Name: Jose DeL VALLE

SQUIBB Quarterly Measurements

__ Q 20___

Date: 2-27-17

Building 5 Area							
Well #	Stick up, feet	Time	PID	Water level, feet, btc	Well depth, feet, btc	Screen range, btc	Notes/Comments
UP-1	-0.19	1121	0.5	4.20		4.0-14.0	
UP-2	-0.28	1118	0.8	7.07		4.0-14.0	
A-1R (4)	-0.28	1126	36.8	8.47		4.1-14.1	
A-2R (2)	-0.61	1129	2.7	6.56		2.7-12.7	
A-3	-0.15	—	—	—		8.4-18.4	
D-1R	-0.29	1139	0.3	8.55		6.1-16.1	
E-1R	-0.30	1149	1.6	8.71		5.7-20.7	
G-1R (3)	-0.35	1158	450.6	6.73		5.7-15.7	
S-28	-0.12	1718	0.4	10.49		9.8-19.8	
S-29R	-0.12	1642	0.0	9.42		11.4-21.4	
S-30	2.32	1639	0.8	9.17		12.6-22.6	
S-31R (2)	-0.39	1637	27.0	8.37		5.6-15.6	
S-32	2.66	1516	1915	14.16		11.6-21.6	
S-33	2.73	1501	0.5	15.69		10.1-20.1	
S-34	1.82	1502	3.0	17.97		11.2-21.2	
S-35	2.39	1505	0.9	13.89		8.0-18.0	
S-35D	2.21	1506	3.0	11.56		24.98-34.98	SS screen
S-36	2.04	1511	2.0	15.91		9.5-19.5	
S-37	2.70	1509	1.0	21.22		21.7-31.7	
S-38	-0.25	1505	0.2	6.28		4.0-14.0	
S-39S	1.65	1152	1.6	11.74		10.20-20.20	
S-39D	1.63	1154	0.6	11.80		19.80-29.80	SS screen
S-40S	2.61	1659	2.1	14.02		13.50-23.50	
S-40D	2.35	1658	2.1	13.22		25.10-35.10	SS screen
S-41S	2.55	1512	1.7	13.08		12.48-24.48	
S-41D	2.68	1514	1.0	10.60		23.49-33.49	SS screen
S-42S	0.28	—	—	—		6.0-16.0	There was a car on top.
S-42D	-0.25	1631	3.42	8.42		15.80-25.80	SS screen
S-43S	-0.28	1642	7.2	5.10		8.05-18.05	
S-43D	-0.23	1644	11.0	5.27		15.43-25.73	SS screen
RA-10S	-0.28	1457	0.3	7.14		4.12-14.2	
RA-10D	-0.480	1459	0.0	6.97		11.95-21.95	
Bridge		1615	—	8.47	NA		

Former Tank Farm							
Well #	Stick up, feet	Time	PID	Water level, feet	Well depth, feet	Screen range, btc	Notes/Comments
MW-3	2.45	1017	0.0	9.60		6.8-16.8	Top of the pump, no water.
MW-5	2.42	1415	0.5	10.92		5.3-15.3	
MW-7	1.90	1009	0.8	5.82		6.7-16.7	
MW-11	3.47	1510	0.0	11.82		10.5-20.5	
MW-12	2.62	1017	0.0	10.56		20.9-25.9	
MW-13	-0.17	1012	2.6	5.65		5.0-15.0	
MW-14	-0.27	1425	2.0	5.46		5.8-15.8	
MW-15	-0.26	1430	0.0	6.27		7.5-17.5	
MW-16	-0.21	1730	0.6	8.16		6.4-16.4	
MW-17	-0.49	1436	237.0	5.89		3.67-13.7	
MW-18	-0.04	1028	0.2	5.61		4.0-14.0	

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Name: J. Del Valle / R. Stuart SQUIBB Quarterly Measurements Date: 2/27/17

__ Q 20___

MW-19	-0.29	1405	1.159	3.11 ~~1.159~~ RS		4.01-14.01	
MW-20S	-0.29	1452	0.4	5.63		5.80-15.80	
MW-20D	-0.51	1450	1.8	5.52		11.79-21.79	SS screen
RW-1	1.55	1019	6.0	9.22		4.3-17.3	

Brule Area							
Well #	Stick up, feet	Time	PID	Water level, feet	Well depth, feet	Screen range, btc	Notes/Comments
BR-1	-0.37	1107	250.8	6.56		2.8-12.8	PID 250.8 / 6.56
BR-2	-0.19	1104	0.1	7.38		2.7-12.7	
BR-3	-0.72	1101	0.1	6.50		1.6-12.6	
BR-4	-0.28	1058	/	6.52		5.95-15.95	

Upgradient							
Well #	Stick up, feet	Time	PID	Water level, feet, btc	Well depth, feet, btc	Screen range, btc	Notes/Comments
MW-9	3.00	1356	0.0	9.06		10.6-20.6	

Release Assessment							
Well #	Stick up, feet	Time	PID	Water level, feet, btc	Well depth, feet, btc	Screen range, btc	Notes/Comments
MW-21	-0.43	1000	0.0	7.44		7.98-17.98	
MW-22	-0.31	1003	0.0	6.10		4.46-14.46	
MW-23	-0.33	1435	0.0	5.38		3.57-13.57	

