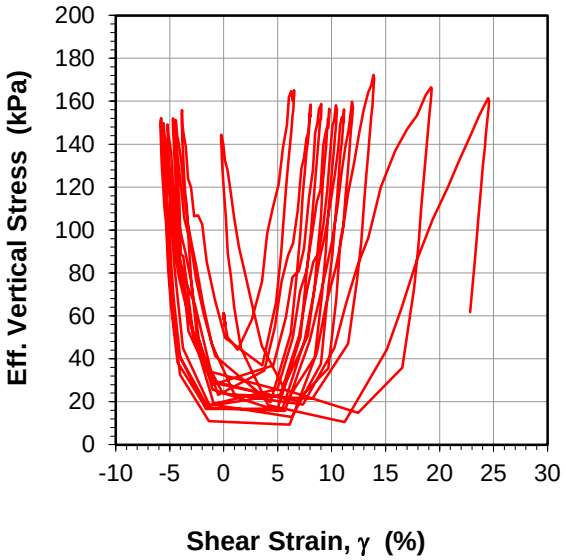
IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

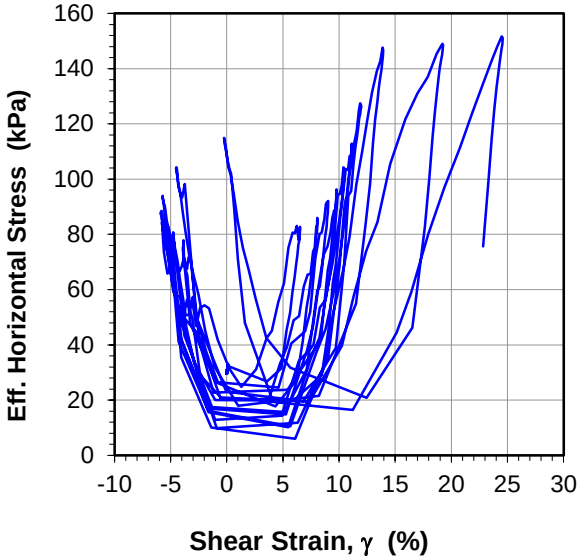
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







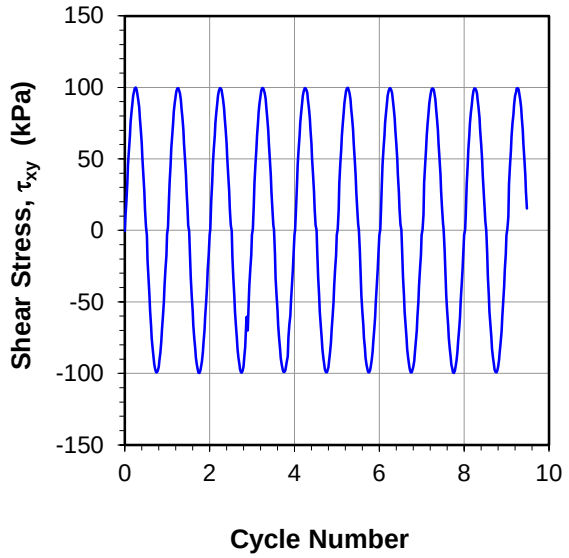


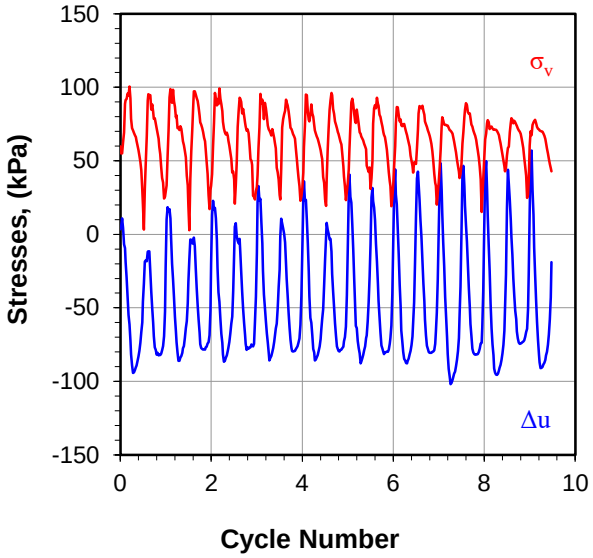
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

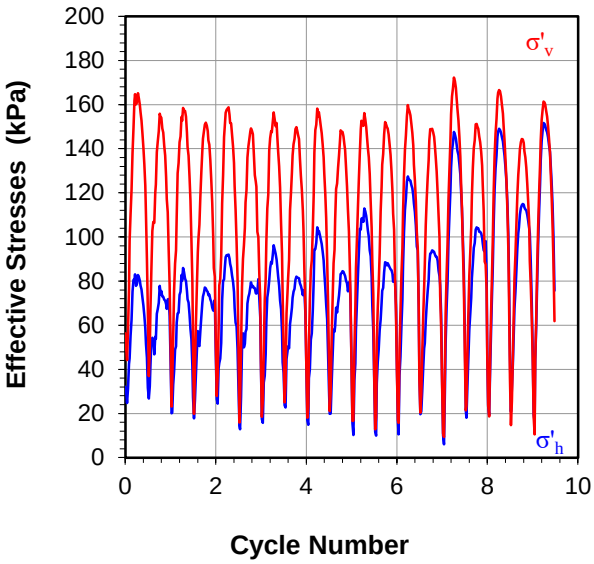
IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

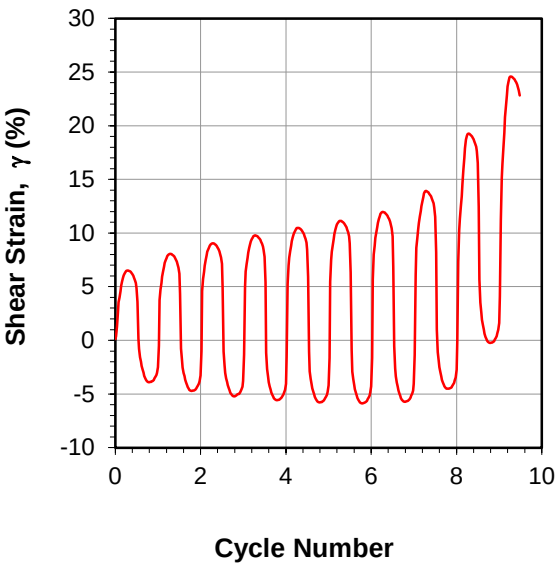
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage







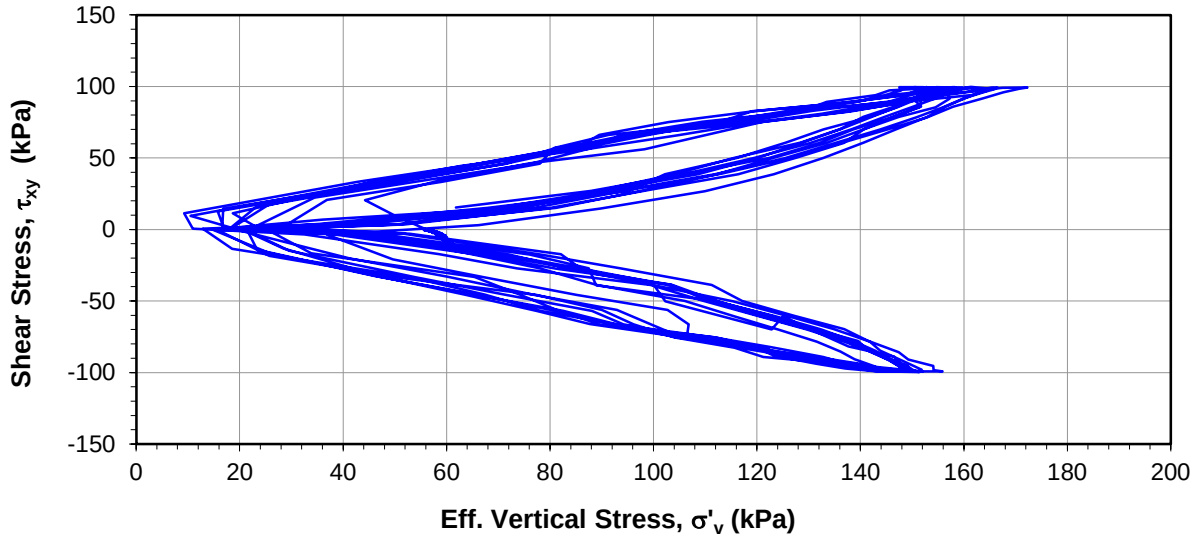


BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client:	Bureau of Safety and Environmental Enforcement (BSEE)	**IPO Number:**	2019-030
Project:	BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand	**Sample ID:**	2019-030-011
		Borehole ID:	-
Sample No.:	2D	**Depth:**	6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage



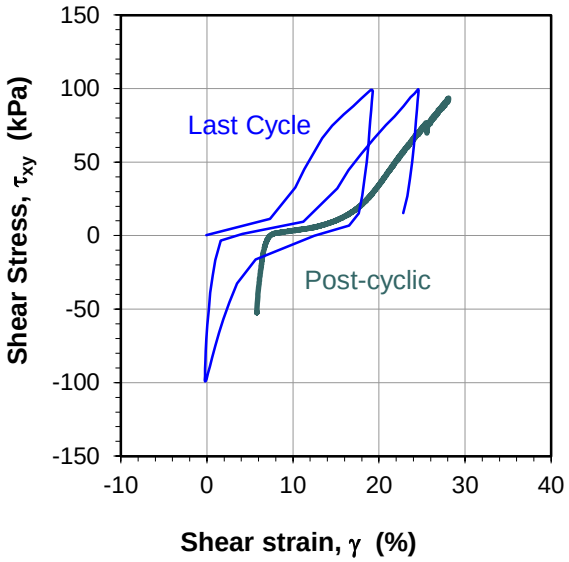
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

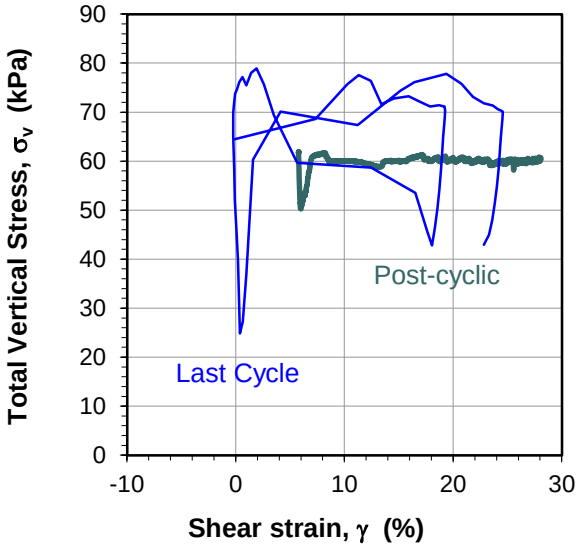
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 2D

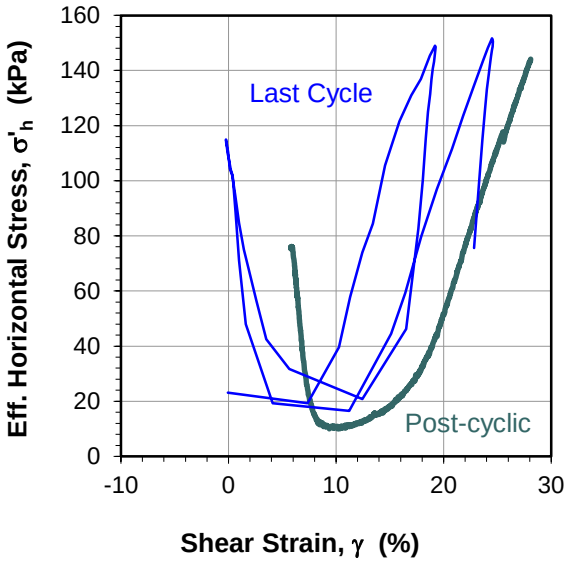
IPO Number: 2019-030
Sample ID: 2019-030-011
Borehole ID: -
Depth: 6.00 m

