

12 June 2020

Mr. David Meyers  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**Subject: Groundwater Sampling Trip Report  
Florida State Fire College  
11655 NW Gainesville Road  
Ocala, Marion County, Florida  
ERIC\_6494  
FDEP Contract HW550, Task Assignment SOL-0A087, Subtasks 4 and 5**

Dear Mr. Meyers,

Geosyntec Consultants, Inc. (Geosyntec) has prepared this Trip Report for the Florida Department of Environmental Protection (FDEP) to document activities associated with groundwater, water supply, and filtration system sampling at the Florida State Fire College (FSFC; the “Site”) located at 11655 NW Gainesville Road, Ocala, Marion County, Florida. The objective of this investigation is to assess the extent of groundwater that was previously documented to be affected with per- and polyfluoroalkyl substances. Geosyntec completed the activities under Task Assignment SOL-0A087.

On 8 June to 11 June 2020, Geosyntec completed the following activities at FSFC:

- collected groundwater samples from 11 shallow (water-table) monitoring wells;
- collected groundwater samples from 11 deep (up to 120 feet) monitoring wells;
- collected two water samples from the FSFC Supply Well;
- collected one water sample from the FSFC Fire Well;
- collected five water samples from supply wells located on the adjacent Lhoist property;
- staged and filled 10, 55-gallon drums with investigation-derived waste; and
- completed synoptic water level gauging of all groundwater monitoring wells sampled.

The monitoring well locations, screen intervals, analyses, sampling methods, rationale, and criteria are summarized in **Table 1**. Well locations are depicted on **Figure 1**. Field notes are included in **Attachment A**, and a photographic log documenting representative activities is included as **Attachment B**.

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If you have any questions or comments or require additional information, please contact Eric Sager at 727-330-9952.

Sincerely,  
Geosyntec Consultants, Inc.

A handwritten signature in blue ink, appearing to read "JJ Hollingshead".

JJ Hollingshead  
Scientist

A handwritten signature in blue ink, appearing to read "Eric Sager".

Eric Sager, P.G.  
Principal Geologist

Copy: Mike Lodato, Geosyntec  
Todd Kafka, Geosyntec

Attachments

# TABLE

**Table 1: Groundwater Monitoring Well Sampling Locations, Matrices, Analytes, Rationale, and Criteria  
Florida State Fire College June 2020**

Location ID	Sample ID	Matrix	Depth (ft BLS)	Sample Method	Analytes	Rationale	Criteria
<b>Monitoring Well Samples</b>							
DW-1 (FACID#429101718)	CCDW-1 (90-95)	Groundwater	90-95	Submersible Pump	PFAS	Site-Wide Groundwater Monitoring	Provisional Groundwater Cleanup Target Levels
MW-3 (FACID#429101718)	CCMW-3 (60-80)		60-80				
DEPMW-1 (100-120)	DEPMW-1 (100-120)		100-120				
DEPMW-2 (35-55)	DEPMW-2 (35-55)		35-55				
DEPMW-3 (100-120)	DEPMW-3 (100-120)		100-120				
DEPMW-4 (100-120)	DEPMW-4 (100-120)		100-120				
DEPMW-5 (50-70)	DEPMW-5 (50-70)		50-70				
DEPMW-6 (100-120)	DEPMW-6 (100-120)		100-120				
DEPMW-7 (30-50)	DEPMW-7 (30-50)		30-50				
DEPMW-8 (100-120)	DEPMW-8 (100-120)		100-120				
DEPMW-9 (40-60)	DEPMW-9 (40-60)		40-60				
DEPMW-10 (100-120)	DEPMW-10 (100-120)		100-120				
DEPMW-11 (30-50)	DEPMW-11 (30-50)		30-50				
DEPMW-12 (100-120)	DEPMW-12 (100-120)		100-120				
DEPMW-13 (40-60)	DEPMW-13 (40-60)		40-60				
DEPMW-14 (100-120)	DEPMW-14 (100-120)		100-120				
DEPMW-15 (35-55)	DEPMW-15 (35-55)		35-55				
DEPMW-16 (30-50)	DEPMW-16 (30-50)		30-50				
	DEPMW-16 (30-50) DUP						
DEPMW-17 (100-120)	DEPMW-17 (100-120)		100-120				
	DEPMW-17 (100-120) DUP						
DEPMW-18 (100-120)	DEPMW-18 (100-120)	100-120					
DEPMW-19 (45-65)	DEPMW-19 (45-65)	45-65					
DEPMW-20 (30-50)	DEPMW-20 (30-50)	30-50					
FSFC Supply Well	FSFC Supply Well (Pre-filter)	Unknown		From Tap			
	FSFC Supply Well (Post-filter)						
FSFC Fire Well	FSFC Fire Well						
Well #1 (Lhoist property)	Well #1						
Well #4 (Lhoist property)	Well #4						
Well #5AC (Lhoist property)	Well #5AC						
Well #8 (Lhoist property)	Well #8						
	Well #8 DUP						
CC Supply Well (Lhoist property)	CC Supply Well						



**Table 1: Groundwater Monitoring Well Sampling Locations, Matrices, Analytes, Rationale, and Criteria  
Florida State Fire College June 2020**

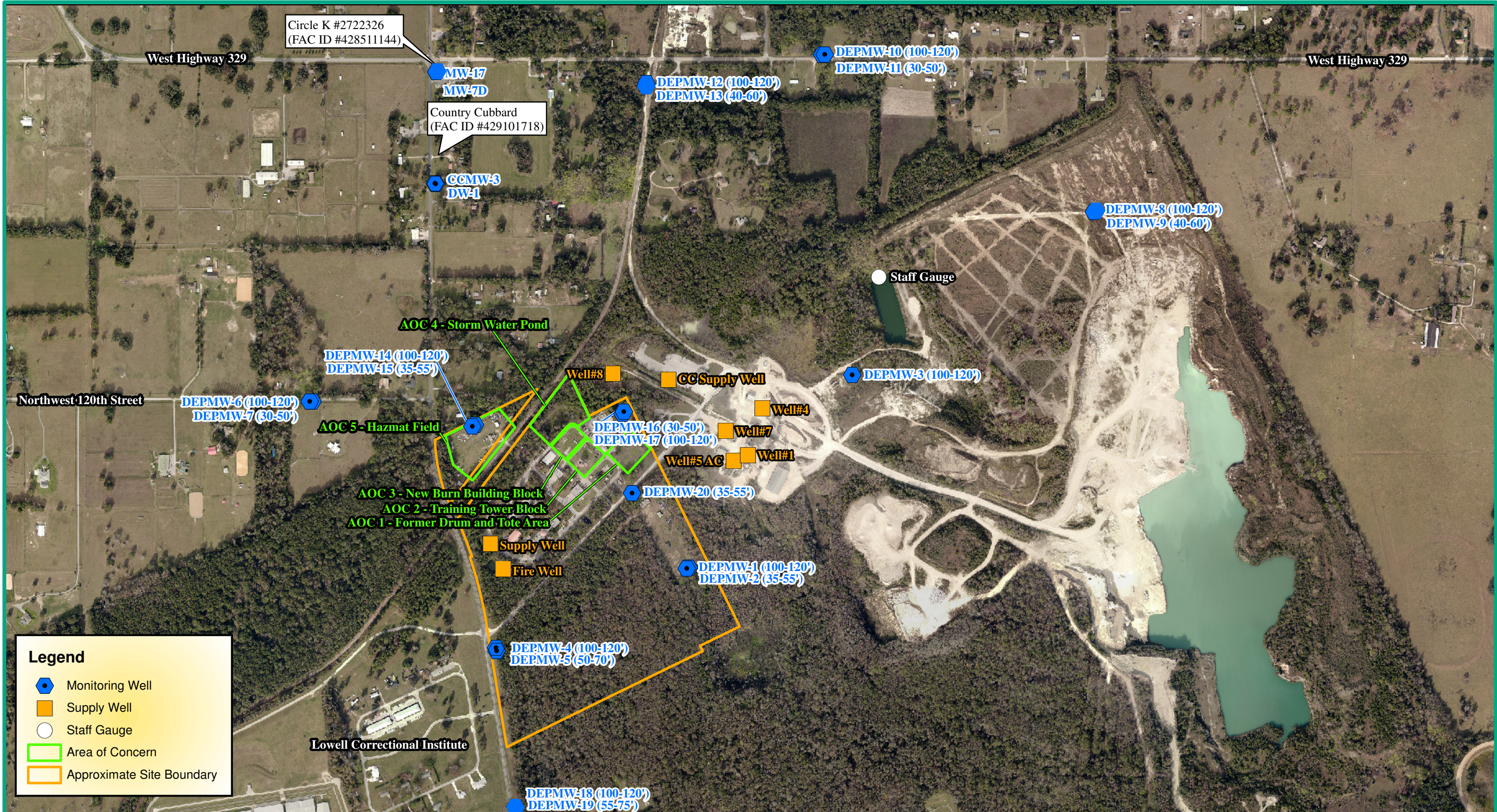
Laboratory Quality Assurance/Quality Control Samples							
Sample Type	Sample ID	Matrix	Equipment Sampled	Analyses	Rationale	Criteria	
Equipment Blanks (ratio of 1:10)	EQB 1	Water	Submersible Pump	PFAS	Assess potential sources of contamination from monitoring well sampling equipment	N/A	
	EQB 2						
Field Reagent Blanks (1 per cooler)	FRB 3		N/A		N/A		Evaluate potential impact of sample cross-contamination
	FRB 4						
	FRB 5						

**Notes:**

- |  |                                       |
|--|---------------------------------------|
| 1. ft BLS indicates feet below land surface.           | 4. EQB indicates equipment blank.     |
| 2. PFAS indicates per- and polyfluoroalkyl substances. | 5. FRB indicates field reagent blank. |
| 3. N/A indicates not applicable.                       | 6. DUP indicates duplicate.           |

**FIGURE**





**Figure 1 Monitoring Well Locations  
Florida State Fire College  
11655 NW Gainesville Road  
Ocala, Marion County, Florida**

**Notes:**

1. AOC indicates area of concern.
2. Sample depths are presented in feet below land surface.
3. Source of 2017 aerial: Florida Department of Transportation Aerial Photo Look Up System website.



700  
Feet



Date: June 01, 2020



# **ATTACHMENT A**

## Field Forms

Water Level Measurement Field Form

Site: Florida State Fire College (FSFC)

Project No.: FR3511C/04

Date 6/10/20 - 6/11/20  
 Weather Hot & humid  
 Initials JH

Page 1 of 1

Well ID	Status	Control Point	Measurement		
		Monitoring Point	Time of Measurement	Depth to Water feet	Depth to Bottom feet
CCDW-1	Good	N	0737 (6/11)	65.19	NM
CCMW-3			0739 (6/11)	68.35	
DEPMW-1			1000 (6/10)	40.39	
DEPMW-2			1003 (6/10)	40.79	
DEPMW-3			1030 (6/10)	68.35	
DEPMW-4			0727 (6/11)	64.59	
DEPMW-5			0725 (6/11)	64.55	
DEPMW-6			0733 (6/11)	35.46	
DEPMW-7			0732 (6/11)	36.03	
DEPMW-8			1315 (6/10)	49.52	
DEPMW-9			1318 (6/10)	49.38	
DEPMW-10			0755 (6/11)	35.69	
DEPMW-11			0753 (6/11)	36.32	
DEPMW-12			0748 (6/11)	51.48	
DEPMW-13			0749 (6/11)	51.57	
DEPMW-14			0902 (6/11)	39.09	
DEPMW-15			0900 (6/11)	39.49	
DEPMW-16			0912 (6/11)	34.85	
DEPMW-17			0915 (6/11)	34.45	
DEPMW-18			0720 (6/11)	55.21	
DEPMW-19			0719 (6/11)	55.42	
DEPMW-20	Good	N	1540 (6/11)	38.60	NM

Notes

IDW Inventory - Geosyntec Consultants

**FIELD DRUM INVENTORY TRACKING LOG**

Project Name: **Florida State Fire College**

Drum Number	Generation Date	Content % Full	Contents (soil, development water, purge water, etc.)	Source Location (Well #, Boring #, etc.)	
1	6/08/20	90	IDW Water	DEPMW-18,19,10,11,6,7	
2	6/08/20	90		"	
3	6/09/20	90		DEPMW-4,5,12,13,CC	
4	6/09/20	90		MW-3, CCDW-1	
5	6/09/20	90		"	
6	6/10/20	90		DEPMW-3,8,9,1,2,20	
7	6/10/20	90		"	
8	6/10/20	90		"	
9	6/11/20	80		DEPMW-14,15,16,17	
10	6/11/20	90		IDW Water	"

DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: DW-1 (FAA ID# 429101718)	SAMPLE ID: CC DW-1 (90-95) DATE: 6/09/2020

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8" SD	WELL SCREEN INTERVAL DEPTH: 90 feet to 95 feet	STATIC DEPTH TO WATER (feet): 65.21	PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( 95 ft - 65.21 ft ) X 0.16 gallons/foot = 4.8 gal 1/4 = 1.2				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= 0.1 gallons + ( gallons/foot X feet ) + 0.1 gallons =				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~67		FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~75		PURGING INITIATED AT: 1655
				PURGING ENDED AT: 1724
				TOTAL VOLUME PURGED (gallons): 29

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1700	5	5	0.5	73.82	9.67	24.02	2,069	53.36	appears	lt. white	199.5	
1715	15	20	1.0	73.82	9.66	24.03	2,044	46.05	524	lt. white	211.5	
1720	5	25	1.0	73.82	9.64	23.97	2,004	62.47	426	lt. white	215.2	
1722	2	27	1.0	73.84	9.59	23.95	1,999	62.75	401	lt. white	220.6	
1724	2	29	1.0	73.82	9.56	23.93	1,988	62.00	430	lt. white	222.6	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec			SAMPLER(S) SIGNATURES:			SAMPLING INITIATED AT: 1725		SAMPLING ENDED AT: 1726	
PUMP OR TUBING DEPTH IN WELL (feet): ~75			SAMPLE PUMP FLOW RATE (mL per minute): 3,787			TUBING MATERIAL CODE: HDPE			
FIELD DECONTAMINATION: <input checked="" type="radio"/> N (pump)			FIELD-FILTERED: Y <input checked="" type="radio"/> N (N) FILTER SIZE: µm			DUPLICATE: Y <input checked="" type="radio"/> N (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
CC DW-1 (90-95)	2	HDPE	125 mL	none	250	9.56	PFAS - 8321B	ESP	3,787

REMARKS: \* No odors; 1 gpm was lowest achievable flow rate

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING:** APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:**  
 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 **STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: MW-3 (FAC ID #429/01718)	SAMPLE ID: CCMW-3(60-80)
DATE: 6/09/20	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/8" ID	WELL SCREEN INTERVAL DEPTH: 60 feet to 80 feet	STATIC DEPTH TO WATER (feet): 68.35	PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( 80 ft - 68.35 ft) X 0.16 gallons/foot = 1.9 gal				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.1 gallons + ( gallons/foot X feet) + 0.1 gallons =				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~70			FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~70 72.5			PURGING INITIATED AT: 1539		PURGING ENDED AT: 1600		TOTAL VOLUME PURGED (gallons): 1600		
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1543	2	2	0.5	70.92	6.67	24.47	866	48.16	38.3	white	153.1	
1556	6.5	8.5	0.5	70.94	6.81	24.46	873	45.00	17.0	clear	135.5	
1558	1.0	9.5	0.5	70.91	6.88	24.42	874	43.81	16.5	clear	133.9	
1600	1.0	10.5	0.5	70.90	6.95	24.42	874	45.77	16.3	clear	131.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec	SAMPLER(S) SIGNATURES: 	SAMPLING INITIATED AT: 1601	SAMPLING ENDED AT: 1602
PUMP OR TUBING DEPTH IN WELL (feet): 72.5	SAMPLE PUMP FLOW RATE (mL per minute): 1.893	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: <input type="radio"/> N (pump)	FIELD-FILTERED: Y <input checked="" type="radio"/> N Filtration Equipment Type:	DUPLICATE: Y <input checked="" type="radio"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
CCMW-3(60-80)	2	HDPE	125 mL	none	250	6.95	PFAS - 8321B	ESP	1.893

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING/PURGING: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2);  
 optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)



Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL</b>
WELL NO: <b>DEPMW 1 (100-120)</b>	SAMPLE ID: <b>DEPMW 1 (100-120)</b>
DATE: <b>6.10.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>40.39</b>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>120</b> feet - <b>40.39</b> feet ) X <b>.16</b> gallons/foot = <b>12.73</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <b>(BTOC)</b> gallons + ( <b>                        </b> gallons/foot X <b>                        </b> feet ) + <b>                        </b> gallons = <b>                        </b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b>	PURGING INITIATED AT: <b>1117</b>	PURGING ENDED AT: <b>1233</b>	TOTAL VOLUME PURGED (gallons): <b>22.8</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1200	12.9	12.9	.3	40.57	7.01	23.34	566	.06	1.80	clear	-172.7
1211	3.3	16.2		40.57	6.97	23.26	571	.05	1.73	"	-164.8
1222	3.3	19.5		40.57	6.98	23.35	573	.13	1.22	"	-189.9
1233	3.3	22.8		40.57	6.95	23.40	576	.09	1.40	"	-146.4

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATTHIAS   GEOSYNTEC</b>	SAMPLER(S) SIGNATURE(S): <i>Rik Matthias</i>	SAMPLING INITIATED AT: <b>1234</b>	SAMPLING ENDED AT: <b>1235</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <b>(N)</b>	FILTER SIZE: <b>          </b> µm
FIELD DECONTAMINATION: PUMP <b>(Y)</b> N	TUBING Y <b>(N (replaced))</b>	DUPLICATE: Y <b>(N)</b>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW 1</b>	<b>2</b>	<b>HDPE</b>	<b>125 ml</b>	<b>ICE</b>	<b>→</b>	<b>6.95</b>	<b>PFAS</b>	<b>ESP</b>	<b>~1140</b>

REMARKS: **SAMPLE TIME : 1234**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)  
 Revision Date: February 12, 2009

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL.</b>
WELL NO: <b>DEPNW 2 (35-55)</b>	SAMPLE ID: <b>DEPNW 2 (35-55)</b>
DATE: <b>6-10-2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>35</b> feet to <b>55</b> feet	STATIC DEPTH TO WATER (feet): <b>40.79</b> <sup>(bdc)</sup>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY</b> (only fill out if applicable) = ( <b>55</b> feet - <b>40.79</b> feet ) X <b>.16</b> gallons/foot = <b>2.27</b> gallons											
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) = ( <b>2.27</b> ) gallons + ( <b>0.0006</b> gallons/foot X <b>42</b> feet ) + <b>0</b> gallons = <b>0.0252</b> gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b>	PURGING INITIATED AT: <b>1009</b>	PURGING ENDED AT: <b>1030</b>	TOTAL VOLUME PURGED (gallons): <b>4.20</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1021	2.40	2.40	.2	40.85	6.56	26.03	973	1.07	47.2	clear	138.4
1024	.6	3.0		40.85	6.56	26.06	973	1.08	45.7	"	138.1
1027	.6	3.6		40.85	6.56	26.08	973	1.07	45.1	"	138.1
1030	.6	4.2		40.85	6.56	26.04	973	1.10	44.8	"	139.7
<b>WELL CAPACITY (Gallons Per Foot):</b> 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 <b>TUBING INSIDE DIA. CAPACITY (Gal./Ft.):</b> 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016 <b>PURGING EQUIPMENT CODES:</b> B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Rik MATIAS / GEOSYNTEC</b>				SAMPLER(S) SIGNATURE(S): <i>Rik Matias</i>				SAMPLING INITIATED AT: <b>1031</b>		SAMPLING ENDED AT: <b>1032</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~42</b> <sup>(bdc)</sup>				TUBING MATERIAL CODE: <b>HDPE</b>				FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N				TUBING Y <input checked="" type="checkbox"/> N (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<b>DEPNW 2</b>	<b>2</b>	<b>HDPE</b>	<b>125 ml</b>	<b>ICE</b>	<b>—</b>	<b>6.56</b>	<b>PFAS</b>	<b>ESP</b>	<b>~760</b>		
REMARKS: <b>SAMPLE TIME: 1031</b>											
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
<b>SAMPLING EQUIPMENT CODES:</b> APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

**NOTES:** 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <u>DEPMW-3(100-120)</u>	SAMPLE ID: <u>DEPMW-3(100-120)</u>
DATE: <u>6/10/2020</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): <u>3/8" ID</u>	WELL SCREEN INTERVAL DEPTH: 100 feet to 120 feet	STATIC DEPTH TO WATER (feet): <u>57.58</u>
PURGE PUMP TYPE OR BAILER: <u>ESP</u>			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>120</u> ft - <u>62.42</u> ft ) X <u>0.16</u> gallons/foot = <u>10.0 gal</u> <u>1/4 = 2.5</u>			

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
(only fill out if applicable)  
= 0.1 gallons + (      gallons/foot X      feet ) + 0.1 gallons =

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~59</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~60</u>	PURGING INITIATED AT: <u>1036</u>	PURGING ENDED AT: <u>1122</u>	TOTAL VOLUME PURGED (gallons): <u>18.4</u>
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TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/l or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1101	10.0	10.0	0.4	58.41	6.63	23.43	852	0.13	1.65	clear	-54.9	
1108	2.8	12.8	0.4	58.44	6.66	23.46	844	0.11	7.50	clear	-55.5	
1115	2.8	15.6	0.4	58.44	6.67	23.42	842	0.08	5.20	clear	-56.1	
1122	2.8	18.4	0.4	58.44	6.67	23.41	841	0.07	3.03	clear	-58.1	

**WELL CAPACITY (Gallons Per Foot):** 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY (Gal./Ft.):** 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: <u>1123</u>	SAMPLING ENDED AT: <u>1124</u>
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PUMP OR TUBING DEPTH IN WELL (feet): <u>~60</u>	SAMPLE PUMP FLOW RATE (mL per minute): <u>1.515</u>	TUBING MATERIAL CODE: HDPE
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FIELD DECONTAMINATION: <input type="radio"/> N (pump)	FIELD-FILTERED: Y <input checked="" type="radio"/> N      FILTER SIZE:      µm	DUPLICATE: Y <input checked="" type="radio"/> N
Filtration Equipment Type:		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
<u>DEPMW-3(100-120)</u>	2	HDPE	125 mL	none	250	<u>6.67</u>	PFAS - 8321B	ESP	<u>1.515</u>

REMARKS: \* slight rotten egg odor at purge initiation; none after ~10 minutes

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING:** APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:** 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Orla, FL.</b>
WELL NO: <b>DEPMW 4 (100-120)</b>	SAMPLE ID: <b>DEPMW 4 (100-120)</b>
DATE: <b>6-9-2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>64.53</b> <sup>(one)</sup>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <b>120</b> feet - <b>64.53</b> feet ) X <b>.16</b> gallons/foot = <b>8.87</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~ 66</b> <sup>(one)</sup>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~ 66</b>	PURGING INITIATED AT: <b>1150</b>	PURGING ENDED AT: <b>1250</b>	TOTAL VOLUME PURGED (gallons): <b>18.0</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1220	9.00	9.00	.3	64.59	7.12	28.78	503	1.16	18.5	clear	-70.0
1230	3.00	12.00		64.59	7.07	29.12	509	1.23	13.6	11	-60.7
1240	3.00	15.00		64.59	7.06	29.15	510	1.17	9.24	11	-47.2
1250	3.00	18.00		64.59	7.04	29.14	511	1.14	7.07	11	-34.9
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATTHIAS / GEDSYNTEC</b>				SAMPLER(S) SIGNATURE(S): <i>Rik Matthias</i>			SAMPLING INITIATED AT: <b>1251</b>		SAMPLING ENDED AT: <b>1252</b>		
PUMP OR TUBING DEPTH IN WELL (feet): <b>~ 66</b> <sup>(one)</sup>				TUBING MATERIAL CODE: <b>HDPE</b>			FIELD FILTERED: Y <sup>(N)</sup>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <sup>(Y)</sup> N				TUBING Y <sup>(N (replaced))</sup>			DUPLICATE: Y <sup>(N)</sup>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
<b>DEPMW 4</b>	<b>2</b>	<b>HDPE</b>	<b>125ml</b>	<b>ICE</b>	<b>—</b>	<b>7.04</b>	<b>AFAS</b>		<b>ESP ~ 1140</b>		
REMARKS: <b>SAMPLE TIME: 1251</b>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL.</b>
WELL NO: <b>DEPMW 5 (50-70)</b>	SAMPLE ID: <b>DEPMW 5 (50-70)</b>
DATE: <b>6.9.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>50</b> feet to <b>70</b> feet	STATIC DEPTH TO WATER (feet): <b>64.53</b> <sup>(BTOC)</sup>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>70</b> feet - <b>64.53</b> feet ) X <b>.16</b> gallons/foot = <b>.87</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>216.66</b> <sup>(BTOC)</sup>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~66</b>	PURGING INITIATED AT: <b>1030</b>	PURGING ENDED AT: <b>1048</b>	TOTAL VOLUME PURGED (gallons): <b>1.80</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1039	.90	.90	.10	64.65	6.75	28.08	637	3.61	165	slight cloudy	242.7
1042	.30	1.20		64.65	6.75	28.01	638	3.58	161	"	243.9
1045	.30	1.50		64.65	6.75	27.95	637	3.50	153	"	245.0
1048	.30	1.80		64.65	6.74	27.92	636	3.55	155	"	247.8