Off Site Wells							
Well #	Stick up, feet	Time	PID	Water level, feet, btc	Well depth, feet, btc	Screen range, btc	Notes/Comments
OSMW-1S	-0.24	1528	28.0	4.39		6.20-16.20	5ft screen
OSMW-1D	-0.24	1530	1.2	3.83		16.80-21.08	
OSMW-2S	-0.35	1537	6.0	4.02		8.27-18.27	
OSMW-2D	-0.20	1538	2.0	3.70		17.88-27.88	
OSMW-3S	-0.39	1540	1.4	4.04		4.98-14.98	
OSMW-3D	-0.29	1542	0.5	3.68		15.23-25.23	
OSMW-4S	-0.34	1547	1.1	4.70		6.20-16.20	
OSMW-4D	-0.40	1548	4.1	4.32		15.70-25.70	
OSMW-5S	-0.27	1555	2.5	4.68		7.88-12.88	5 ft screen
OSMW-5D	-0.35	1556	1.2	2.30		14.93-24.93	
OSMW-6S	-0.24	1608	0.9	5.95		4.85-14.85	
OSMW-6D	-0.38	1607	15.0	5.70		13.88-23.88	6.04 ft First measure

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-1S

Site Name, Location: PR #3, BMS, Humacao

Personnel: J. Del Valle/R. Strat

Equipment Used: Horiba, pump + tubbing dedicated decontaminated pump

Date: March 1, 2017

Monitoring Well Information:

Diameter/Material:	2" / PVC
Depth to Bottom (ft from TOC):	16.50
Top of Screen (ft from TOC):	6.20
Bottom of Screen (ft from TOC):	16.20
Pump Intake Level (ft from TOC):	~11
Desired Pumping Rate (Lpm):	0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time:	4.37 / 1143
Measured DTB (ft from TOC)/Time:	(16.50) /
Headspace Reading (ppm):	28
Time @ Start Purging:	1331
Time @ Stop Purging:	1358
Time @ Stop Sampling:	1454
Purge Volume (gallons):	2.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1331	4.24		Start pursing, Pump + tubbing installed					
1333	4.24	30.42	125	2.46	6.81	-102	2.0	200
1338	4.26	30.32	125	4.14	6.65	-97	0.1	200
1343	4.25	30.13	125	4.11	6.59	-96	0.0	200
1348	4.24	30.20	125	3.78	6.75	-105	0.0	200
1353	4.24	30.31	125	3.47	6.75	-105	0.0	200
1358	4.23	30.38	125	3.56	6.75	-105	0.0	200
			Ready to sample					

Comments:

Sample Time: 1416 DUP ✓ MS 1434 MSD 1454 Water Quality/Appearance: clear

Sample Analysis: see below DUP ✓ MS _____ MSD _____

Additional Comments: VOC, VPH, SVOC, SVOC-SIM, EPH, PEST,

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-1D

Site Name, Location: PR#3 BMS, Humacao

Personnel: J. Del Valle / R. Stuart

Equipment Used: Horiba, dedicated pump, tubing. decontaminated pump bladder

Date: March 1, 2017.

Monitoring Well Information:

Diameter/Material:	2" / PVC
Depth to Bottom (ft from TOC):	21.38
Top of Screen (ft from TOC):	16.08
Bottom of Screen (ft from TOC):	21.08
Pump Intake Level (ft from TOC):	~18
Desired Pumping Rate (Lpm):	0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time:	3.86 / 1140
Measured DTB (ft from TOC)/Time:	(21.38)
Headspace Reading (ppm):	1.2
Time @ Start Purging:	1203
Time @ Stop Purging:	1225
Time @ Stop Sampling:	1258
Purge Volume (gallons):	2.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1203	4.17		Start	purging	/ after	tubing	installed + pump.	
1205	4.29	30.31	1.30	2.04	6.85	-113	6.1	200
1210	4.00	30.14	131	1.60	6.70	-112	2.8	250
1215	4.00	30.28	132	1.55	6.81	-125	1.4	150
1220	3.94	30.34	132	1.56	6.73	-115	0.7	150
1225	4.07	30.37	131	1.53	6.79	-118	0.9	250
			Ready to sample					

Comments:

Sample Time: 1255 DUP — MS — MSD — Water Quality/Appearance: Clear

Sample Analysis: DUP — MS — MSD —

Additional Comments: FB-030117 at 1258 VOC, VPH, SVOC SIM, SVOC, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW - 2S

Site Name, Location: Guided Christiana, BMS Furnace **Personnel:** H. Ro / R. Stuart

Equipment Used: Horiba, dedicated pump + tubing bladder decontaminated pump **Date:** March 2, 2017.

Monitoring Well Information:

Diameter/Material:	2" / PVC
Depth to Bottom (ft from TOC):	18.57
Top of Screen (ft from TOC):	8.27
Bottom of Screen (ft from TOC):	18.27
Pump Intake Level (ft from TOC):	13
Desired Pumping Rate (Lpm):	0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time:	4.04 / 1015
Measured DTB (ft from TOC)/Time:	(18.57) /
Headspace Reading (ppm):	0.0
Time @ Start Purging:	10:48
Time @ Stop Purging:	11:14
Time @ Stop Sampling:	11:38
Purge Volume (gallons):	1.75gal

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1048	3.87		pump and tubing installed					
1049			start pumping					
1050	3.96	29.11	838	2.40	7.18	-76	17.5	400
1055	3.92	28.96	827	1.06	7.18	-102	11.7	300
1100	3.93	28.82	819	0.86	7.18	-112	7.2	300
1105	3.92	28.90	812	0.74	7.18	-113	4.9	150
1110	3.91	29.00	807	0.71	7.16	-111	3.2	100
		Conditions stable. sampling can begin						