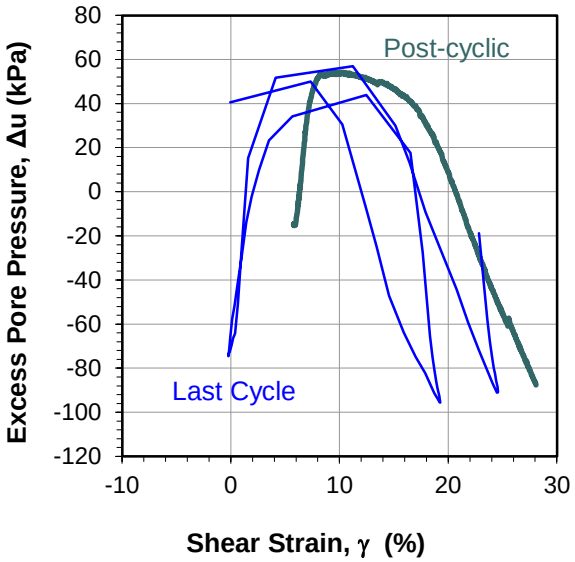
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

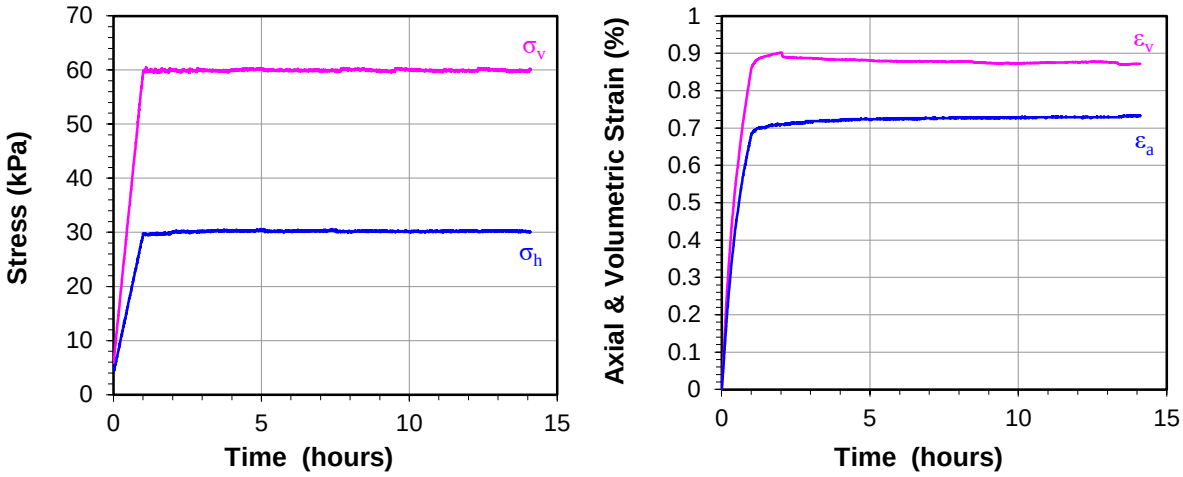
Test Details:		
Test ID:	3E-DSS-12	
Final Consolidation Stress (kPa):	σ_{vo}	σ_{ho}
	120.0	60.0
Cyclic Axial Stress (kPa):	30 to 60 for 5 cycles	
Cyclic Shear Stress (kPa):	$\tau \pm 1$ for 400 cycles	
Frequency (Hz):	0.1	
Cyclic Shear Stress (kPa):	-90.0 to 90.0	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample.

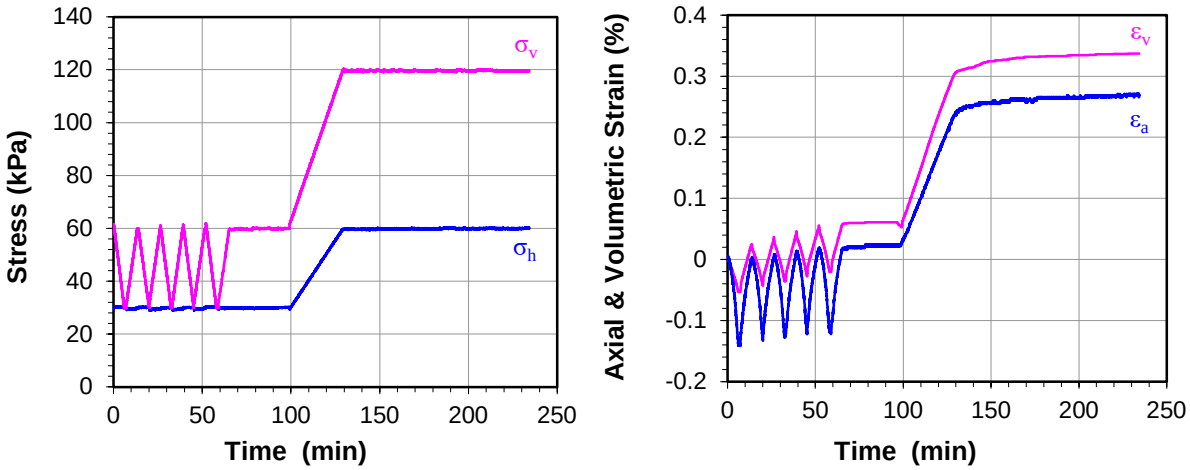
Sample Details:	Initial	Final
Sample Diameter (mm):	70.0	-
Sample Height (mm) :	37.2	36.9
Dry Density (t/m^3) :	1.76	1.78
Moisture Content (%) :	17.3 *	19.7
Tested By:	SF	
Date:	19/12/2019	
Checked By:	TC	
Date:	23/06/2020	

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 1: Consolidation



Step 2: Drained Pre-shearing Stage 1 and Reconsolidation



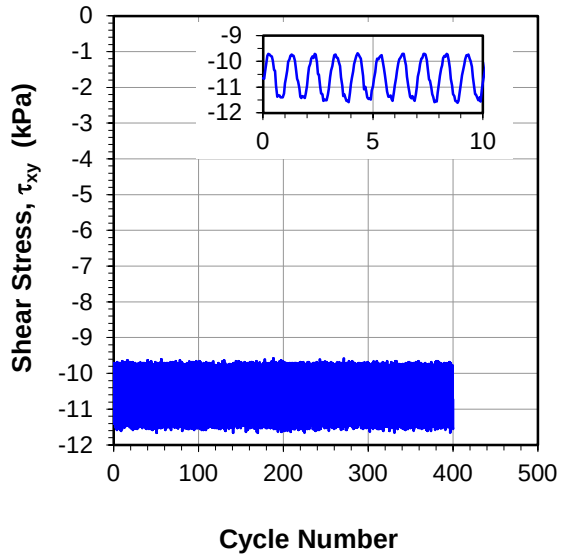
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