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Rik Mathias   GEOSYNTEC</b>				SAMPLER(S) SIGNATURE(S): <i>Rik Mathias</i>			SAMPLING INITIATED AT: <b>1049</b>		SAMPLING ENDED AT: <b>1051</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~66</b> <sup>(BTOC)</sup>				TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: <b>Y</b> <sup>(N)</sup>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N				TUBING <b>Y</b> <sup>(N (replaced))</sup>		DUPLICATE: <b>Y</b> <sup>(N)</sup>				

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW 5</b>	<b>2</b>	<b>HDPE</b>	<b>125ml</b>	<b>ice</b>	<b>—</b>	<b>6.74</b>	<b>PFAS</b>	<b>ESP</b>	<b>~380</b>

REMARKS: **SAMPLE TIME: 1049**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL.</b>
WELL NO: <b>DEPMW 6 (100-120)</b>	SAMPLE ID: <b>DEPMW 6 (100-120)</b>
DATE: <b>6.8.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>35.44</b> <sup>(BTOC)</sup>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <b>120</b> feet - <b>35.44</b> feet ) X <b>.16</b> gallons/foot = <b>13.52</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~37</b> <sup>(BTOC)</sup>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~37</b>	PURGING INITIATED AT: <b>1720</b>	PURGING ENDED AT: <b>1812</b>	TOTAL VOLUME PURGED (gallons): <b>26.0</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1748	14.0	14.0	.5	35.51	6.82	25.21	674	2.59	19.1	clear	276.7
1756	4.0	18.0		35.51	6.82	25.17	671	2.55	11.3	"	276.0
1804	4.0	22.0		35.51	6.82	25.14	669	2.49	8.58	"	271.9
1812	4.0	26.0		35.51	6.82	25.13	668	2.42	6.13	"	270.8
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88											
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATTHIAS / GEOSYNTER</b>				SAMPLER(S) SIGNATURE(S): <i>Rik Matthias</i>			SAMPLING INITIATED AT: <b>1813</b>		SAMPLING ENDED AT: <b>1814</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~37</b> <sup>(BTOC)</sup>				TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N				TUBING Y <input checked="" type="checkbox"/> N (replaced)		DUPLICATE: Y <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<b>DEPMW6</b>	<b>2</b>	<b>HDPE</b>	<b>125 ml</b>	<b>ICE</b>	<b>—</b>	<b>6.82</b>	<b>PFAS</b>		<b>ESP</b>	<b>~1900</b>
REMARKS: <b>SAMPLE TIME: 1813</b>										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL</b>
WELL NO: <b>DEPMW 7 (30-50)</b>	SAMPLE ID: <b>DEPMW 7 (30-50)</b>
DATE: <b>6-8-2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>30</b> feet to <b>50</b> feet	STATIC DEPTH TO WATER (feet): <b>36.04</b> <span style="float:right"><b>(BTOC)</b></span>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)											
= ( <b>50</b> feet - <b>36.04</b> feet ) X <b>.16</b> gallons/foot = <b>2.23</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)											
= gallons + ( gallons/foot X feet ) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~38</b> <span style="float:right"><b>(BTOC)</b></span>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~38</b>	PURGING INITIATED AT: <b>1638</b>	PURGING ENDED AT: <b>1650</b>	TOTAL VOLUME PURGED (gallons): <b>4.80</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1644	2.40	2.40	.40	36.19	6.74	24.58	721	5.40	247	Slight cloudy	262.5
1646	.80	3.20		36.19	6.73	24.57	721	5.37	254	"	264.1
1648	.80	4.00		36.19	6.74	24.55	721	5.31	263	"	268.1
1650	.80	4.80		36.19	6.72	24.56	721	5.25	258	"	270.3
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATTHIAS / GEOSYSTEMS</b>				SAMPLER(S) SIGNATURE(S): <i>rik mathias</i>			SAMPLING INITIATED AT: <b>1651</b>	SAMPLING ENDED AT: <b>1652</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~38</b> <span style="float:right"><b>(BTOC)</b></span>				TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input checked="" type="radio"/> N <input type="radio"/>	FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> N <input type="radio"/> TUBING Y <input checked="" type="radio"/> N <input type="radio"/> <b>(replaced)</b>				DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW 7</b>	<b>2</b>	<b>HDPE</b>	<b>125ml</b>	<b>ice</b>	<b>—</b>	<b>6.72</b>	<b>PFAS</b>	<b>ESP</b>	<b>~1520</b>
REMARKS: <b>SAMPLE TIME: 1651 collected FRB 3@1515; equipment setup</b>									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: DEP MW-8(100-120)	SAMPLE ID: DEP MW-8(100-120)
DATE: 6/10/2020	

**PURGING DATA**

WELL: 2	TUBING DIAMETER (inches): 3/8" ID	WELL SCREEN INTERVAL DEPTH: 180 feet to 120 feet	STATIC DEPTH TO WATER (feet): 49.52	PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (120 ft - 49.52 ft) X 0.16 gallons/foot = 11.3 gal <span style="float:right">1/4 = 2.8</span>				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.1 gallons + (gallons/foot X feet) + 0.1 gallons =				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~51	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ~51	PURGING INITIATED AT: 1447	PURGING ENDED AT: 1545	TOTAL VOLUME PURGED (gallons): 17.4

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/l or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1525	11.4	11.4	0.3	49.76	7.03	24.89	554	0.45	2.58	clear	-9.9	
1535	3.0	14.4	0.3	49.78	7.05	24.79	552	0.46	2.02	clear	-6.8	
1545	3.0	17.4	0.3	49.78	7.02	24.70	551	0.48	2.00	clear	-8.6	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec				SAMPLER(S) SIGNATURES:				SAMPLING INITIATED AT: 1546		SAMPLING ENDED AT: 1548	
PUMP OR TUBING DEPTH IN WELL (feet): ~51				SAMPLE PUMP FLOW RATE (mL per minute): 1.136				TUBING MATERIAL CODE: HDPE			
FIELD DECONTAMINATION: <input type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> FILTER SIZE: µm				DUPLICATE: Y <input checked="" type="radio"/>			
FIELD-FILTERED: Y <input checked="" type="radio"/> Filtration Equipment Type:				SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			
SAMPLE ID CODE		# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
DEP MW-8(100-120)		2	HDPE	125 mL	none	250	7.02	PFAS - 8321B		ESP	1.136

REMARKS: No odors

MATERIAL CODES: AG = Amber Glass, CG = Clear Glass, PE = Polyethylene, PP = Polypropylene, S = Silicone, T = Teflon, O = Other (Specify)  
 SAMPLING/PURGING: APP = After Peristaltic Pump, B = Bailor, BP = Bladder Pump, ESP = Electric Submersible Pump, PP = Peristaltic Pump  
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump, SM = Straw Method (Tubing Gravity Drain), VT = Vacuum Trap, O = Other (Specify)

NOTES:  
 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)



DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24

**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College		SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL	
WELL NO: <u>DEPMW-9(40-60)</u>		SAMPLE ID: <u>DEPMW-9(40-60)</u>	
		DATE: <u>6/10/28</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): <u>3/8" ID</u>	WELL SCREEN INTERVAL DEPTH: <u>40</u> feet to <u>60</u> feet	STATIC DEPTH TO WATER (feet): <u>49.38</u>	PURGE PUMP TYPE OR BAILER: <u>ESP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>60</u> ft - <u>49.38</u> ft) X <u>0.16</u> gallons/foot = <u>1.7 gal</u> <span style="float: right;"><u>1/4 = 0.4</u></span>				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <u>0.1</u> gallons + ( <u>        </u> gallons/foot X <u>        </u> feet) + <u>0.1</u> gallons =				

INITIAL PUMP OR TUBING		FINAL PUMP OR TUBING		PURGING INITIATED AT:		PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):				
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec		SAMPLER(S) SIGNATURES: <i>[Signature]</i>		SAMPLING INITIATED AT: <u>1415</u>	SAMPLING ENDED AT: <u>1416</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>451</u>		SAMPLE PUMP FLOW RATE (mL per minute): <u>1.893</u>		TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: <input checked="" type="radio"/> N (pump)		FIELD-FILTERED: <input checked="" type="radio"/> N FILTER SIZE: <u>        </u> µm		DUPLICATE: <input checked="" type="radio"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
<u>DEPMW9(40-60)</u>	<u>2</u>	<u>HDPE</u>	<u>125 mL</u>	<u>none</u>	<u>250</u>	<u>6.90</u>	<u>PFAS - 8321B</u>	<u>ESP</u>	<u>1.893</u>

REMARKS: \* No advs

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING:** APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <u>DEPMW-10(100-120)</u>	SAMPLE ID: <u>DEPMW-10(100-120)</u>
DATE: <u>6/08/2020</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2		TUBING DIAMETER (inches): <u>3/8" ±0</u>			WELL SCREEN INTERVAL DEPTH: <u>100</u> feet to <u>120</u> feet			STATIC DEPTH TO WATER (feet): <u>35.71</u>		PURGE PUMP TYPE OR BAILER: ESP		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) =( <u>120</u> ft - <u>35.71</u> ft) X <u>0.16</u> gallons/foot = <u>13.5 gal</u> <u>1/4 = 3.4</u>												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.1 gallons + (                                  gallons/foot X                                  feet) + 0.1 gallons =												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~37.5</u>			FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~38.5</u>			PURGING INITIATED AT: <u>1714</u>		PURGING ENDED AT: <u>1802</u>		TOTAL VOLUME PURGED (gallons): <u>36.5</u>		
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1741	27	27	0.5	37.18	7.80	24.48	277	0.06	4.00	clear	-153.2	
1748	3.5	30.5	0.5	37.18	7.53	24.32	297	0.06	3.98	clear	-155.6	
1755	3.5	33.5	0.5	37.18	7.53	24.41	299	0.07	5.00	clear	-157.3	
1802	3.5	36.5	0.5	37.18	7.52	24.43	299	0.06	4.70	clear	-159.8	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>JJ Hollingshead/Geosyntec</b>				SAMPLER(S) SIGNATURES: <i>[Signature]</i>				SAMPLING INITIATED AT: <u>1803</u>		SAMPLING ENDED AT: <u>1804</u>			
PUMP OR TUBING DEPTH IN WELL (feet): <u>38.5</u>				SAMPLE PUMP FLOW RATE (mL per minute):				TUBING MATERIAL CODE: HDPE					
FIELD DECONTAMINATION: <input type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> N FILTER SIZE: µm				DUPLICATE: Y <input checked="" type="radio"/> N					
FIELD-FILTERED: Y <input checked="" type="radio"/> N Filtration Equipment Type:				DUPLICATE: Y <input checked="" type="radio"/> N				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per min)	
SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION										
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per min)		
<u>DEPMW-10(100-120)</u>	<u>2</u>	HDPE	125 mL	none	250	<u>7.52</u>	PFAS - 8321B		ESP		<u>1.894</u>		

REMARKS: No odors

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING/PURGING APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:** 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)



DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <u>DEPMW-11(30-50)</u>	SAMPLE ID: <u>DEPMW-11(30-50)</u> DATE: <u>6/08/2022</u>