Comments:

Sample Time: 11:38 DUP — MS — MSD — Water Quality/Appearance: clear

Sample Analysis: DUP — MS — MSD —

Additional Comments: VOC, SVOC, VPH, SVOC, PESC, EPH
Sim

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-2D

Site Name, Location: Ciudad Cristiana Humacao, PR **Personnel:** R Stuart H Royer

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump **Date:** 3/2/2017

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 28.18
Top of Screen (ft from TOC): 17.88
Bottom of Screen (ft from TOC): 27.88
Pump Intake Level (ft from TOC): ~22
Desired Pumping Rate (Lpm): ~~[illegible]~~ 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: — / —
Measured DTB (ft from TOC)/Time: (28.18 / ____
Headspace Reading (ppm): 2.0
Time @ Start Purging: 1207
Time @ Stop Purging: 13.23
Time @ Stop Sampling: 13.57
Purge Volume (gallons): 4

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
12:07	3.64	After	pump &	tubing	in	place		
12:13	3.69	29.87	798	7.93	7.25	-78	1.0	225
12:18	3.39	29.34	798	6.87	7.20	-105	1.4	200
12:23	3.69	29.26	794	6.17	7.19	-111	1.1	200
12:28	3.37	29.19	789	5.60	7.19	-111	0.7	200
12:33	3.39	29.03	785	5.03	7.18	-113	0.5	200
12:38	3:39	29.07	783	4.62	7.18	-114	0.3	200
12:43	3.39	29.13	780	4.46	7.19	-114	0.3	200
12:48	3.37	29.18	777	3.84	7.17	-114	0.3	200
12:53	3.38	29.16	773	3.60	7.19	-115	0.1	200
12:58	3.39	29.22	768	3.24	7.17	-116	0.2	200
13:03	3.38	29.22	763	2.92	7.17	-114	0.1	200
13:08	3.38	29.23	762	2.72	7.19	-116	0	200
13:13	3.39	29.35	758	2.45	7.18	-115	0.3	200
13:18	3.36	29.39	756	2.36	7.18	-116	0.2	200
13:23	3.38	29.40	751	2.16	7.19	-117	0	200
		Conditions	stabilize		Sampling	Begins		

Comments:
Sample Time: ~~[illegible]~~ 13:57 DUP — MS — MSD — Water Quality/Appearance: clear
Sample Analysis: ____ DUP — MS — MSD —

Additional Comments: VOC, VPH, SVOC, SIM, SVOC, PEST, & PH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-35

Site Name, Location: BMS - Off Site

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 2, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 15.28
Top of Screen (ft from TOC): 4.98
Bottom of Screen (ft from TOC): 14.98
Pump Intake Level (ft from TOC): ~10
Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 3.79 / 1032
Measured DTB (ft from TOC)/Time: (15.28) /
Headspace Reading (ppm): 1.4
Time @ Start Purging: 1036
Time @ Stop Purging: 1125
Time @ Stop Sampling: 1152
Purge Volume (gallons): 3.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1034	3.76	After installing the pump						
1036	~~4.05~~	start						
1050	4.05	28.22	663	2.00	6.79	-104	18.5	450+
1055	3.98	28.24	624	1.69	6.88	-106	4.8	200
1100	3.97	28.19	624	1.63	6.87	-107	3.7	200
1105	3.94	28.04	625	2.01	6.90	-100	2.6	300+
1110	3.94	28.04	625	1.68	6.98	-98	2.3	200
1115	3.95	28.16	624	1.54	6.96	-110	1.1	200
1120	3.95	28.17	623	1.63	6.97	-113	0.7	300
1125	3.95	28.20	623	1.46	6.93	-113	0.5	300
			Ready to sample					

Comments:

Sample Time: 1152 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, PEST, EPH DUP ✓ MS ✓ MSD ✓

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-3D

Site Name, Location: BMS- off site

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 3, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 28.18

Top of Screen (ft from TOC): 17.88

Bottom of Screen (ft from TOC): 27.88

Pump Intake Level (ft from TOC): ~23

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 3.62 / 1637

Measured DTB (ft from TOC)/Time: (28.18) / ____

Headspace Reading (ppm): 1.4

Time @ Start Purging: 1215

Time @ Stop Purging: 1253

Time @ Stop Sampling: 1318

Purge Volume (gallons): 225

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1047	3.61	After installing the pump						
1215	START							
1218	3.69	28.16	626	7.22	7.07	-29	2.8	250
1223	3.69	28.12	627	6.88	7.05	-37	1.0	250
1228	3.69	28.18	629	5.72	7.04	-54	0.8	225
1233	3.66	28.18	628	5.16	7.04	-61	0.4	200
1238	3.66	28.17	627	4.60	7.05	-66	0.4	200
1243	3.66	28.21	627	4.19	6.99	-61	0.4	200
1248	3.66	28.23	626	4.41	7.04	-70	0.4	200
1253	3.66	28.24	626	4.38	6.99	-70	0.4	200
			Ready to sample					

Comments:

Sample Time: ~~1410~~ 1318 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, PEST, EPH DUP ✓ MS ✓ MSD ✓

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW - 4S

Site Name, Location: Ciudad Cristiana Humacao, PR

Personnel: R Stuart H Rayer

Equipment Used: Dedicated bladder, cord, & tubing decontaminated pump

Date: 3/3/2017

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 16.50
Top of Screen (ft from TOC): 6.20
Bottom of Screen (ft from TOC): 16.20
Pump Intake Level (ft from TOC): ~11
Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.60 / 1237
Measured DTB (ft from TOC)/Time: (16.5) /
Headspace Reading (ppm): 1.1
Time @ Start Purging: 12:47
Time @ Stop Purging: 13:19
Time @ Stop Sampling:
Purge Volume (gallons): 4