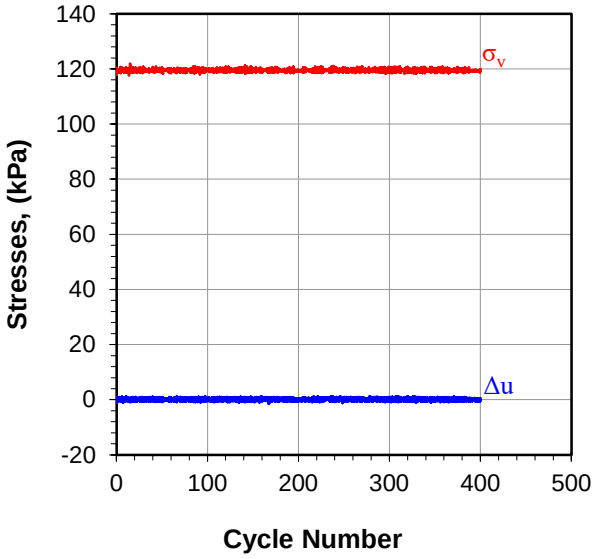
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

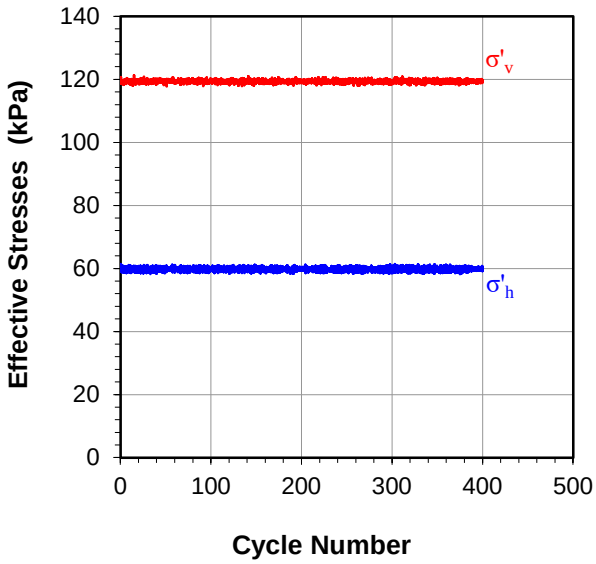
IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

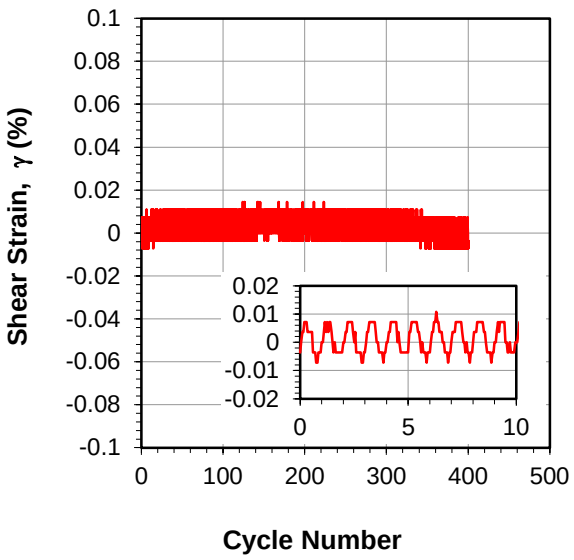
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 3: Drained Pre-shearing Stage 2









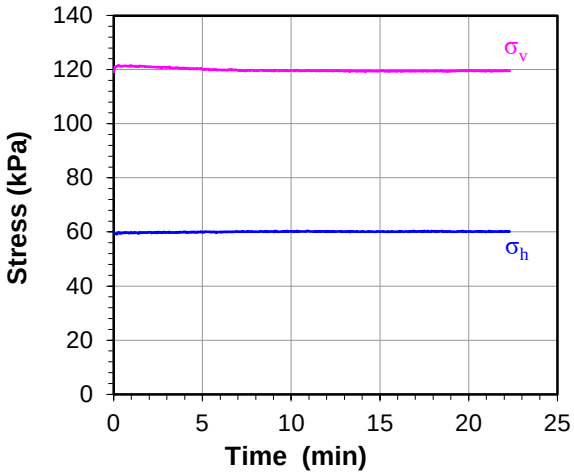
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

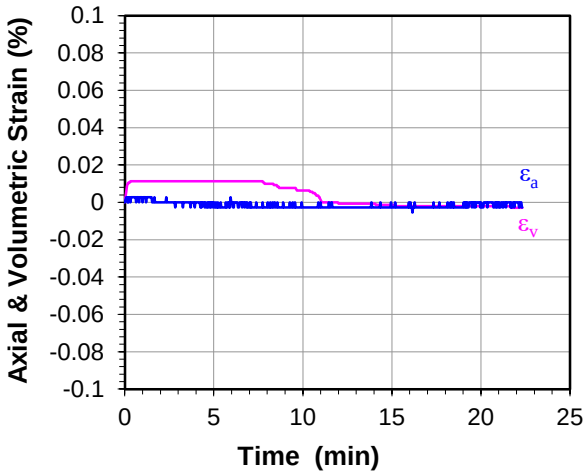
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 4: Reconsolidation and Pore Pressure Equalization





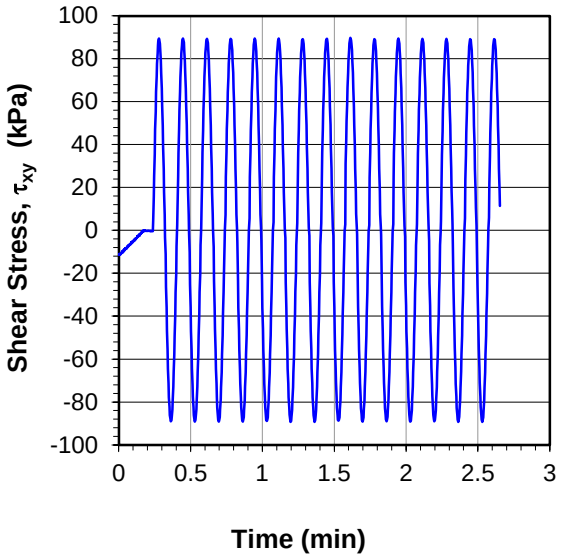
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