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): <u>3/8" ID</u>	WELL SCREEN INTERVAL DEPTH: 30 feet to 50 feet	STATIC DEPTH TO WATER (feet): <u>36.34</u>									
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)		PURGE PUMP TYPE OR BAILER: ESP										
= ( <u>50</u> ft - <u>36.34</u> ft) X gallons/foot = <u>2.2 gal</u>		<u>1/4 = 0.6</u>										
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)												
= 0.1 gallons + ( gallons/foot X feet) + 0.1 gallons =												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~38.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>~38.5</u>	PURGING INITIATED AT: <u>1625</u>	PURGING ENDED AT: <u>1646</u>									
TOTAL VOLUME PURGED (gallons): <u>16.5</u>												
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/l or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1630	2.5	2.5	0.5	36.71	5.30	25.73	62	6.46	98.1	lt. white	254.8	
1632	1.0	3.5	0.5	36.71	5.48	25.60	76	6.40	42.7	lt. white	243.0	
16346	2.0	5.5	0.5	36.71	5.74	25.37	115	5.86	16.1	clear	228.9	
1638	1.0	6.5	0.5	36.71	5.78	25.48	118	5.85	14.1	clear	228.0	
1640	1.0	7.5	0.5	36.71	5.94	25.47	125	5.78	14.0	clear	233.4	
1642	1.0	8.5	0.5	36.71	5.89	25.57	135	5.63	13.7	clear	238.7	
1644	1.0	9.5	0.5	36.71	5.91	25.57	136	5.66	12.2	clear	239.2	
1646	1.0	10.5	0.5	36.71	5.96	25.62	142	5.51	11.5	clear	239.7	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec				SAMPLER(S) SIGNATURES: <u>[Signature]</u>				SAMPLING INITIATED AT: <u>1647</u>		SAMPLING ENDED AT: <u>1648</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>~38.5</u>				SAMPLE PUMP FLOW RATE (mL per minute): <u>1,894</u>				TUBING MATERIAL CODE: HDPE			
FIELD DECONTAMINATION: <input type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> FILTER SIZE: µm				DUPLICATE: Y <input checked="" type="radio"/>			
Filtration Equipment Type:											
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph					
<u>DEPMW-11(30-50)</u>	2	HDPE	125 mL	none	250	<u>5.96</u>	PFAS - 8321B	ESP	<u>1,894</u>		
REMARKS:											
<b>MATERIAL CODES:</b> AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) <b>SAMPLING/PURGING:</b> APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump <b>EQUIPMENT CODES:</b> RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)											

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>F5FC</b>	SITE LOCATION: <b>Ocala, FL.</b>
WELL NO: <b>DEPMW 12 (106-120)</b>	SAMPLE ID: <b>DEPMW12 (100-120)</b>
DATE: <b>6.9.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>51.64</b>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( <b>120</b> feet - <b>51.64</b> feet ) X <b>0.16</b> gallons/foot = <b>10.93</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~53</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~53</b>	PURGING INITIATED AT: <b>1541</b>	PURGING ENDED AT: <b>1648</b>	TOTAL VOLUME PURGED (gallons): <b>20.1</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
<b>1618</b>	<b>11.1</b>	<b>11.1</b>	<b>.3</b>	<b>51.96</b>	<b>6.94</b>	<b>25.27</b>	<b>531</b>	<b>3.63</b>	<b>2.69</b>	<b>clear</b>	<b>156.7</b>
<b>1628</b>	<b>3</b>	<b>14.1</b>	<b> </b>	<b>51.96</b>	<b>6.94</b>	<b>25.29</b>	<b>532</b>	<b>3.61</b>	<b>3.47</b>	<b>"</b>	<b>157.6</b>
<b>1638</b>	<b>3</b>	<b>17.1</b>	<b> </b>	<b>51.96</b>	<b>6.94</b>	<b>25.30</b>	<b>531</b>	<b>3.50</b>	<b>4.01</b>	<b>(1)</b>	<b>158.8</b>
<b>1648</b>	<b>3</b>	<b>20.1</b>	<b> </b>	<b>51.96</b>	<b>6.94</b>	<b>25.33</b>	<b>530</b>	<b>3.60</b>	<b>3.63</b>	<b>"</b>	<b>159.7</b>

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATHIAS / GEOSYNTEC</b>			SAMPLER(S) SIGNATURE(S): <i>Rik Mathias</i>			SAMPLING INITIATED AT: <b>1649</b>		SAMPLING ENDED AT: <b>1651</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~53 (BTOC)</b>			TUBING MATERIAL CODE: <b>HDPB</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Filtration Equipment Type: <b>(N)</b>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N <input type="checkbox"/>			TUBING Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <b>(replaced)</b>		DUPLICATE: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <b>MS/MSD *</b>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW12</b>	<b>24</b>	<b>HDPB</b>	<b>125 ml</b>	<b>ice</b>	<b>---</b>	<b>---</b>	<b>PFAS</b>	<b>ESP</b>	<b>~1140</b>
<del>RMMS</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>PA</del>	<del>"</del>	<del>"</del>
<del>RMMSD</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>"</del>	<del>RM</del>	<del>"</del>	<del>"</del>

REMARKS: **Sample time: 1649** **\* MS/MSD taken here**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)  
 Revision Date: February 12, 2009





**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME:	SITE LOCATION:
WELL NO: <b>DEPMW 14 (100-120)</b>	SAMPLE ID: <b>DEPMW 14 (100-120)</b>
DATE: <b>6-11-2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>39.09</b>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>120</b> feet - <b>39.09</b> feet ) X <b>.16</b> gallons/foot = <b>12.94</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~41</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~41</b>	PURGING INITIATED AT: <b>1352</b>	PURGING ENDED AT: <b>1452</b>	TOTAL VOLUME PURGED (gallons): <b>24.0</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1425	13.2	13.2	.4	39.23	6.88	26.23	535	3.30	1.44	clear	-22.3
1434	3.6	16.8		39.23	6.87	26.19	537	3.35	1.05	"	-16.6
1443	3.6	20.4		39.23	6.86	26.13	541	3.27	.90	"	-3.0
1452	3.6	24.0		39.23	6.86	26.10	545	3.22	.70	"	16.3

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATHEWS / GEOSYNTEC</b>	SAMPLER(S) SIGNATURE(S): <i>Rik Mathews</i>	SAMPLING INITIATED AT: <b>1453</b>	SAMPLING ENDED AT: <b>1454</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~41</b>	TUBING MATERIAL CODE: <b>HDPE</b>	FIELD-FILTERED: Y <input checked="" type="radio"/> N	FILTER SIZE: _____ μm
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> N	TUBING Y <input checked="" type="radio"/> N (replaced)	DUPLICATE: Y <input checked="" type="radio"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
DEPMW14	2	HDPE	125ml	ice	—	6.86	PFAS	ESP	~1520

REMARKS:  
**Sample Time: 1453**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)







**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Orla, FL.</b>
WELL NO: <b>DEPMW 17 (100-120)</b>	SAMPLE ID: <b>DEPMW 17 (100-120)</b>
DATE: <b>6.11.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>100</b> feet to <b>120</b> feet	STATIC DEPTH TO WATER (feet): <b>34.45</b>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( <b>120</b> feet - <b>34.45</b> feet ) X <b>.16</b> gallons/foot = <b>13.68</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= <b>(BTP)</b> gallons + ( <b>(BTP)</b> gallons/foot X <b>(BTP)</b> feet ) + <b>(BTP)</b> gallons = <b>(BTP)</b> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~36</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~36.5</b>	PURGING INITIATED AT: <b>1057</b>	PURGING ENDED AT: <b>1202</b>	TOTAL VOLUME PURGED (gallons): <b>26.0</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) (mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1132	14.0	14.0	.4	35.97	7.37	24.89	458	.47	7.02	clear	-51.2
1142	4.0	18.0		35.97	7.36	24.92	457	.51	6.19	11	-56.7
1152	4.0	22.0		35.97	7.34	24.94	452	.60	3.72	11	-54.6
1202	4.0	26.0		35.97	7.33	24.94	451	.66	3.13	11	-56.3

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016  
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATHIAS / GEOSYNTEC</b>			SAMPLER(S) SIGNATURE(S): <i>Rik Mathias</i>			SAMPLING INITIATED AT: <b>1203</b>	SAMPLING ENDED AT: <b>1204</b>
PUMP OR TUBING DEPTH IN WELL (feet): <b>~36.5 (BTP)</b>			TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N	FILTER SIZE: <b>1</b> μm	
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N			TUBING Y <input checked="" type="checkbox"/> N (replaced)		DUPLICATE: <input checked="" type="checkbox"/> <del>Y</del> <del>N</del>		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW 17</b>	<b>2</b>	<b>HDPE</b>	<b>125ml</b>	<b>ICE</b>	<b>—</b>	<b>7.33</b>	<b>PFAS</b>	<b>ESP</b>	<b>~1520</b>
<b>DUP</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>—</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>

REMARKS: **Sample Time: 1203** \* **DUP collected here**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <u>DEPMW-18(100-120)</u>	SAMPLE ID: <u>DEPMW-18(100-120)</u>
DATE: <u>6/08/2020</u>	

**PURGING DATA**

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): <u>3/8" ID</u>	WELL SCREEN INTERVAL DEPTH: <u>100</u> feet to <u>120</u> feet	STATIC DEPTH TO WATER (feet): <u>55.20</u>	PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <u>120</u> ft - <u>55.25</u> ft ) X <u>64.75</u> gallons/foot = <u>10.36</u> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = <u>0.1</u> gallons + ( <u>        </u> gallons/foot X <u>        </u> feet ) + <u>0.1</u> gallons = <u>        </u> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>57</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>60</u>	PURGING INITIATED AT: <u>1401</u>	PURGING ENDED AT: <u>1440</u>	TOTAL VOLUME PURGED (gallons): <u>20.0</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1422	11.0	11.0	0.5	57.56	6.95	23.54	784	0.15	23.6	clear	-79.9	
1428	3.0	14.0	0.5	57.44	6.94	24.06	784	0.14	15.8	clear	-89.9	
1434	3.0	17.0	0.5	57.42	6.97	24.12	786	0.13	11.1	clear	-95.5	
1440	3.0	20.0	0.5	57.43	6.96	24.15	784	0.12	11.4	clear	-101.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec	SAMPLER(S) SIGNATURES: 	SAMPLING INITIATED AT: <u>1441</u>	SAMPLING ENDED AT: <u>1442</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>60</u>	SAMPLE PUMP FLOW RATE (mL per minute): <u>1.894</u>	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: <input type="radio"/> N (pump)	FIELD-FILTERED: Y <input checked="" type="radio"/> N Filtration Equipment Type:	DUPLICATE: Y <input checked="" type="radio"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
<u>DEPMW-18(100-120)</u>	<u>2</u>	<u>HDPE</u>	<u>125 mL</u>	<u>none</u>	<u>250</u>	<u>6.96</u>	<u>PFAS - 8321B</u>	<u>ESP</u>	<u>1.894</u>

REMARKS: 4 no obs; collected FRB4 @ 1500 during decon

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING/PURGING: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

Form FD 9000-24  
GROUNDWATER SAMPLING LOG

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL</b>
WELL NO: <b>DEPMW 19 (55-75)</b>	SAMPLE ID: <b>DEPMW 19 (55-75)</b>
DATE: <b>6.8.2020</b>	

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>55</b> feet to <b>75</b> feet	STATIC DEPTH TO WATER (feet): <b>55.42</b>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( <b>75</b> feet - <b>55.42</b> feet ) X <b>.16</b> gallons/foot = <b>3.13</b> gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + ( gallons/foot X feet ) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>57 (BSC)</b>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~57</b>	PURGING INITIATED AT: <b>1406</b>	PURGING ENDED AT: <b>1422</b>	TOTAL VOLUME PURGED (gallons): <b>8.00</b>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1416	5.00	5.00	.50	56.02	6.92	24.86	602	2.50	30.3	slight cloud	207.8
1418	1.00	6.00		56.02	6.90	24.80	601	2.55	29.8	CLEAR	208.2
1420	1.00	7.00		56.02	6.89	24.79	600	2.59	29.1	"	207.3
1422	1.00	8.00		56.02	6.89	24.79	600	2.62	28.7	"	205.7

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>Rik Mathias / GEOSYNTEC</b>			SAMPLER(S) SIGNATURE(S): <i>Rik Mathias</i>			SAMPLING INITIATED AT: <b>1423</b>		SAMPLING ENDED AT: <b>1424</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~57 (BSC)</b>			TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			FILTER SIZE: _____ μm	
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N			TUBING Y <input checked="" type="checkbox"/> N (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<b>DEPMW-19</b>	<b>2</b>	<b>HDPE</b>	<b>125 ml</b>	<b>ICE</b>	<b>—</b>	<b>6.89</b>	<b>PFAS</b>	<b>ESP</b>	<b>~1900</b>

REMARKS: **SAMPLE TIME: 1423** **Turb: started high (623 NTU)**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

- NOTES:**
- The above do not constitute all of the information required by Chapter 62-160, F.A.C.
  - STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

**Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: <b>FSFC</b>	SITE LOCATION: <b>Ocala, FL</b>
WELL NO: <b>DEPMW 20 (35-55)</b>	SAMPLE ID: <b>DEPMW 20 (35-55)</b> DATE: <b>6.10.2020</b>

**PURGING DATA**

WELL DIAMETER (inches): <b>2</b>	TUBING DIAMETER (inches): <b>3/8</b>	WELL SCREEN INTERVAL DEPTH: <b>35</b> feet to <b>55</b> feet	STATIC DEPTH TO WATER (feet): <b>38.60</b> <small>(BTOC)</small>	PURGE PUMP TYPE OR BAILER: <b>ESP</b>							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( <b>55</b> feet - <b>38.60</b> feet ) X <b>.16</b> gallons/foot = <b>2.62</b> gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ gallons + ( _____ gallons/foot X _____ feet ) + _____ gallons = _____ gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40</b> <small>(BTOC)</small>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <b>~40</b>	PURGING INITIATED AT: <b>1550</b>	PURGING ENDED AT: <b>1639</b>	TOTAL VOLUME PURGED (gallons): <b>4.90</b>							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or (μS/cm)	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
1618	2.80	2.80	.1	39.55	6.65	25.37	741	2.83	3.36	clear	125.5
1625	.70	3.50		39.55	6.65	25.36	741	2.82	2.95	"	176.2
1632	.70	4.20		39.55	6.66	25.31	742	2.79	2.74	"	128.8
1639	.70	4.90		39.55	6.66	25.27	740	2.80	2.09	"	128.8
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>RIK MATTHIAS / GEOSYNTEC</b>				SAMPLER(S) SIGNATURE(S): <i>Rik Matthias</i>			SAMPLING INITIATED AT: <b>1640</b>		SAMPLING ENDED AT: <b>1642</b>	
PUMP OR TUBING DEPTH IN WELL (feet): <b>~40</b> <small>(BTOC)</small>				TUBING MATERIAL CODE: <b>HDPE</b>		FIELD-FILTERED: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> N <input type="checkbox"/>				TUBING Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <small>(replaced)</small>		DUPLICATE: Y <input checked="" type="checkbox"/> N <input type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
<b>DEPMW 20</b>	<b>2</b>	<b>HDPE</b>	<b>125 ml</b>	<b>ICE</b>	<b>—</b>	<b>6.66</b>	<b>PFAS</b>		<b>ESP</b>	<b>~380</b>

REMARKS:

**SAMPLE TIME: 1640**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units    Temperature: ± 0.2 °C    Specific Conductance: ± 5%    Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater)    Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009



DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: FSFC Supply Well (Pre-filter)	SAMPLE ID: FSFC Supply Well (Pre-filter) DATE: 6/11/20

**PURGING DATA**

WELL DIAMETER (inches):			TUBING DIAMETER (inches):			WELL SCREEN INTERVAL DEPTH: feet to feet			STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER: F	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (= ( ft - ft) X gallons/foot =												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (= 0.1 gallons + ( gallons/foot X feet) + 0.1 gallons =												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):			FINAL PUMP OR TUBING DEPTH IN WELL (feet):			PURGING INITIATED AT: 0730		PURGING ENDED AT: 0914		TOTAL VOLUME PURGED (gallons): 322.2		
TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0912	316.2	316.2	3.1	NA	7.04	23.97	579	5.96	4.98	clear	680.9	
0914	6.2	322.2	3.1	NA	7.00	23.87	578	5.76	4.40	clear	699.5	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016												

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec				SAMPLER(S) SIGNATURES:				SAMPLING INITIATED AT: 0915		SAMPLING ENDED AT: 0916	
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute): 11742				TUBING MATERIAL CODE: HDPE			
FIELD DECONTAMINATION: <input type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> N FILTER SIZE: µm				DUPLICATE: Y <input checked="" type="radio"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph					
CU	2	HDPE	125 mL	none	250	7.00	PFAS - 8321B		ESP	11,742	

REMARKS: \*No odors; sample collected directly from tap

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING** APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:** 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2);  
 optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <b>FSFC Supply well (Post-Filter)</b>	DATE: <b>6/11/20</b>

**PURGING DATA**

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH (feet):	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:								
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)												
=( _____ ft - _____ ft) X _____ gallons/foot = _____												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)												
= 0.1 gallons + ( _____ gallons/foot X _____ feet) + 0.1 gallons = _____												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		PURGING INITIATED AT: <b>0730</b>								
				PURGING ENDED AT: <b>0908</b>								
				TOTAL VOLUME PURGED (gallons): <b>313.1</b>								
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/l or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
<b>0905</b>	<b>303.8</b>	<b>303.8</b>	<b>3.1</b>	<b>NA</b>	<b>7.22</b>	<b>24.27</b>	<b>352</b>	<b>4.86</b>	<b>0.76</b>	<b>clear</b>	<b>207.1</b>	
<b>0908</b>	<b>9.3</b>	<b>313.1</b>	<b>3.1</b>	<b>NA</b>	<b>7.16</b>	<b>24.20</b>	<b>374</b>	<b>4.76</b>	<b>0.88</b>	<b>clear</b>	<b>228.3</b>	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>JJ Hollingshead/Geosyntec</b>				SAMPLER(S) SIGNATURES:			SAMPLING INITIATED AT: <b>0909</b>		SAMPLING ENDED AT: <b>0910</b>		
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute): <b>11,742</b>			TUBING MATERIAL CODE: HDPE				
FIELD DECONTAMINATION: <input type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> N (pump) FILTER SIZE: µm			DUPLICATE: Y <input checked="" type="radio"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph					
<b>GW</b>	<b>2</b>	<b>HDPE</b>	<b>125 mL</b>	<b>none</b>	<b>250</b>	<b>7.16</b>	<b>PFAS - 8321B</b>	<b>ESP</b>	<b>11,742</b>		

REMARKS: **\*No odors; sample collected directly from tap**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING/PURGING APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: FSFC Fire Well	DATE: 6/4/2020

**PURGING DATA**

WELL DIAMETER (inches):			TUBING DIAMETER (inches):			WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = ( ft - ft) X gallons/foot =												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.1 gallons + ( gallons/foot X feet) + 0.1 gallons =												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):			FINAL PUMP OR TUBING DEPTH IN WELL (feet):			PURGING INITIATED AT: 0926		PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):		
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
0933	2,625	2,625	375	NA	6.85	22.36	505	0.91	0.97	clear	265.7	
0935	750	3,375	375	NA	6.70	22.36	505	0.84	0.87	clear	252.1	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec				SAMPLER(S) SIGNATURES: 				SAMPLING INITIATED AT: 0936		SAMPLING ENDED AT: 0937			
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute): 1,420,455				TUBING MATERIAL CODE: HDPE					
FIELD DECONTAMINATION: <input type="checkbox"/> N (pump)				FIELD-FILTERED: <input checked="" type="checkbox"/> Y FILTER SIZE: µm				DUPLICATE: <input checked="" type="checkbox"/> Y					
FIELD-FILTRATION EQUIPMENT TYPE:													
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per min)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH							
6W	2	HDPE	125 mL	none	250	6.70		PFAS - 8321B		ESP		1,420,455	

REMARKS: No odors; sample collected from 6-inch pipe near well

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING:** APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:**  
 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)



DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: Well #1	SAMPLE ID: Well #1
	DATE: 6/4/20

**PURGING DATA**

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: _____ feet to _____ feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  
 (only fill out if applicable) = ( \_\_\_\_\_ ft - \_\_\_\_\_ ft) X \_\_\_\_\_ gallons/foot = \_\_\_\_\_

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME  
 (only fill out if applicable) = \_\_\_\_\_ 0.1 gallons + ( \_\_\_\_\_ gallons/foot X \_\_\_\_\_ feet) + \_\_\_\_\_ 0.1 gallons = \_\_\_\_\_

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1033	PURGING ENDED AT: 1038	TOTAL VOLUME PURGED (gallons): 15.5
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1035	6.2	6.2	3.1	NA	6.90	22.45	545	1.39	1.71	clear	115.0	
1038	9.3	15.5	3.1	NA	6.88	22.44	549	1.33	2.04	clear	114.8	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: JJ Hollingshead/Geosyntec	SAMPLER(S) SIGNATURES: 	SAMPLING INITIATED AT: 1039	SAMPLING ENDED AT: 1040
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PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): 11742	TUBING MATERIAL CODE: HDPE
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FIELD DECONTAMINATION: <input type="radio"/> N (pump)	FIELD-FILTERED: Y <input checked="" type="radio"/> N FILTER SIZE: _____ µm	DUPLICATE: Y <input checked="" type="radio"/> N
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SAMPLE CONTAINER SPECIFICATION	SAMPLE PRESERVATION
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SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
GW	2	HDPE	125 mL	none	250	6.88	PFAS - 8321B	ESP	11,742

REMARKS: 29.322037, ~82.189510 \*no odors; sample collected directly from pipe

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
 SAMPLING/PURGING: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
 EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)



**DEP-SOP-001/01**  
**FS 220 Groundwater Sampling**  
**Form FD 9000-24**  
**GROUNDWATER SAMPLING LOG**

SITE NAME: <b>Florida State Fire College</b>	SITE LOCATION: <b>11655 NW Gainesville Rd, Ocala, FL</b>
WELL NO: <b>Well #4</b>	SAMPLE ID: <b>Well #4</b>
DATE: <b>6/11/2020</b>	

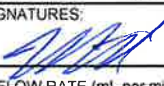
**PURGING DATA**

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: _____ feet to _____ feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: _____
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= ( _____ ft - _____ ft) X _____ gallons/foot = _____				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= 0.1 gallons + ( _____ gallons/foot X _____ feet) + 0.1 gallons = _____				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
1130	9.3	9.3	3.1	NA	7.13	23.96	472	4.99	2.93	clear	208.3	
1132	6.2	15.5	3.1	NA	6.98	23.50	464	4.95	2.80	clear	209.9	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>JJ Hollingshead/Geosyntec</b>	SAMPLER(S) SIGNATURES: 	SAMPLING INITIATED AT: <b>1133</b>	SAMPLING ENDED AT: <b>1134</b>
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute): <b>11,472</b>	TUBING MATERIAL CODE: HDPE	
FIELD DECONTAMINATION: <input type="radio"/> N (pump)	FIELD-FILTERED: Y <input checked="" type="radio"/> N Filtration Equipment Type:	DUPLICATE: Y <input checked="" type="radio"/> N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			
<b>GW</b>	2	HDPE	125 mL	none	250	<b>6.98</b>	PFAS - 8321B	ESP	<b>11,472</b>

REMARKS: **#NO odors; + FRBS; water collected from sink near maintenance area**

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING/PURGING: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

**DEP-SOP-001/01  
FS 220 Groundwater Sampling  
Form FD 9000-24  
GROUNDWATER SAMPLING LOG**

SITE NAME: Florida State Fire College	SITE LOCATION: 11655 NW Gainesville Rd, Ocala, FL
WELL NO: <u>Well #5 AC</u>	SAMPLE ID: <u>Well #5 AC</u>
	DATE: <u>6/11/2020</u>

**PURGING DATA**

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: _____ feet to _____ feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: _____
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (	ft -	ft) X	gallons/foot =	
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
=	0.1	gallons + (	gallons/foot X	feet) +
	0.1	gallons	=	

INITIAL PUMP OR TUBING			FINAL PUMP OR TUBING			PURGING INITIATED AT: <u>1017</u>		PURGING ENDED AT: <u>1022</u>		TOTAL VOLUME PURGED (gallons):		
DEPTH IN WELL (feet):	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mv)	NOTES:
<u>1019</u>	<u>6.2</u>	<u>6.2</u>	<u>3.1</u>	<u>NA</u>	<u>7.10</u>	<u>24.83</u>	<u>480</u>	<u>3.08</u>	<u>22.7</u>	<u>clear</u>	<u>211.4</u>	
<u>1022</u>	<u>9.3</u>	<u>15.5</u>	<u>13.1</u>	<u>NA</u>	<u>7.05</u>	<u>23.61</u>	<u>447</u>	<u>4.53</u>	<u>15.4</u>	<u>clear</u>	<u>202.0</u>	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <u>JJ Hollingshead/Geosyntec</u>				SAMPLER(S) SIGNATURES: <u>[Signature]</u>				SAMPLING INITIATED AT: <u>1023</u>		SAMPLING ENDED AT: <u>1024</u>	
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute): <u>11,472</u>				TUBING MATERIAL CODE: <u>HDPE</u>			
FIELD DECONTAMINATION: <input checked="" type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> FILTER SIZE: <u>µm</u>				DUPLICATE: Y <input type="radio"/> N <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph					
<u>GW</u>	<u>2</u>	<u>HDPE</u>	<u>125 mL</u>	<u>none</u>	<u>250</u>	<u>7.05</u>	<u>PFAS - 8321B</u>		<u>ESP</u>	<u>11,472</u>	