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
~~3~~ 12:37	4.60	Before	installing	pump				
12:47	4.70	Pump	Installed					
12:54	4.71	30.63	~~[illegible]~~ 1030	8.37	6.61	-76	684	300
1259	4.71	30.63	103	6.89	6.60	-77	296	300
1304	4.71	30.53	103	6.66	6.59	-77	201	300
1309	4.71	30.52	103	6.43	6.59	-78	123	300
1314	4.71	30.53	103	6.19	6.58	-77	76	300
1319	4.71	30.43	103	6.03	6.58	-76	52	300

Comments:
Sample Time: _____ DUP _____ MS _____ MSD _____
Sample Analysis: _____ DUP _____ MS _____ MSD _____

Water Quality/Appearance: slightly cloudy

Additional Comments: VOC, VPH, SVOC, EPH, PEST, SVOC, SM

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW - 4D

Site Name, Location: Ciudad Cristiana, Humacao, PR

Personnel: Roslynn Stuart, Haley Royer

Equipment Used: dedicated bladder, tubing, & cord decontaminated pump

Date: 3/3/2017

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 26.00
Top of Screen (ft from TOC): 15.70
Bottom of Screen (ft from TOC): 25.70
Pump Intake Level (ft from TOC): ~20
Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.26 / 1033
Measured DTB (ft from TOC)/Time: (26.00) /
Headspace Reading (ppm): 4.1
Time @ Start Purging: 10:45
Time @ Stop Purging: 11:11
Time @ Stop Sampling:
Purge Volume (gallons): 4.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:33	4.26	Before pump installed						
10:43	4.24	Pump installed but not pumping						
10:45	4.52	30.27	718	2.93	7.00	-116	309	75
10:50	4.67	30.43	686	1.89	7.04	-120	196	600
10:56	4.67	30.47	679	1.62	7.06	-123	92.3	500
11:01	4.61	30.48	677	1.54	7.07	-123	51.1	400
11:06	4.65	30.46	676	1.51	7.08	-123	52.3	320
11:11	4.65	30.49	675	1.46	7.09	-122	42.5	320
		Conditions are stable; sampling begins						

Comments:

Sample Time: _____ DUP _____ MS _____ MSD _____

Water Quality/Appearance: cloudy

Sample Analysis: _____ DUP _____ MS _____ MSD _____

Additional Comments: VOC, VPH, SVOC, SVOC, EPH, PEST, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-55

Site Name, Location: BMS, off Site

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder, tubing, and decontaminated pump

Date: March 3, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 13.18

Top of Screen (ft from TOC): 7.88

Bottom of Screen (ft from TOC): 12.88

Pump Intake Level (ft from TOC): ~9

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.64 / 1052

Measured DTB (ft from TOC)/Time: (13.18) / ____

Headspace Reading (ppm): 2.5

Time @ Start Purging: 1241

Time @ Stop Purging: 1303

Time @ Stop Sampling: 1329

Purge Volume (gallons): ~~Clear~~ 1.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1054	4.64	After	installing	pump				
1241	start							
1243	4.73	31.94	652	4.34	6.69	-167	5.9	300 ↓
1248	4.70	31.92	651	2.39	6.75	-177	4.4	150
1253	4.70	31.91	650	1.18	6.84	-186	2.7	150
1258	4.70	31.94	646	1.06	6.81	-192	1.8	150
1303	4.70	32.03	645	0.90	6.82	-195	1.6	150
			Ready to sample					

Comments:

Sample Time: 1329 DUP / MS / MSD /

Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, PEST, EPH) DUP / MS / MSD /

Additional Comments: FB030317 @ 1310 (VOC, VPH, SVOC, PEST, EPH)

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-5D

Site Name, Location: BMS - off Site

Personnel: J Del Valle / N. Rivera

Equipment Used: dedicated bladder, tubing, cord, decontaminated pump

Date: March 3, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 24.23

Top of Screen (ft from TOC): 13.93

Bottom of Screen (ft from TOC): 23.93

Pump Intake Level (ft from TOC): ~20

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.31 / 1048

Measured DTB (ft from TOC)/Time: (24.23) /

Headspace Reading (ppm): 1.2

Time @ Start Purging: 1102

Time @ Stop Purging: 1130

Time @ Stop Sampling: 1218

Purge Volume (gallons): 3.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1058	4.22	After	installing	pump				
1102	start							
1105	4.29	31.21	712	4.89	6.79	-192	13.7	200 ↓
1110	4.29	31.22	679	1.46	6.88	-194	5.7	125
1115	4.29	31.18	670	1.18	6.87	-200	2.9	125
1120	4.29	31.52	659	0.88	6.80	-199	0.0	125
1125	4.29	31.59	655	0.90	6.79	-201	0.4	125
1130	4.29	31.64	647	0.94	6.88	-206	0.0	125

Comments:

Sample Time: 1159 DUP 1218 MS ✓ MSD ✓

Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, EPH, PEST DUP VOC, EPH, VPH, SVOC, PEST MS ✓ MSD ✓

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-6S

Site Name, Location: BMS- Off Site

Personnel: J. Del Valle, N. Rivera

Equipment Used: dedicated bladder, tubing cord, decontaminated pump

Date: March 6, 2017

Monitoring Well Information:

Diameter/Material: 2, PVC

Depth to Bottom (ft from TOC): 15.15

Top of Screen (ft from TOC): 4.85

Bottom of Screen (ft from TOC): 14.85

Pump Intake Level (ft from TOC): ~11

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.60 / 1046

Measured DTB (ft from TOC)/Time: (15.15) /

Headspace Reading (ppm): 0.9

Time @ Start Purging: 10:48

Time @ Stop Purging: 11:26

Time @ Stop Sampling: 11:42

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1048	5.55	After installing pump, START						
1051	5.73	30.43	1810	2.62	6.94	-19	38.9	400 ↓
1056	5.71	30.34	1800	1.23	6.74	-22	26.1	100 ↑
1101	5.74	30.30	1770	1.13	6.92	-48	15.3	300 ↓
1106	5.76	30.69	1700	0.71	6.92	-63	9.5	150
1111	5.73	30.64	1690	0.69	6.71	-52	5.5	150
1116	5.73	30.51	1670	0.69	6.68	-52	2.9	150
1121	5.73	30.44	1650	0.69	6.67	-52	2.4	150
1126	5.73	30.49	1620	0.67	6.77	-60	1.7	150
			READY to SAMPLE					

Comments:

Sample Time: 1142 DUP / MS / MSD /

Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, PCB, EPH DUP / MS / MSD /

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: OSMW-6D

Site Name, Location: BMS- off site

Personnel: J. Del Valle / N. Rivera

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 6, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 24.18

Top of Screen (ft from TOC): 13.88

Bottom of Screen (ft from TOC): 23.88

Pump Intake Level (ft from TOC): ~19

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.27 / 1202

Measured DTB (ft from TOC)/Time: (24.18) /

Headspace Reading (ppm): 15.0

Time @ Start Purging: 1211

Time @ Stop Purging: 1315

Time @ Stop Sampling: 1418

Purge Volume (gallons): 35

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1209	5.26	After installing the pump						
1211	START							
1225	5.46	30.68	854	3.44	7.13	-66	63.1	150
1230	5.46	30.86	830	1.26	7.09	-81	66.4	150
1235	5.46	30.97	823	1.10	7.04	-78	49.4	150
1240	5.46	30.87	815	0.86	7.08	-83	38.3	150
1245	5.46	30.97	809	0.75	7.07	-83	33.4	150
1250	5.46	30.96	807	0.75	7.11	-83	33.5	200
1255	5.46	31.13	822	3.77	7.10	-76	16.1	200
1300	5.46	31.20	819	3.55	7.10	-82	12.4	200
1305	5.46	31.22	810	3.15	7.10	-86	9.2	200
1310	5.46	31.35	809	3.03	7.09	-87	7.4	200
1315	5.46	31.37	804	2.90	6.92	-76	5.3	200
			READY TO SAMPLE					

Comments:

Sample Time: 1336 DUP / MS 1357 MSD 1418 Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, SVOC, PEST, EPH DUP / MS VOC, VPH, SVOC PEST, EPH MSD VOC, VPH, SVOC, PEST, EPH

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-23S

Site Name, Location: BMS Humacao, PR

Personnel: R Stuart & H Royer

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump

Date: 3/6/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 13.87
Top of Screen (ft from TOC): 3.87
Bottom of Screen (ft from TOC): 13.57
Pump Intake Level (ft from TOC): 9
Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.86 / 1416
Measured DTB (ft from TOC)/Time: (13.87) /
Headspace Reading (ppm): 0.0
Time @ Start Purging: 14~~8~~:20
Time @ Stop Purging: 15:16
Time @ Stop Sampling: 15:41
Purge Volume (gallons): 3.75

	Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
14	~~8~~:16	4.86	Before	Installing	Pump				
14	~~8~~:19	4.92	After	Installing	Pump				
14	~~8~~:20	4.96	29.19	538	7.39	6.63	-2	30.4	~~375~~ 375
14	~~8~~:25	4.93	28.63	525	6.67	6.50	24	2.3	300
14	~~8~~:30	4.96	28.52	521	6.23	6.47	29	1.1	225
	14:35	4.96	28.63	524	5.90	6.47	30	0.3	325
	14:40	5.01	28.82	527	5.50	6.47	29	0	325 ↓
	14:45	4.98	28.78	528	5.28	6.47	29	0	175
	14:50	4.96	28.77	519	5.04	6.46	27	0	175
	14:55	5.01	28.74	518	4.90	6.46	26	0	175
	15:00	4.96	28.64	519	4.69	6.46	26	0	200 ↓
	15:05	4.97	28.69	518	4.48	6.46	27	0	100
	15:11	4.96	28.83	504	4.31	6.46	27	0	125
	15:16	4.97	28.29	500	4.26	6.45	28	0	100
			Conditions Stabilize; Sampling Begins						

Comments:

Sample Time: 15:41 DUP / MS / MSD /

Water Quality/Appearance: clear & colorless

Sample Analysis: DUP / MS / MSD /

Additional Comments: VOC, LMA, EDH, ~~VMA~~, SVOC, SVOC, SIM

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-21S

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Rager

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump.