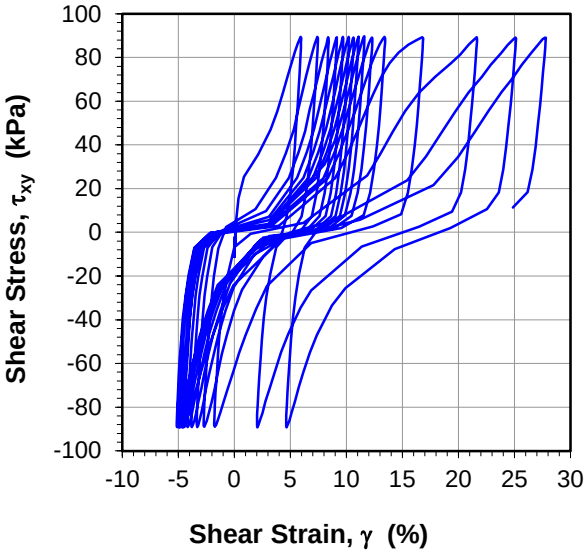
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

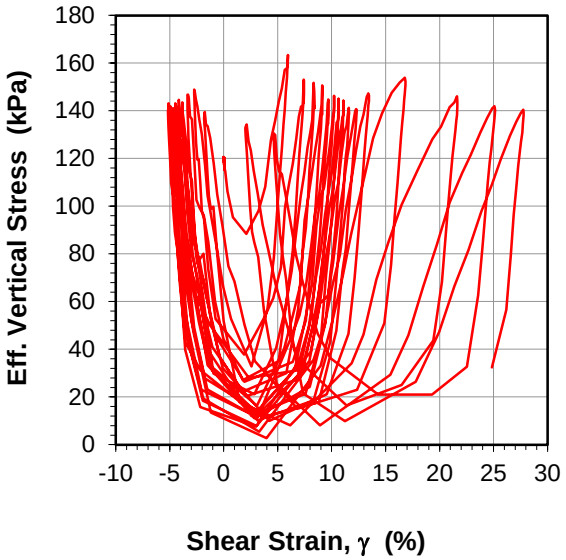
IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

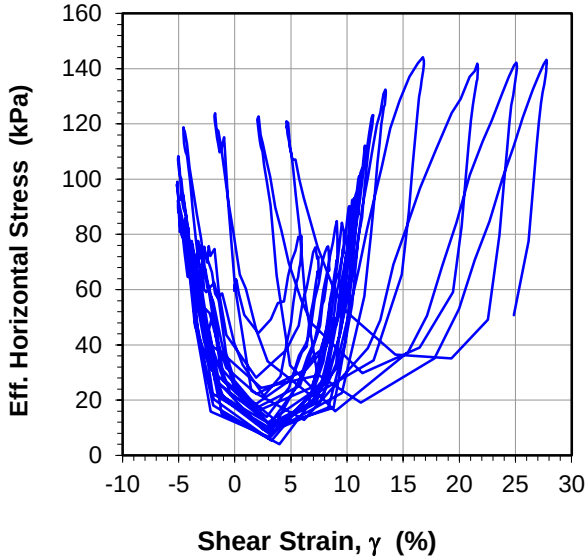
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









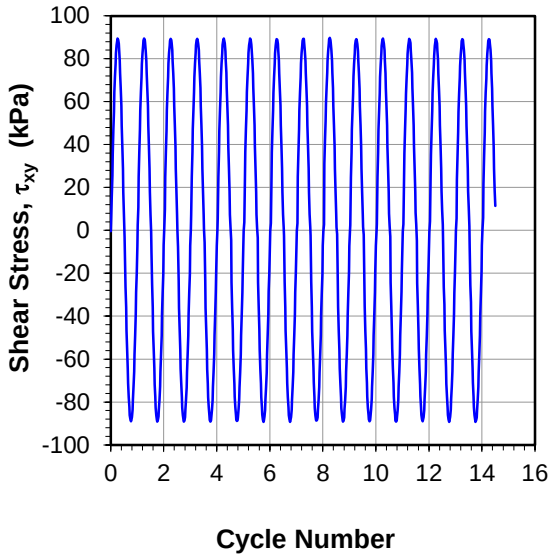
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

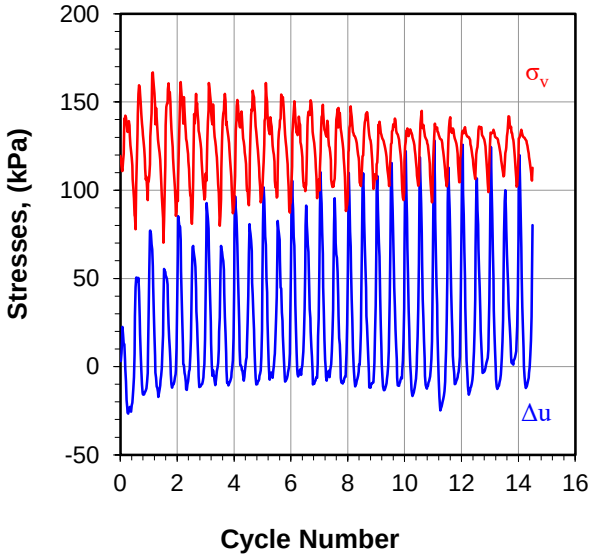
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

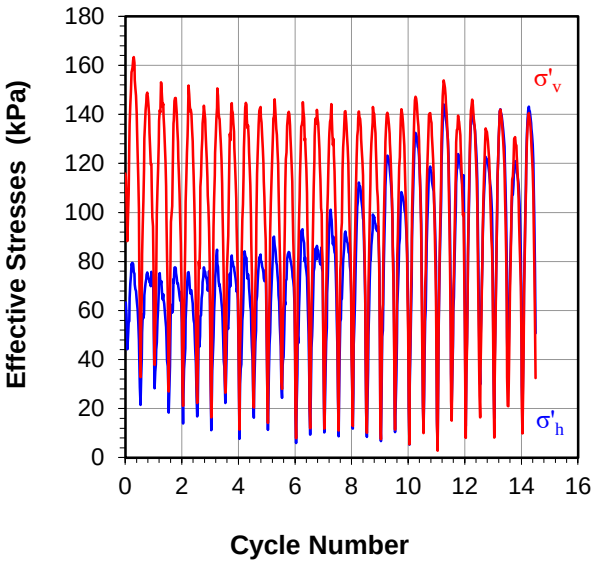
IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