REMARKS: \* No odors; sample collected directly from tap

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
SAMPLING/PURGING: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
EQUIPMENT CODES: RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

NOTES: 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)

DEP-SOP-001/01  
 FS 220 Groundwater Sampling  
 Form FD 9000-24  
**GROUNDWATER SAMPLING LOG**

SITE NAME: <b>Florida State Fire College</b>	SITE LOCATION: <b>11655 NW Gainesville Rd, Ocala, FL</b>
WELL NO: <i>Well #8</i>	SAMPLE ID: <i>Well #8</i>
DATE: <i>6/15/2020</i>	

**PURGING DATA**

WELL DIAMETER (inches):			TUBING DIAMETER (inches):			WELL SCREEN INTERVAL DEPTH: feet to feet		STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER: <i>CC</i>		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)												
= (                      ft -                      ft ) X                      gallons/foot =												
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)												
= 0.1 gallons + (                      gallons/foot X                      feet ) + 0.1 gallons =												
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):			FINAL PUMP OR TUBING DEPTH IN WELL (feet):			PURGING INITIATED AT: <i>1158</i>		PURGING ENDED AT: <i>1203</i>		TOTAL VOLUME PURGED (gallons): <i>15.5</i>		
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)	NOTES:
<i>1200</i>	<i>6.2</i>	<i>6.2</i>	<i>3.1</i>	<i>NA</i>	<i>6.84</i>	<i>25.43</i>	<i>264</i>	<i>2.52</i>	<i>2.56</i>	<i>clear</i>	<i>737.1</i>	
<i>1203</i>	<i>9.3</i>	<i>15.5</i>	<i>3.1</i>	<i>NA</i>	<i>6.82</i>	<i>25.46</i>	<i>289</i>	<i>2.55</i>	<i>2.31</i>	<i>clear</i>	<i>745.2</i>	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.68  
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION: <b>JJ Hollingshead/Geosyntec</b>				SAMPLER(S) SIGNATURES: <i>[Signature]</i>			SAMPLING INITIATED AT: <i>1204</i>		SAMPLING ENDED AT: <i>1205</i>		
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute): <i>11,472</i>			TUBING MATERIAL CODE: HDPE				
FIELD DECONTAMINATION: <input checked="" type="radio"/> N (pump)				FIELD-FILTERED: Y <input checked="" type="radio"/> FILTER SIZE: µm			DUPLICATE: <input checked="" type="radio"/> N				
Filtration Equipment Type:				SAMPLE CONTAINER SPECIFICATION			SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL Ph			SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per min)	
<i>Well #8</i>	<i>2</i>	<i>HDPE</i>	<i>125 mL</i>	<i>none</i>	<i>250</i>	<i>6.82</i>	<i>PFAS - 8321B</i>		<i>ESP</i>	<i>11,472</i>	
<i>Well #8 Dump</i>	<i>2</i>	<i>CC</i>	<i>CC</i>	<i>CC</i>	<i>CC</i>	<i>CC</i>	<i>CC</i>		<i>CC</i>	<i>CC</i>	

REMARKS: *\*no odors; + duplicate; sample collected directly from tap*

**MATERIAL CODES:** AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)  
**SAMPLING/PURGING:** APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump  
**EQUIPMENT CODES:** RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)

**NOTES:**  
 1 The above do not constitute all of the information required by Chapter 62-160, F.A.C.  
 2 STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)  
 pH: + 0.2 units Temperature: + 0.2 oC Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater)





**Geosyntec Consultants**  
**Water Quality Instrument Calibration Form**

Project/Site: FSFC

Project # FR3511C/04/64

Field Personnel: J. Hollingshead

Water Quality Meter - Model/Serial #: VSI 556MPS / 09G100115

Turbidimeter - Model/Serial # HHC112100G / 13050C025380

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) <sup>1</sup>	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3mg/L								
CAL ICV CCV		6/08/20	1125	31.06	7.42	7.42	100.0	P F
CAL ICV CCV		6/09/20	0950	32.38	7.26	7.39	98.2	P F
CAL ICV CCV		6/10/20	0855	32.01	7.30	7.42	101.4	P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%								
CAL ICV CCV		6/08/20	1129	1.413	96K 393	11/20	1.416	P F
CAL ICV CCV		6/09/20	0954	"	"	"	1.410	P F
CAL ICV CCV		6/10/20	0858	"	"	"	1.418	P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU								
CAL ICV CCV		6/08/20	1130	7	96G802	7/20/21	7.13	P F
CAL ICV CCV		6/09/20	0956	"	"	"	7.12	P F
CAL ICV CCV		6/10/20	0859	"	"	"	7.12	P F
CAL ICV CCV		6/08/20	1132	4	96L804	12/30/21	4.13	P F
CAL ICV CCV		6/09/20	0957	"	"	"	4.15	P F
CAL ICV CCV		6/10/20	0901	"	"	"	4.10	P F
CAL ICV CCV		6/08/20	1133	10	96F372	6/21	9.97	P F
CAL ICV CCV		6/09/20	0958	"	"	"	10.05	P F
CAL ICV CCV		6/10/20	0902	"	"	"		P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%								
CAL ICV CCV		6/08/20	1134	240.0025	06A143	11/20/20	240.0	P F
CAL ICV CCV		6/09/20	1000	"	"	"	238.4	P F
CAL ICV CCV		6/10/20	0905	"	"	"	246.4	P F

0.1 - 10 NTU	Std 10 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL ICV CCV		6/08/20	10.7	P F
CAL ICV CCV		6/09/20	9.01	P F
CAL ICV CCV		6/10/20	9.29	P F
CAL ICV CCV				P F

11 - 40 NTU	Std 20 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL ICV CCV		6/08/20	20.9	P F
CAL ICV CCV		6/09/20	20.7	P F
CAL ICV CCV		6/10/20	20.9	P F
CAL ICV CCV				P F

41 - 100 NTU	Std 100 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL ICV CCV		6/08/20	97.3	P F
CAL ICV CCV		6/09/20	98.7	P F
CAL ICV CCV		6/10/20	96.0	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

>100 NTU	Std 200 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL ICV CCV		6/08/20	376	P F
CAL ICV CCV		6/09/20	784	P F
CAL ICV CCV		6/10/20	780	P F

Specific Conductance Probe Cleaned? Yes No      Dissolved Oxygen membrane Changed? Yes No

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration  
ICV - Initial Calibration Verification  
CCV - Continuing Calibration Verification

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration  
Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)  
Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)  
If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier





**Geosyntec Consultants**  
**Water Quality Instrument Calibration Form**

Project/Site: FSFC

Project #: FR3511C/04

Field Personnel: J. Hollingshead

Water Quality Meter - Model/Serial #: YSI 556 MMS 109610045

Turbidimeter - Model/Serial #: HACH 2100Q 13050025380

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) <sup>1</sup>	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3mg/L								
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>6/11/20</u>	<u>0847</u>	<u>29.18</u>	<u>7.66</u>	<u>7.82</u>	<u>101.7</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1400</u>	<u>32.88</u>	<u>7.20</u>	<u>7.01</u>	<u>97.4</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%								
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>6/11/20</u>	<u>0849</u>	<u>1.413</u>	<u>96K393</u>	<u>11/20</u>	<u>1.406</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1402</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>1.410</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU								
Pine Oaks Golf Course								
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>6/11/20</u>	<u>0850</u>	<u>7</u>	<u>966002</u>	<u>7/22/21</u>	<u>7.14</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1403</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>7.13</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>0851</u>	<u>4</u>	<u>96L804</u>	<u>12/02/21</u>	<u>4.11</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1405</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>4.15</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>0853</u>	<u>10</u>	<u>96F372</u>	<u>6/21</u>	<u>10.05</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1407</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>9.95</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%								
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>6/11/20</u>	<u>0855</u>	<u>240.0mV @ 25</u>	<u>06B1143</u>	<u>11/30/20</u>	<u>245.1</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV		<u>"</u>	<u>1410</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>243.7</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV								<input type="radio"/> P <input type="radio"/> F

0.1 - 10 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>12</u>	<u>6/11/20</u>	<u>9.75</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>"</u>	<u>"</u>	<u>9.89</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F

11 - 40 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>20</u>	<u>6/11/20</u>	<u>20.9</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>"</u>	<u>"</u>	<u>20.9</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F

41 - 100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>100</u>	<u>6/11/20</u>	<u>102</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>"</u>	<u>6/11/20</u>	<u>105</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F

>100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>800</u>	<u>6/11/20</u>	<u>787</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input checked="" type="radio"/> ICV <input checked="" type="radio"/> CCV	<u>"</u>	<u>"</u>	<u>770</u>	<input checked="" type="radio"/> P <input type="radio"/> F
CAL <input type="radio"/> ICV <input type="radio"/> CCV				<input type="radio"/> P <input type="radio"/> F

Specific Conductance Probe Cleaned? Yes No      Dissolved Oxygen membrane Changed? Yes No

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration

ICV - Initial Calibration Verification

CCV - Continuing Calibration Verification

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier

Comments: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_





**Geosyntec Consultants  
Water Quality Instrument Calibration Form**

Project/Site: **FSFC**

Project #: **FR3511C**

Field Personnel: **RIK MATHIAS**

Water Quality Meter - Model/Serial #: **YSI 556 15C 105287**

Turbidimeter - Model/Serial #: **HACH 2100 Q 13060 C 026176**

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) <sup>1</sup>	Reading (mg/L)	Reading (%)	Pass or Fail
CAL ICV CCV		6-8-20	1124	30.53	7.494	7.47	99.8	P F
CAL ICV CCV		11	1824	26.40	8.055	7.95	99.5	P F
CAL ICV CCV		6-9-20	0958	25.95	8.128	8.16	99.8	P F
CAL ICV CCV		6-10-20	0805	25.05	8.263	8.24	99.8	P F
CAL ICV CCV		6-11-20	0806	25.15	8.218	8.29	100.7	P F
Acceptance Criteria: +/- 0.3mg/L								
Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
CAL ICV CCV		6-8-20	1124	1.413	96F944	6/20	1.415	P F
CAL ICV CCV		11	1827	1.413	11	11	1.416	P F
CAL ICV CCV		6-9-20	0904	1.413	11	11	1.416	P F
CAL ICV CCV		6-10-20	0809	1.413	11	11	1.423	P F
CAL ICV CCV		6-11-20	0810	1.413	11	11	1.419	P F
Acceptance Criteria: +/- 5%								
pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
CAL ICV CCV		6-8-20	1128	7.00	96G002	7/2021	7.00	P F
CAL ICV CCV		11	1131	4.00	96L204	12/2021	4.00	P F
CAL ICV CCV		11	1135	10.00	96E372	6/21	10.01	P F
CAL ICV CCV		11	1131	7.00	96G002	7/2021	7.07	P F
CAL ICV CCV		6-9-20	0809	7.00	96G002	7/2021	7.00	P F
CAL ICV CCV		6-10-20	0814	7.00	96G002	7/2021	7.07	P F
CAL ICV CCV		6-11-20	0815	7.00	96G002	7/2021	7.04	P F
CAL ICV CCV								P F
CAL ICV CCV								P F
Acceptance Criteria: +/- 0.2 SU								
ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
CAL ICV CCV		6-8-20	1138	240.0	06B1143	3/11/20	240.0	P F
CAL ICV CCV		11	1834	240.0	06E122	11/20	239.6	P F
CAL ICV CCV		6-9-20	0813	11	06B1143	11	240.2	P F
Geosyntec Acceptance Criteria: +/- 5%								
Specific Conductance Probe Cleaned?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Dissolved Oxygen membrane Changed? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