Date: 3/6/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 18.28
Top of Screen (ft from TOC): 7.98
Bottom of Screen (ft from TOC): 17.98
Pump Intake Level (ft from TOC): ~13
Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.82 / 1004
Measured DTB (ft from TOC)/Time: (18.28) /
Headspace Reading (ppm): 0.0
Time @ Start Purging: 10:16
Time @ Stop Purging: 10:47
Time @ Stop Sampling: 11:15
Purge Volume (gallons): 2.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:04	6.82	Before	installing	pump				
10:11	6.82	After	installing	pump				
10:16	6.85	27.42	625	4.45	6.11	97	113	420
10:22	6.85	27.39	603	3.63	6.12	12	152	300
10:27	6.84	27.39	601	3.56	6.14	14	115	200
10:32	6.85	27.35	601	3.47	6.16	15	90.3	200
10:37	6.85	27.10	598	3.25	6.18	15	43.7	200
10:42	6.85	27.08	595	3.13	6.15	19	30.5	125
10:47	6.85	27.08	598	3.13	6.15	18	17.9	200
		Conditions stable, sampling can begin						

Comments:

Sample Time: 11:15 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: turbid; yellow/brown

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, PEST, EPH, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-22S

Site Name, Location: BMS Humacao PR **Personnel:** R Stuart H Royer

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump **Date:** 3/6/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 14.76
Top of Screen (ft from TOC): 4.46
Bottom of Screen (ft from TOC): 14.46
Pump Intake Level (ft from TOC): ~11
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.56 / 1150
Measured DTB (ft from TOC)/Time: (14.76) /
Headspace Reading (ppm): 0.0
Time @ Start Purging: 12:00
Time @ Stop Purging: 12:38
Time @ Stop Sampling:
Purge Volume (gallons): 2.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:50	5.56	before	installing	pump				
11:58	5.53	after	installing	pump				
12:00	5.55	27.86	456	2.87	6.34	141	211	425
12:05	5.59	27.81	453	1.91	6.32	140	138	500
12:10	5.58	27.76	448	1.87	6.33	148	105	350
12:16	5.58	27.82	449	1.80	6.31	151	62.2	150
12:21	5.58	27.89	448	1.79	6.31	154	43.3	150
12:26	5.58	27.92	452	1.70	6.30	153	28.4	125
12:31	5.58	27.94	453	1.79	6.31	151	19.5	125
12:36	5.58	27.75	449	1.67	6.31	148	20.7	150
		Conditions stabilize : Sampling begins						

Comments:

Sample Time: _____ DUP _____ MS _____ MSD _____ Water Quality/Appearance: turbid brown/orange

Sample Analysis: _____ DUP _____ MS _____ MSD _____

Additional Comments: VOC, VPH, LMA, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-42D

Site Name, Location: BMS - B18S

Personnel: J. D. Valle / N. Rivera

Equipment Used: dedicated bladder, tubing, cord, decontaminated pump

Date: May 7, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC / SS

Depth to Bottom (ft from TOC): 26.10

Top of Screen (ft from TOC): 15.80

Bottom of Screen (ft from TOC): 25.80

Pump Intake Level (ft from TOC): -21

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.07 / 1117

Measured DTB (ft from TOC)/Time: (26.10) /

Headspace Reading (ppm): 3.4

Time @ Start Purging: 1130

Time @ Stop Purging: 1152

Time @ Stop Sampling: 1232

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1128	8.03							
1130	START			4.26				
1132	8.03	27.60	1250	~~1250~~	6.82	-104	9.5	200
1137	8.07	28.53	1250	2.07	6.67	-98	8.0	150
1142	8.07	28.43	1240	1.81	6.77	-105	2.0	200
1147	8.07	28.54	1240	1.69	6.78	-105	0.0	200
1152	8.07	28.63	1236	1.62	6.75	-97	0.0	200
			Ready to sample					

Comments:

Sample Time: 1212 DUP 1232 MS — MSD —

Water Quality/Appearance: clear

Sample Analysis: DUP MS — MSD —

Additional Comments: VOC, LMA, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-42S

Site Name, Location: BMS - Bldg 5

Personnel: J. Del Valle

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 7, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.00

Top of Screen (ft from TOC): 5.70

Bottom of Screen (ft from TOC): 15.70

Pump Intake Level (ft from TOC): ~12

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.17 / 1155

Measured DTB (ft from TOC)/Time: 16.00 /

Headspace Reading (ppm):

Time @ Start Purging: 1236

Time @ Stop Purging: 1258

Time @ Stop Sampling: 1320

Purge Volume (gallons): 1

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1145	8.17	After	installing	pump				
1236	START							
1238	8.17	28.85	1240	2.15	6.77	-102	12.7	400 ↓
1243	8.18	28.40	1240	1.83	6.75	-100	7.3	300 ↓
1248	8.18	28.41	1240	1.76	6.76	-101	7.8	175
1253	8.18	28.26	1240	1.58	6.76	-103	9.2	200
1258	8.18	28.21	1240	1.52	6.74	-103	8.2	200
			Ready to sample					

Comments:

Sample Time: 1320 DUP — MS — MSD —

Water Quality/Appearance: clear

Sample Analysis: DUP — MS — MSD —

Additional Comments: VOC, VPH, LMA, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-43S