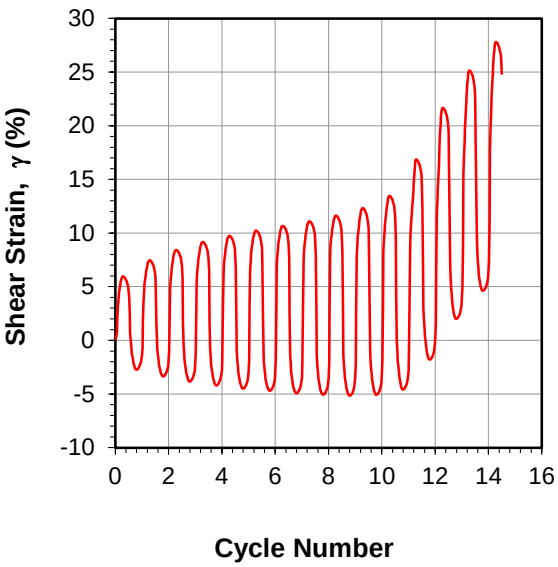
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage









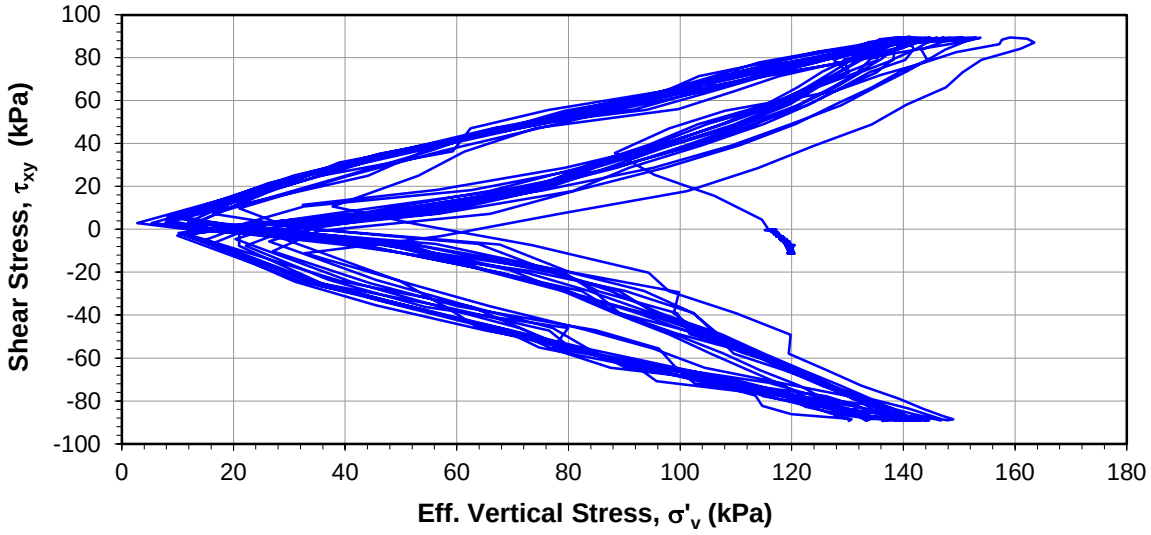
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 5: Undrained Cyclic Shearing Stage



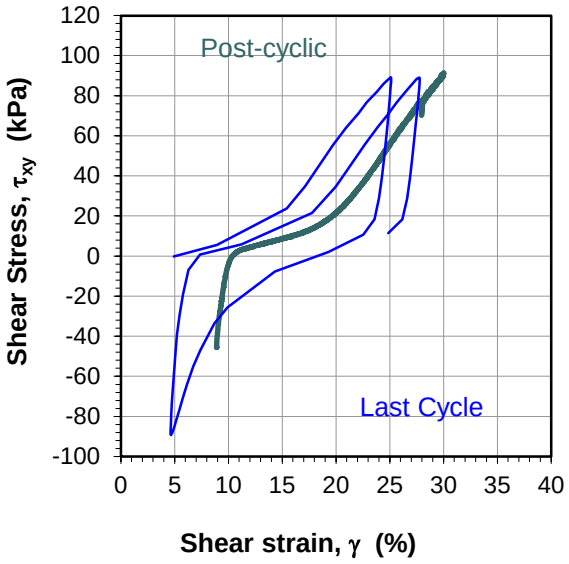
BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

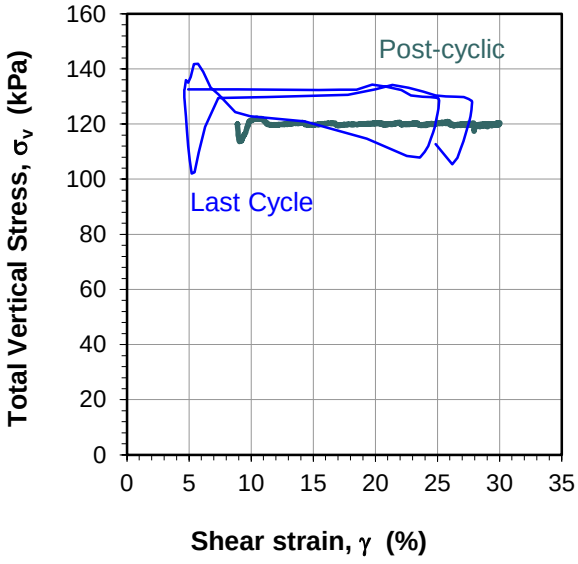
Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3E

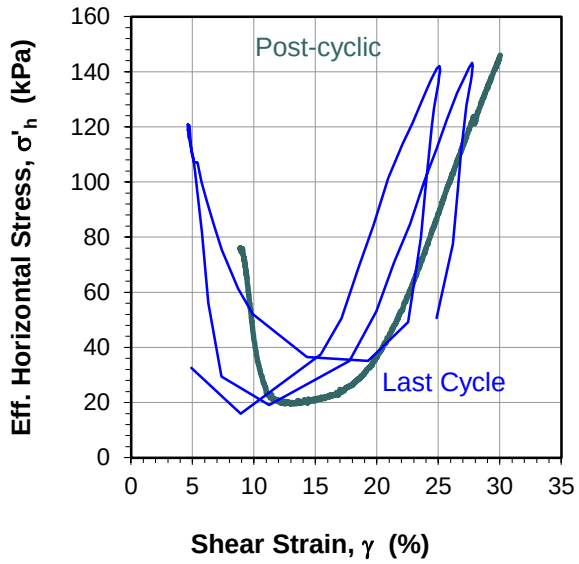
IPO Number: 2019-030
Sample ID: 2019-030-012
Borehole ID: -
Depth: 6.00 m