0.1 - 10 NTU	Std 10 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL ICV CCV		6-8-20	10.1	P F
CAL ICV CCV		11	10.0	P F
CAL ICV CCV		6-9-20	10.2	P F
CAL ICV CCV		6-10-20	10.1	P F
CAL ICV CCV		6-11-20	10.0	P F
11 - 40 NTU	Std 20 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL ICV CCV		6-8-20	19.9	P F
CAL ICV CCV		11	20.2	P F
CAL ICV CCV		6-9-20	20.5	P F
CAL ICV CCV		6-10-20	20.1	P F
CAL ICV CCV		6-11-20	20.2	P F
41 - 100 NTU	Std 100 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL ICV CCV		6-8-20	98.8	P F
CAL ICV CCV		11	101	P F
CAL ICV CCV		6-9-20	97.6	P F
CAL ICV CCV		6-10-20	98.0	P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
>100 NTU	Std 800 NTU	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL ICV CCV		6-8-20	802	P F
CAL ICV CCV		6-9-20	788	P F
CAL ICV CCV		6-10-20	796	P F

1. See Table FS 2200-2 on the back of this form

CAL - Initial Calibration  
ICV - Initial Calibration Verification  
CCV - Continuing Calibration Verification

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration  
Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)  
Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)  
If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier



**Geosyntec Consultants**  
**Water Quality Instrument Calibration Form**

Project/Site: FSFC

Project #: FR3511C/04

Field Personnel: Rik Mathias

Water Quality Meter - Model/Serial #: YSI 556 15C105287

Turbidimeter - Model/Serial #: HACH 2100Q 13060C 026176

Dissolved Oxygen	DEP SOP FT 1500	Date	Time	Temp (°C)	Saturation (mg/L) <sup>1</sup>	Reading (mg/L)	Reading (%)	Pass or Fail
Acceptance Criteria: +/- 0.3mg/L								
CAL ICV <u>CCV</u>		<u>6-11-20</u>	<u>1510</u>	<u>31.19</u>		<u>7.45</u>	<u>100.8</u>	<u>P</u> F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance	DEP SOP FT 1200	Date	Time	Standard (mS/cm)	Standard Lot #	Standard Exp. Date	Reading (mS/cm)	Pass or Fail
Acceptance Criteria: +/- 5%								
CAL ICV <u>CCV</u>		<u>6-11-20</u>	<u>1514</u>	<u>1.413</u>	<u>96994</u>	<u>6/20</u>	<u>1.420</u>	<u>P</u> F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

pH	DEP SOP FT 1100	Date	Time	Standard (SU)	Standard Lot #	Standard Exp. Date	Reading (SU)	Pass or Fail
Acceptance Criteria: +/- 0.2 SU								
CAL ICV <u>CCV</u>		<u>6-11-20</u>	<u>1519</u>	<u>7.00</u>	<u>969402</u>	<u>7/2021</u>	<u>7.03</u>	<u>P</u> F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

ORP	SOP N/A	Date	Time	Std. mV @ Temp °C	Standard Lot #	Standard Exp. Date	Reading (mV)	Pass or Fail
Geosyntec Acceptance Criteria: +/- 5%								
CAL ICV <u>CCV</u>		<u>6-11-20</u>	<u>1525</u>	<u>240.0</u>	<u>06B1143</u>	<u>11/20</u>	<u>237.8</u>	<u>P</u> F
CAL ICV CCV								P F
CAL ICV CCV								P F

Specific Conductance Probe Cleaned? Yes No      Dissolved Oxygen membrane Changed? Yes No

0.1 - 10 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 10%				
CAL ICV <u>CCV</u>	<u>10</u>	<u>6-11-20</u>	<u>9.98</u>	<u>P</u> F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

11 - 40 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 8%				
CAL ICV <u>CCV</u>	<u>20</u>	<u>6-11-20</u>	<u>20.1</u>	<u>P</u> F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

41 - 100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 6.5%				
CAL ICV <u>CCV</u>	<u>100</u>	<u>6-11-20</u>	<u>99.1</u>	<u>P</u> F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F
CAL ICV CCV				P F

>100 NTU	Std	Date	Reading (NTU)	Pass or Fail
Acceptance Criteria: +/- 5%				
CAL ICV <u>CCV</u>	<u>200</u>	<u>6-11-20</u>	<u>190</u>	<u>P</u> F
CAL ICV CCV				P F
CAL ICV CCV				P F

1. See Table FS 2200-2 on the back of this form

- CAL - Initial Calibration
- ICV - Initial Calibration Verification
- CCV - Continuing Calibration Verification

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Allow adequate time for the dissolved oxygen sensor to equilibrate during air calibration

Calibrate specific conductance using at least two standards that bracket the range of expected sample readings (unless readings < 0.1 mS/cm then one standard of 0.1 mS/cm is acceptable)

Calibrate pH using at least two standards (typ. pH 4 and 7) that bracket the range of expected sample readings; always start with pH 7; add a third calibration point if needed (i.e. pH > 7)

If parameter fails to calibrate within SOP acceptance criteria then append sample results with a "J" qualifier



## Attachment A. Daily PFAS Sampling Checklist

Date: 6/08/20

Site Name: FSFC

Weather (temperature/precipitation): hot & humid

**Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.**

### Field Clothing and PPE:

- No water- or stain-resistant clothing (e.g., GORE-TEX®)
- During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- Clothing has not been recently laundered with a fabric softener
- No coated HDPE suits (e.g., coated Tyvek® suits)
- Field crew has not used cosmetics, moisturizers, or other related products today
- Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

### Field Equipment:

- Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- No materials containing Teflon™, Viton™, or fluoropolymers
- No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- No plastic clipboards, binders, or spiral hard cover notebooks
- No waterproof field books
- No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- No chemical (blue) ice, unless it is contained in a sealed bag
- No aluminum foil
- No sticky notes (e.g., certain Post-It® products)

### Decontamination:

- Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- "PFAS-free" water is on-site for decontamination of field equipment
- Alconox® or Liquinox® used as decontamination detergent



Food and Drink:

- No food or drink on-site, except within staging area
- Food in staging area is contained in HDPE or stainless steel container

Notes:

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Field Team Leader Name (Print): J.J. Hallingsford

Field Team Leader Signature: 

Date/Time: 0942

## Attachment A. Daily PFAS Sampling Checklist

Date: 6/09/20

Site Name: KSFC

Weather (temperature/precipitation): hot & humid

**Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.**

### Field Clothing and PPE:

- No water- or stain-resistant clothing (e.g., GORE-TEX®)
- During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- Clothing has not been recently laundered with a fabric softener
- No coated HDPE suits (e.g., coated Tyvek® suits)
- Field crew has not used cosmetics, moisturizers, or other related products today
- Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

### Field Equipment:

- Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- No materials containing Teflon™, Viton™, or fluoropolymers
- No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- No plastic clipboards, binders, or spiral hard cover notebooks
- No waterproof field books
- No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- No chemical (blue) ice, unless it is contained in a sealed bag
- No aluminum foil
- No sticky notes (e.g., certain Post-It® products)

### Decontamination:

- Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- "PFAS-free" water is on-site for decontamination of field equipment
- Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- No food or drink on-site, except within staging area
- Food in staging area is contained in HDPE or stainless steel container

Notes:

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Field Team Leader Name (Print): JJ Gallagher

Field Team Leader Signature: [Signature]

Date/Time: 6/09/20; 0825



## Attachment A. Daily PFAS Sampling Checklist

Date: 6/10/20

Site Name: FSFC

Weather (temperature/precipitation): better & more humid than yesterday

**Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.**

### Field Clothing and PPE:

- No water- or stain-resistant clothing (e.g., GORE-TEX®)
- During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- Clothing has not been recently laundered with a fabric softener
- No coated HDPE suits (e.g., coated Tyvek® suits)
- Field crew has not used cosmetics, moisturizers, or other related products today
- Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

### Field Equipment:

- Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- No materials containing Teflon™, Viton™, or fluoropolymers
- No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- No plastic clipboards, binders, or spiral hard cover notebooks
- No waterproof field books
- No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- No chemical (blue) ice, unless it is contained in a sealed bag
- No aluminum foil
- No sticky notes (e.g., certain Post-It® products)

### Decontamination:

- Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- "PFAS-free" water is on-site for decontamination of field equipment
- Alconox® or Liquinox® used as decontamination detergent

Food and Drink:

- No food or drink on-site, except within staging area
- Food in staging area is contained in HDPE or stainless steel container

Notes:

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Field Team Leader Name (Print): J.J. Hollingshead

Field Team Leader Signature: [Signature]

Date/Time: 6/10/20; 0838

## Attachment A. Daily PFAS Sampling Checklist

Date: 6/11/20

Site Name: FSFC

Weather (temperature/precipitation): hot & humid

**Please check all boxes that apply and describe any exceptions in the notes section below along with QA/QC methods used to assess potential sample cross-contamination as a result.**

### Field Clothing and PPE:

- No water- or stain-resistant clothing (e.g., GORE-TEX®)
- During collection of water and sediment samples, no water- or stain-resistant boots OR water- or stain-resistant boots covered by PFAS-free over-boots
- Field boots (or over-boots) are made of polyurethane, PVC, rubber, or untreated leather
- Waders or rain gear are made of polyurethane, PVC, vinyl, wax-coated or rubber
- Clothing has not been recently laundered with a fabric softener
- No coated HDPE suits (e.g., coated Tyvek® suits)
- Field crew has not used cosmetics, moisturizers, or other related products today
- Field crew has not used sunscreen or insect repellants today, other than products approved as PFAS-free

### Field Equipment:

- Sample containers and equipment in direct contact with the sample are made of HDPE, polypropylene, silicone, acetate or stainless steel, not LDPE or glass
- Sample caps are made of HDPE or polypropylene and are not lined with Teflon™
- No materials containing Teflon™, Viton™, or fluoropolymers
- No materials containing LDPE in direct contact with the sample (e.g., LDPE tubing, Ziploc® bags)
- No plastic clipboards, binders, or spiral hard cover notebooks
- No waterproof field books
- No waterproof or felt pens or markers (e.g., certain Sharpie® products)
- No chemical (blue) ice, unless it is contained in a sealed bag
- No aluminum foil
- No sticky notes (e.g., certain Post-It® products)

### Decontamination:

- Reusable field equipment (e.g., inner drill rods, samplers) decontaminated prior to reuse
- "PFAS-free" water is on-site for decontamination of field equipment
- Alconox® or Liquinox® used as decontamination detergent



Food and Drink:

- No food or drink on-site, except within staging area
- Food in staging area is contained in HDPE or stainless steel container

Notes:

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Field Team Leader Name (Print): JJ. Hollingshead

Field Team Leader Signature: [Signature]

Date/Time: 6/11/20; D810

Chain of Custody Record

Project Name <i>Florida State Fire College</i>					# B O T T L E S	Analyses														
Sampled by <i>J.J. Hallwachter</i>			Module#			<i>W-PTAS-MS</i>														
RQ# <i>RA-2020-06-08-30</i>		Site Name <i>Florida State Fire College</i>																		
Field ID	Matrix	Date	Time	Bottle Group															Comments	
<i>FSFC Supply Well (Pre-filter)</i>	<i>GW</i>	<i>6/11/20</i>	<i>0915</i>	<i>A</i>	<i>2</i>	<i>X</i>														
<i>FSFC Supply Well (Post-filter)</i>	<i> </i>	<i>6/11/20</i>	<i>0909</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>FSFC Fire Well</i>	<i> </i>	<i>6/11/20</i>	<i>0936</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>Well #1</i>	<i> </i>	<i>6/11/20</i>	<i>1039</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>Well #4</i>	<i> </i>	<i>6/11/20</i>	<i>1133</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>Well #5 AC</i>	<i> </i>	<i>6/11/20</i>	<i>1023</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>Well #8</i>	<i> </i>	<i>6/11/20</i>	<i>1204</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>PC Supply Well</i>	<i> </i>	<i>6/11/20</i>	<i>1150</i>	<i>A</i>	<i>#24</i>	<i> </i>													<i>MS/MSD</i>	
<i>Well #8 Dup</i>	<i> </i>	<i>6/11/20</i>	<i>1204</i>	<i>A</i>	<i>2</i>	<i> </i>														
<i>FRB5</i>	<i>GW</i>	<i>6/11/20</i>	<i>1122</i>	<i>B</i>	<i>2</i>	<i>X</i>														
<i>NFE</i>																				
Relinquished by: <i>[Signature]</i>		Date/Time		Method of Dispatch			Received by:			Date/Time										
Relinquished by:		Date/Time		Method of Dispatch			Received by:			Date/Time										
Relinquished by:		Date/Time		Method of Dispatch			Received by:			Date/Time										

Remarks:

Preservative Sticker 1

Preservative Sticker 2

Preservative Sticker 3

Preservative Sticker 4

**Cooler Packing Worksheet for Request: RQ-2020-06-08-30**  
**Florida State Fire College-Drinking Water/Production Wells June**

Ship Cooler On: 6/5/2020  
Customer/Project: SIS/FC-MARION

Assigned To: MCCOY\_I  
Requester: David Meyers  
Priority: 5

727.262.8268  
19321 U.S. Highway 19 North  
Building C, Suite 200  
Tallahassee, FL 32764  
Attn: Olivia Cain Geosyntec

**Comments:**

No preservatives needed.