Site Name, Location: BMS Humacao, PR **Personnel:** H Rays R Stuart

Equipment Used: Dedicated bladder, cord, & tubing decontaminated pump **Date:** 3/7/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 18.35
Top of Screen (ft from TOC): 8.05
Bottom of Screen (ft from TOC): 18.05
Pump Intake Level (ft from TOC): -13
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.72 / 1217
Measured DTB (ft from TOC)/Time: 18.35 / ____
Headspace Reading (ppm): 7.2
Time @ Start Purging: 12:23
Time @ Stop Purging: 12:58
Time @ Stop Sampling: 13:25
Purge Volume (gallons): 2.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
12:17	4.72	Before Installing Pump						
12:20	4.71	After Installing Pump						
12:23	4.81	26.70	777	4.00	6.59	-71	191	225
12:28	4.79	27.81	770	1.03	6.59	-78	127	225
12:33	4.79	28.11	754	0.74	6.58	-79	67.9	225
12:38	4.75	28.31	750	0.63	6.59	-80	36.9	225
12:43	4.74	28.35	748	0.55	6.58	-79	15.0	225
12:48	4.75	28.18	749	0.51	6.59	-79	8.6	225
12:53	4.75	28.00	749	0.51	6.58	-79	4.0	225
12:58	4.76	27.96	750	0.48	6.59	-78	2.8	225
		Conditions stable sampling begins						

Comments:
Sample Time: 13:25 DUP — MS — MSD — Water Quality/Appearance: clear
Sample Analysis: ____ DUP — MS — MSD —

Additional Comments: VOC, VPH, LMW, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-43D

Site Name, Location: BMS Humacao PR **Personnel:** H Royer R Stuart

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump **Date:** 3/7/17

Monitoring Well Information:

Diameter/Material: 2 / PVC/SS
Depth to Bottom (ft from TOC): 26.03
Top of Screen (ft from TOC): 15.73
Bottom of Screen (ft from TOC): 25.73
Pump Intake Level (ft from TOC): ~21
Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.91 / 1044
Measured DTB (ft from TOC)/Time: (26.03) /
Headspace Reading (ppm): 11.0
Time @ Start Purging: 10:58
Time @ Stop Purging: 11:23
Time @ Stop Sampling: 11:51
Purge Volume (gallons): 1 gal

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:44	4.91	Before	Installing	Pump				
10:56	4.95	After	Installing	Pump				
10:58	4.92	26.49	1000	2.57	6.58	-80	342	200
11:03	4.93	27.27	962	1.24	6.63	~~-74~~	227	200
11:08	4.93	27.49	948	0.92	6.64	-71	122	225
11:13	4.93	27.70	938	0.87	6.64	-70	67.1	200
11:18	4.93	27.73	930	0.73	6.64	-70	41.0	200
11:23	4.93	27.73	923	0.68	6.64	-71	23.9	200
		Conditions stablized, sampling begins						

Comments:

Sample Time: 11:51 DUP ___ MS ___ MSD ___ Water Quality/Appearance: turbid/yellow
Sample Analysis: ___ DUP ___ MS ___ MSD ___

Additional Comments: VOC, LMA, VPH, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

9:41

AMAI Well Purging and Low Flow Sampling Form

Well Number: RA-10D

Site Name, Location: BMS Humacao PR **Personnel:** R Stuart H Rayes

Equipment Used: Dedicated bladder, cord, & tubing decontaminated pump **Date:** 3/8/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 22.25
Top of Screen (ft from TOC): 11.95
Bottom of Screen (ft from TOC): 21.95
Pump Intake Level (ft from TOC): ~17
Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.50 / 955
Measured DTB (ft from TOC)/Time: (22.25) /
Headspace Reading (ppm): 0.0
Time @ Start Purging: 10:08
Time @ Stop Purging: 10:29
Time @ Stop Sampling: 10:56
Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
9:55	6.50	Before	Installing	pump				
10:04	6.50	After	Installing	Pump				
10:08	6.50	26.44	916	2.93	6.45	-80	42.3	175
10:14	6.50	27.19	867	1.16	6.46	-80	77.1	150
10:19	6.50	27.33	837	0.96	6.50	-81	67.5	125
10:24	6.50	27.31	807	0.82	6.51	-78	53.4	175
10:29	6.50	27.40	799	0.74	6.51	-75	37.0	125
	Conditions stabilized, sampling begins							

Comments:
Sample Time: 10:56 DUP — MS — MSD — Water Quality/Appearance: slightly turbid
Sample Analysis: DUP — MS — MSD —

Additional Comments: VOC, VPH, LMA, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: RA-105

Site Name, Location: BMS Humacao PR **Personnel:** H Rayer R Stuart

Equipment Used: Dedicated tubing, cord, & bladder decontaminated pump **Date:** 3/8/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 14.5
Top of Screen (ft from TOC): 4.2
Bottom of Screen (ft from TOC): 14.2
Pump Intake Level (ft from TOC): ~11
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.68 / 9:57
Measured DTB (ft from TOC)/Time: (14.5) /
Headspace Reading (ppm): 0.3
Time @ Start Purging: 10:25
Time @ Stop Purging: 10:45
Time @ Stop Sampling: 12:12
Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
9:57	6.68	Before Installing Pump						
11:22	6.67	After Installing Pump						
10:25	6.65	27.46	882	1.93	6.54	9	3.2	500 ↓
10:30	6.75	27.59	891	0.83	6.55	10	26.7	200
10:35	6.73	27.63	875	0.69	6.55	8	39.6	225 ↓
10:40	6.71	27.78	884	0.67	6.56	5	37.9	150
10:45	6.70	27.64	877	0.65	6.56	4	34.4	150
	Conditions stabilized; sampling begins							

Comments:
Sample Time: 12:12 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: slight turbidity
Sample Analysis: DUP ✓ MS ✓ MSD

Additional Comments: VOC, LMA, VPH, EPH, SVOC, PES.