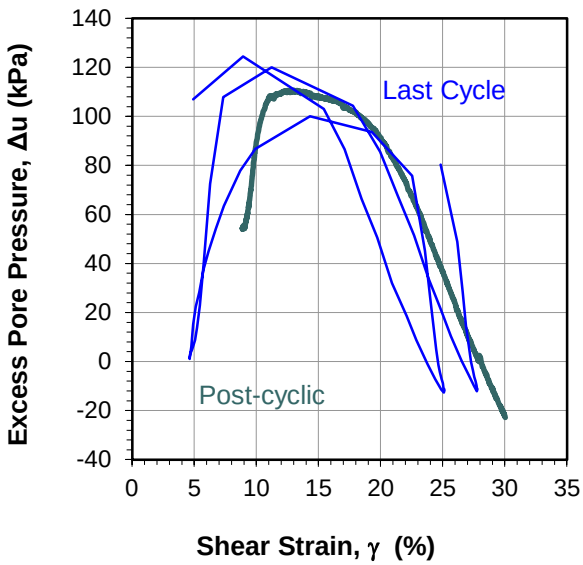
SIMPLE SHEAR TEST
Test Method: AGLab Test Procedure FAM-20741

Step 6: Undrained Post Cyclic Shearing









BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Cyclic Simple Shear with Drained Axial and Lateral Pre-shearing

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3A

IPO Number: 2019-030
Sample ID: 2019-030-023
Borehole ID: -
Depth: 6m

Test Details:	
Test ID:	BSEE-OED01
Tested By:	BB
Date:	03/12/2019
Checked By:	TC
Date:	19/12/2019

Sample Details:	Initial	Final
Sample Diameter (mm) :	70.0	70.0
Sample Height (mm) :	20.00	19.68
Dry Density (t/m^3) :	1.72	1.74
Moisture Content (%) :	18.8 *	18.4
Soil Particle Density (t/m^3) :	2.67	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample

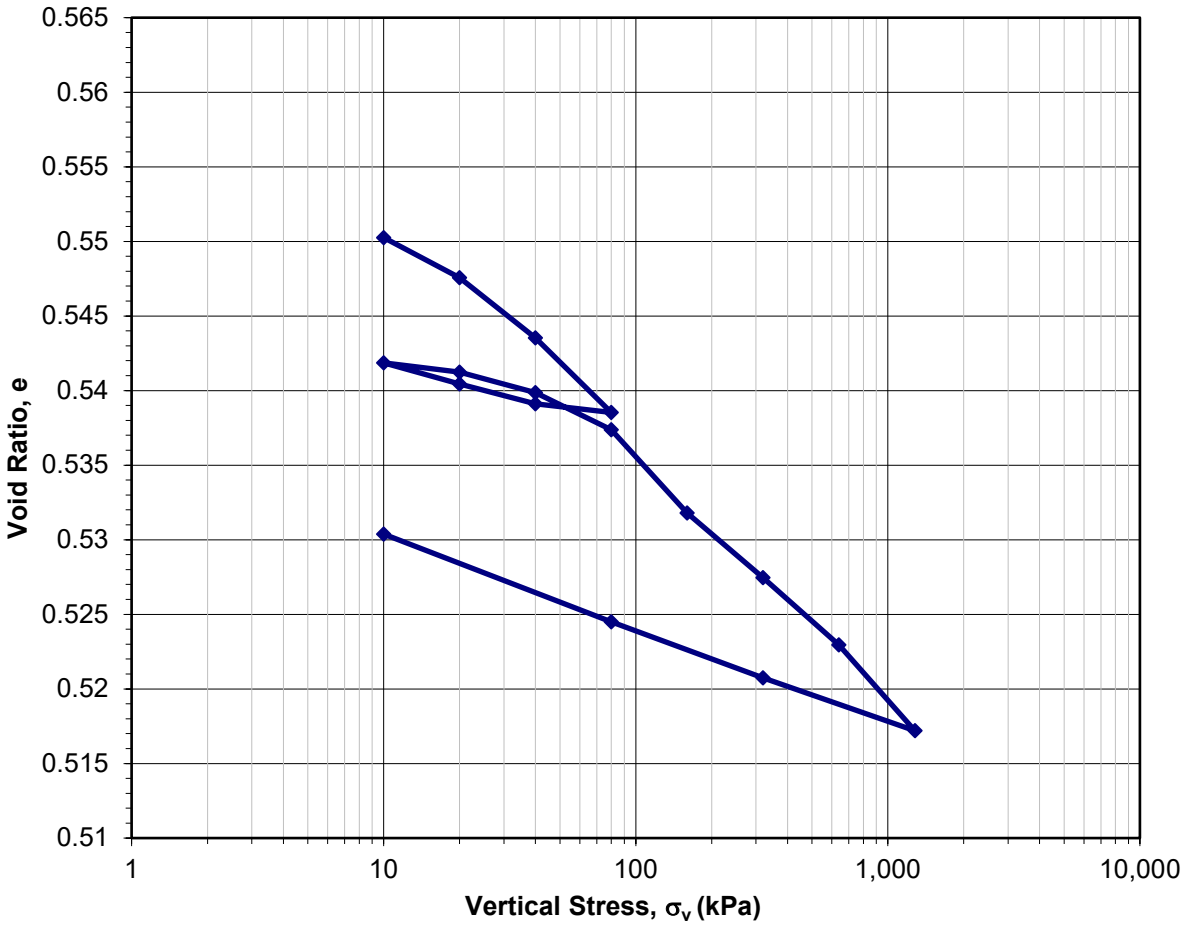
1-DIMENSIONAL CONSOLIDATION TEST
Test Method: AS 1289.6.6.1

Stage		σ_v	e	c_v	m_v	k
		kPa		m^2/year	m^2/kN	m/sec
Loading	1	10	0.550	-	3.8E-04	-
	2	20	0.548	1,420.5	1.7E-04	7.7E-08
	3	40	0.544	1,731.6	1.3E-04	7.0E-08
	4	80	0.539	1,834.5	8.1E-05	4.6E-08
Unloading	5	40	0.539	-	-	-
	6	20	0.540	-	-	-
	7	10	0.542	-	-	-
Reloading	8	20	0.541	-	-	-
	9	40	0.540	-	-	-
	10	80	0.537	-	-	-
Loading	11	160	0.532	1,832.0	4.5E-05	2.6E-08
	12	320	0.527	1,856.4	1.8E-05	1.0E-08
	13	640	0.523	1,871.9	9.2E-06	5.4E-09
	14	1,280	0.517	1,885.6	5.9E-06	3.5E-09
Unloading	15	320	0.521	-	-	-
	16	80	0.524	-	-	-
	17	10	0.530	-	-	-