- ☞ Please include 6 liters PFAS free water
- ☞ Please send a minimum of two coolers (samples may be collected in seperate weeks)
- ☞ Please include Fed-Ex shipping labels for cooler return

Bottle Group A- Supply Wells, DUPs,

Bottle Group B- FRBs

**Requested Analyses:**

**Bottle Group: A**

**# of Sites: 15**

Container ID: P-125ML HDPE PFAS    Qty: 34    Preservation: ICE

Lot # 1269099(9)

Description: 125ml HDPE bottle for PFAS    Affix BLUE dot to container.  
(2-bagged)

1625207(25)

Analysis  
W-PFAS-MS

Description  
Perfluorinated alkyl substances in water matrices by HPLC/MS/MS

**Bottle Group: B**

**# of Sites: 2**

Container ID: P-125ML HDPE PFAS    Qty: 4    Preservation: ICE

Lot # 1269099

Description: 125ml HDPE bottle for PFAS    Affix BLUE dot to container.  
(2-bagged)

Analysis  
W-PFAS-MS

Description  
Perfluorinated alkyl substances in water matrices by HPLC/MS/MS

## Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

**Objective:** Ensure sample kits are received and samples are packaged and shipped properly.

**Instructions:** Please answer each question and provide your name and the date the question was answered. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Florida State Fire College  
Project Number: FR3511C/04

Checked by: J.J. Hollingshead

Date: 6/11/2020

### Item

Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match  Yes No

Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag  Yes No

Bagged Samples Placed on Ice (Photo)  Yes No

Additional Ice (Not Bagged) Placed on Samples (Photo)  Yes No

Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)  Yes No

FDEP Notified of Shipping Date, Method, Expected Arrival  Yes No



Chain of Custody Record

Project Name <u>Florida State Fire College</u>					# B O T T L E S	Analyses										Comments	
Sampled by <u>JJ Hollingshead, Rik Mathias</u>			Module#			<u>W-PFAS-MS</u>											
RQ# <u>RQ-2020-06-08-29</u>		Site Name <u>Florida State Fire College</u>															
Field ID	Matrix	Date	Time	Bottle Group													
<u>CCMW-3(60-90)</u>	<u>GW</u>	<u>6/09/20</u>	<u>1601</u>	<u>A</u>	<u>2</u>	<u>X</u>											
<u>CCDW-1(90-95)</u>		<u>6/09/20</u>	<u>1725</u>	<u>A</u>													
<u>DEPMW-1(100-120)</u>		<u>6/10/20</u>	<u>1234</u>	<u>A</u>													
<u>DEPMW-2(35-55)</u>		<u>6/10/20</u>	<u>1031</u>	<u>A</u>													
<u>DEPMW-3(100-120)</u>		<u>6/10/20</u>	<u>1123</u>	<u>A</u>													
<u>DEPMW-4(100-120)</u>		<u>6/9/20</u>	<u>1251</u>	<u>A</u>													
<u>DEPMW-5(50-70)</u>		<u>6/9/20</u>	<u>1049</u>	<u>A</u>													
<u>DEPMW-6(100-120)</u>		<u>6/08/20</u>	<u>1813</u>	<u>A</u>													
<u>DEPMW-7(30-50)</u>		<u>6/08/20</u>	<u>1651</u>	<u>A</u>													
<u>DEPMW-8(100-120)</u>		<u>6/10/20</u>	<u>1546</u>	<u>A</u>													
<u>DEPMW-9(40-60)</u>		<u>6/10/20</u>	<u>1415</u>	<u>A</u>													
<u>DEPMW-10(100-120)</u>	<u>GW</u>	<u>6/08/20</u>	<u>1803</u>	<u>A</u>	<u>2</u>	<u>X</u>											
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time							
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time							
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time							

Remarks:

Preservative Sticker 1	Preservative Sticker 2	Preservative Sticker 3	Preservative Sticker 4
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Chain of Custody Record

Project Name					# B O T T L E S	Analyses										Comments			
Sampled by						Module#													
RQ#		Site Name																	
Field ID	Matrix	Date	Time	Bottle Group															
DEPMW-11 (30-50)	GW	6/08/20	1647	A	2	X													
DEPMW-12 (100-120)		6/09/20	1649	A	4														MS/MSD
DEPMW-13 (40-60)		6/09/20	1117	A	4														MS/MSD
DEPMW-14 (100-120)		6/11/20	1453	A	2														
DEPMW-15 (35-55)		6/11/20	1325	A															
DEPMW-16 (30-50)		6/11/20	1034	A															
DEPMW-17 (100-120)		6/11/20	1203	A															
DEPMW-18 (100-120)		6/08/20	1441	A															
DEPMW-19 (55-75)		6/08/20	1423	A															
DEPMW-20 (35-55)		6/10/20	1640	A															
<del>DEPMW-21 (EAB1)</del>		6/08/20	1245	A															
EAB 2	GW	6/08/20	1244	A	2	X													
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time									
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time									
Relinquished by:		Date/Time		Method of Dispatch		Received by:				Date/Time									

Remarks:

Preservative Sticker 1

Preservative Sticker 2

Preservative Sticker 3

Preservative Sticker 4



Chain of Custody Record

Project Name <u>Florida State Fire College</u>					# B O T T L E S	Analyses										Comments				
Sampled by <u>J. Kingsford, Rick Mathias</u>			Module#			<u>W-PTAS-MS</u>														
RQ# <u>RQ-2020-06-08-29</u>		Site Name <u>Florida State Fire College</u>																		
Field ID	Matrix	Date	Time	Bottle Group																
<u>FRB 3</u>	<u>GW</u>	<u>6/08/20</u>	<u>1515</u>	<u>B</u>	<u>32</u>	<u>X</u>														
<u>FRB 4</u>	<u>1</u>	<u>6/08/20</u>	<u>1500</u>	<u>B</u>	<u>32</u>	<u>1</u>														
<u>DEPMW-16(30-50)Dup</u>	<u>1</u>	<u>6/11/20</u>	<u>1034</u>	<u>A</u>	<u>a</u>	<u>1</u>														
<u>DEPMW-17(100-120)Dup</u>	<u>GW</u>	<u>6/11/20</u>	<u>1203</u>	<u>A</u>	<u>2</u>	<u>X</u>														
<u>NFE</u>																				
Relinquished by: <u>[Signature]</u>		Date/Time		Method of Dispatch			Received by:			Date/Time										
Relinquished by:		Date/Time		Method of Dispatch			Received by:			Date/Time										
Relinquished by:		Date/Time		Method of Dispatch			Received by:			Date/Time										

Remarks:

Preservative Sticker 1

Preservative Sticker 2

Preservative Sticker 3

Preservative Sticker 4

Cooler Packing Worksheet for Request: RQ-2020-06-08-29

Florida State Fire College June 8 GW Sampling

Ship Cooler On: 6/5/2020

Customer/Project: SIS/FC-MARION

Assigned To: KLUG\_K  
Requester: David Meyers  
Priority: 5

727.262.8268  
19321 U.S. Highway 19 North  
Building C, Suite 200  
Clearwater, FL 33764  
  
Attn: Meg Simms/Olivia Cain GEOSYNTEC

Comments:

No preservatives needed.

Please include 8 liters PFAS free water-

Please include Fed-Ex shipping labels for cooler returns.

Bottle Group A - Ground Water, Duplicate, EQB Samples

Bottle Group B - Field Reagent Blanks

**Requested Analyses:**

**Bottle Group: A**

**# of Sites: 28**

Container ID: P-125ML HDPE PFAS Qty: 62 Preservation: ICE

Lot # 1269099

Description: 125ml HDPE bottle for PFAS (2-bagged) Affix BLUE dot to container.

**Analysis**  
W-PFAS-MS

**Description**  
Perfluorinated alkyl substances in water matrices by HPLC/MS/MS

**Bottle Group: B**

**# of Sites: 2**

Container ID: P-125ML HDPE PFAS Qty: 4 Preservation: ICE

Lot # 1269099

Description: 125ml HDPE bottle for PFAS (2-bagged) Affix BLUE dot to container.

**Analysis**  
W-PFAS-MS

**Description**  
Perfluorinated alkyl substances in water matrices by HPLC/MS/MS



## Sample Packaging/Shipping Checklist for FDEP SIS/SOL PFAS Projects

**Objective:** Ensure sample kits are received and samples are packaged and shipped properly.

**Instructions:** Please answer each question and provide your name and the date the question was answered. For any question with a No answer, please provide details/justification below the question. A copy of this checklist should be saved to the project folder, accompany the sample kit, and be returned to the lab with the samples.

Project Name: Florida State Fire College  
Project Number: FR3511C/04

Checked by: J.J. Hollingshead

Date: 6/11/2020

### Item

Sample dates, times, IDs on field notes, COC, bottle labels (in Sharpie) Match	<input checked="" type="radio"/> Yes	No
Heavy-Duty Garbage Bag Place in Cooler and Ice in Bottom of Bag	<input checked="" type="radio"/> Yes	No
Bagged Samples Placed on Ice (Photo)	<input checked="" type="radio"/> Yes	No
Additional Ice (Not Bagged) Placed on Samples (Photo)	<input checked="" type="radio"/> Yes	No
Bag Sealed and COC, RQ, Checklist in Ziplock Bag Taped to Cooler Lid (Photo)	<input checked="" type="radio"/> Yes	No
FDEP Notified of Shipping Date, Method, Expected Arrival	<input checked="" type="radio"/> Yes	No

# **ATTACHMENT B**

## Photolog

**GEOSYNTEC CONSULTANTS**  
**Photographic Record**

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 1**

**Date:** 8 June 2020

**Direction:** E

**Comments:** View of groundwater sampling equipment set-up and sampling activities at DEPMW-10 (100-120').



**Photograph 2**

**Date:** 8 June 2020

**Direction:** SE

**Comments:** View of Geosyntec staff unloading purge water into investigation-derived waste (IDW) drums.





**GEOSYNTEC CONSULTANTS**  
**Photographic Record**

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 3**

**Date:** 9 June 2020

**Direction:** N

**Comments:** View of groundwater sampling equipment set-up and sampling activities at DEPMW-13 (40-60').



**Photograph 4**

**Date:** 9 June 2020

**Direction:** N

**Comments:** View of electric submersible pump decontamination following groundwater sampling at DEPMW-13 (40-60').





**GEOSYNTEC CONSULTANTS**  
**Photographic Record**

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 5**

**Date:** 11 June 2020

**Direction:** N

**Comments:** View of purging activities at the post-filter area of FSFC Supply Well. The YSI probe cluster is installed in a container attached to the tap for the collection of groundwater quality data.



**Photograph 6**

**Date:** 11 June 2020

**Direction:** N

**Comments:** View of purging activities at the FSFC Fire Well. The YSI probe cluster is installed in a container attached to the fence for the collection of groundwater quality data. The groundwater sample was collected directly from the 6-inch pipe.





**GEOSYNTEC CONSULTANTS**  
**Photographic Record**

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 7**

**Date:** 11 June 2020

**Direction:** E

**Comments:** View of 10, 55-gallon IDW drums filled with purge water and staged near wastewater treatment area.



**Photograph 8**

**Date:** 11 June 2020

**Direction:** SE

**Comments:** View of the extra 15, 55-gallon IDW drums staged in the wastewater treatment area.





**GEOSYNTEC CONSULTANTS**  
**Photographic Record**

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 9**

**Date:** 11 June 2020

**Direction:** NA

**Comments:** View of ice placed in trash bag in cooler prior to placing samples in cooler.



**Photograph 10**

**Date:** 11 June 2020

**Direction:** NA

**Comments:** View of samples placed in cooler on top of ice.



# GEOSYNTEC CONSULTANTS

## Photographic Record

**Client:** FDEP

**Project Number:** FR3511C/04

**Site Name:** FSFC

**Site Location:** Ocala, FL

**Photograph 11**

**Date:** 11 June 2020

**Direction:** NA

**Comments:** View of ice placed on top of samples.



**Photograph 12**

**Date:** 11 June 2020

**Direction:** NA

**Comments:** View of Ziploc bag with chain of custody, RQ, and cooler checklist taped to cooler lid.