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3A

IPO Number: 2019-030
Sample ID: 2019-030-023
Borehole ID: -
Depth: 6m

1-DIMENSIONAL CONSOLIDATION TEST
Test Method: AS 1289.6.6.1



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

1-Dimensional Consolidation

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3A

IPO Number: 2019-030
Sample ID: 2019-030-024
Borehole ID: -
Depth: 6m

Test Details:	
Test ID:	BSEE-OED02
Tested By:	BB
Date:	06/12/2019
Checked By:	TC
Date:	19/12/2019

Sample Details:	Initial	Final
Sample Diameter (mm) :	70.0	70.0
Sample Height (mm) :	20.00	19.68
Dry Density (t/m^3) :	1.73	1.74
Moisture Content (%) :	18.7 *	19.7
Soil Particle Density (t/m^3) :	2.67	

*Moisture content calculated using trimmings; may not be equal to moisture content of whole sample

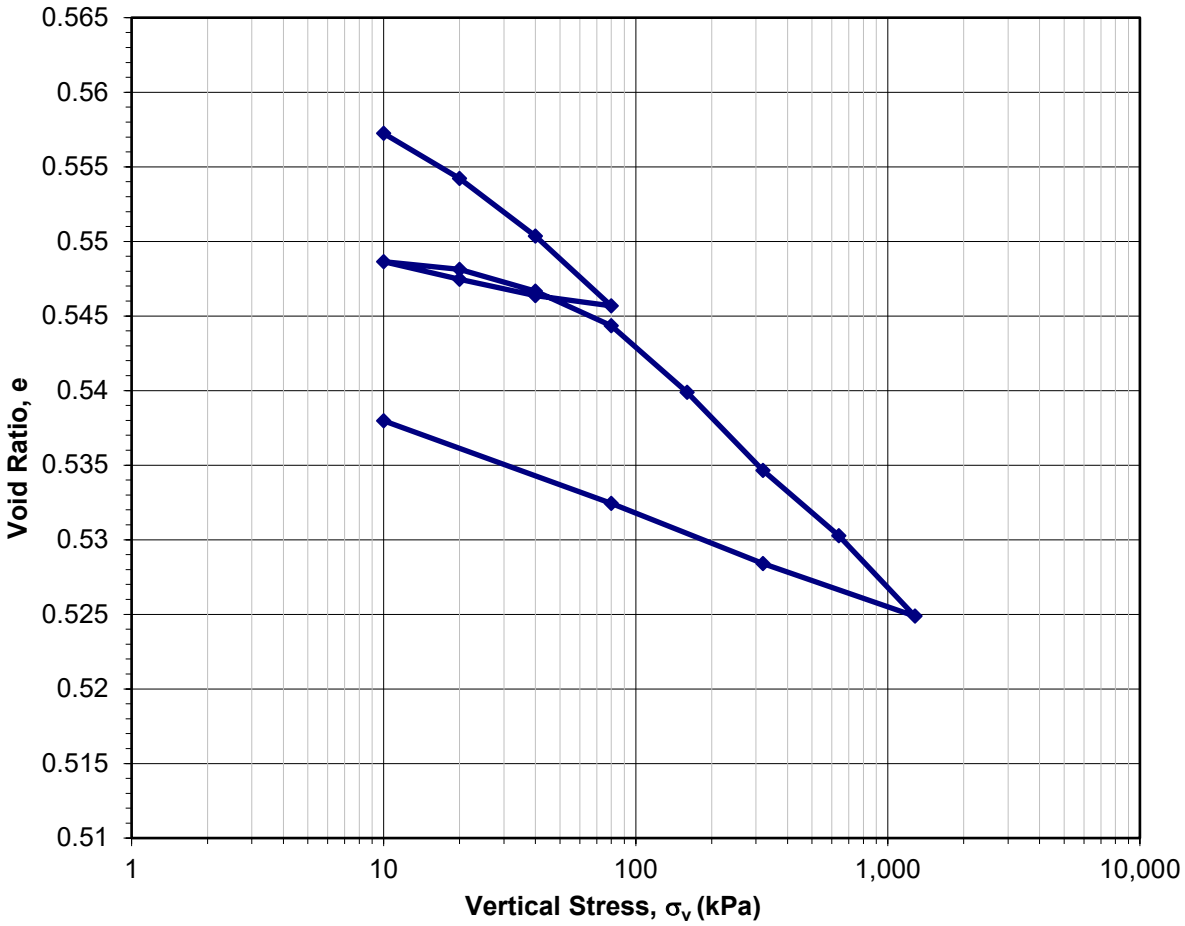
1-DIMENSIONAL CONSOLIDATION TEST
Test Method: AS 1289.6.6.1

Stage		σ_v	e	c_v	m_v	k
		kPa		m^2/year	m^2/kN	m/sec
Loading	1	10	0.557	-	4.4E-04	-
	2	20	0.554	1,924.0	1.9E-04	1.2E-07
	3	40	0.550	1,941.9	1.2E-04	7.5E-08
	4	80	0.546	1,881.7	7.6E-05	4.4E-08
Unloading	5	40	0.546	-	-	-
	6	20	0.547	-	-	-
	7	10	0.549	-	-	-
Reloading	8	20	0.548	-	-	-
	9	40	0.547	-	-	-
	10	80	0.544	-	-	-
Loading	11	160	0.540	1,867.7	3.6E-05	2.1E-08
	12	320	0.535	1,880.9	2.1E-05	1.2E-08
	13	640	0.530	1,895.9	8.9E-06	5.3E-09
	14	1,280	0.525	1,910.5	5.5E-06	3.3E-09
Unloading	15	320	0.528	-	-	-
	16	80	0.532	-	-	-
	17	10	0.538	-	-	-

Client: Bureau of Safety and Environmental Enforcement (BSEE)
Project: BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand
Sample No.: 3A

IPO Number: 2019-030
Sample ID: 2019-030-024
Borehole ID: -
Depth: 6m

1-DIMENSIONAL CONSOLIDATION TEST
Test Method: AS 1289.6.6.1



BSEE - Cyclic Loading of Suction Bucket Foundations in Undrained Sand

1-Dimensional Consolidation