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-20S

Site Name, Location: BMS - Humacao

Personnel: J. del Valle / N. Riveros

Equipment Used: dedicated bladder, tubing, and decontaminated pump

Date: March 8, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.10

Top of Screen (ft from TOC): 5.80

Bottom of Screen (ft from TOC): 15.80

Pump Intake Level (ft from TOC): ~11

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.64 / 1105

Measured DTB (ft from TOC)/Time: (16.10) /

Headspace Reading (ppm): 0.4

Time @ Start Purging: 1114

Time @ Stop Purging: 1137

Time @ Stop Sampling: 1205

Purge Volume (gallons): 1

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1111	5.22	After	installing	pump				
1114	START							
1117	5.27	27.50	636	2.88	6.57	185	1.6	250+
1122	5.27	27.80	618	1.94	6.47	50	0.0	150
1127	5.28	28.00	617	1.77	6.43	11	0.0	150
1132	5.27	27.92	616	1.72	6.42	11	0.0	150
1137	5.27	27.90	613	1.62	6.43	12	0.0	150
			READY TO SAMPL					

Comments:

Sample Time: 1205 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, LMA, SVOC, PEST, EPH DUP ✓ MS ✓ MSD ✓

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: 5-20D

Site Name, Location: BMS Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder, tubing & cord. Decontaminated pump

Date: March 8, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 22.09

Top of Screen (ft from TOC): 11.79

Bottom of Screen (ft from TOC): 21.79

Pump Intake Level (ft from TOC): ~17

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.14 / 1348

Measured DTB (ft from TOC)/Time: (22.09) /

Headspace Reading (ppm): 1.8

Time @ Start Purging: 1419

Time @ Stop Purging: 1453

Time @ Stop Sampling: 1552

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1351	5.12							
1355	START							
1403	stop.	- pulled water line for the						
1408	start							
1412	stop.	- Cut tubing.						
1419	5.12	start						
1423	5.17	28.60	841	2.72	6.72	-93	304	300 ↓
1428	5.16	28.64	843	2.11	6.73	-92	259	100
1433	5.16	28.50	843	2.17	6.74	-89	265	100
1438	5.16	28.48	845	1.98	6.72	-88	264	100
1443	5.16	28.43	847	1.76	6.74	-90	216	100
1448	5.17	28.49	848	1.51	6.71	-88	170	100
1453	5.17	28.47	845	1.58	6.70	-87	152	100

Comments:

Sample Time: 1513 DUP ~~1534~~ 1534 MS ~~1552~~ 1534 MSD 1552

Water Quality/Appearance: clear

Sample Analysis: DUP — MS MSD

Additional Comments: Discarded turbidity readings

VOC, VPH, LMA, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-35D

Site Name, Location: BMS - Bldg 5

Personnel: N. Rivera / J Del Valle

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 9, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 35.28

Top of Screen (ft from TOC): 24.98

Bottom of Screen (ft from TOC): 34.98

Pump Intake Level (ft from TOC): ~30

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 1107 / 1149

Measured DTB (ft from TOC)/Time: 35.28 /

Headspace Reading (ppm): 3.0

Time @ Start Purging: 1218

Time @ Stop Purging: 1300

Time @ Stop Sampling: 1321

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1158	1092							
1218	START							
1230	1119	28.33	1060	3.91	7.15	95	0.0	150
1235	1122	28.49	1060	1.38	7.12	8	0.0	200
1240	1122	28.61	1060	1.00	7.10	-8	0.0	200
1245	1122	28.61	1060	0.81	7.09	-13	0.0	200
1250	1122	28.49	1060	0.82	7.09	-25	0.0	200
1255	1122	28.41	1060	0.71	7.09	-27	0.0	200
1300	1122	28.46	1060	0.69	7.09	-29	0.0	200
			Ready to Sample					

Comments:

Sample Time: 1321 DUP — MS — MSD —

Water Quality/Appearance: Clear

Sample Analysis: DUP — MS — MSD —

Additional Comments: VOC, SVOC, SVOC, LMP, VPH, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-35

Site Name, Location: BMS HUMACAO

Personnel: N. RIVERA / J. DELVALLE

Equipment Used: dedicated pump, bladder, cord, tubing

Date: March 08-2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 18

Top of Screen (ft from TOC): 8

Bottom of Screen (ft from TOC): 18

Pump Intake Level (ft from TOC): ~16

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 13.27 / 1059

Measured DTB (ft from TOC)/Time: 18 /

Headspace Reading (ppm): 0.9

Time @ Start Purging: 1104

Time @ Stop Purging: 1124

Time @ Stop Sampling: 1211

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1100	START							
1104	13.85	28.33	1180	2.15	6.65	-48	0.0	200
1109	13.85	28.16	1.12	0.85	6.63	-79	0.0	200
1114	13.85	28.14	1.10	0.71	6.61	-75	0.0	200
1119	13.88	28.16	1.08	0.68	6.61	-75	0.0	200
1124	13.90	28.14	1.07	0.63	6.61	-76	0.0	200
1129								
		Ready to Sample						

Comments:

Sample Time: 1211 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: Clear

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments:

VOC, VPH, LMA, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-41D

Site Name, Location: BMS Humacao PR

Personnel: H Royes R Stuart

Equipment Used: Dedicated bladder, cord, & tubing, decontaminated pump

Date: 3/9/17

Monitoring Well Information:

Diameter/Material: 2 / PVC/SS

Depth to Bottom (ft from TOC): 33.79

Top of Screen (ft from TOC): 23.49

Bottom of Screen (ft from TOC): 33.49

Pump Intake Level (ft from TOC): ~28

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 10.40 / 1053

Measured DTB (ft from TOC)/Time: (33.79) /

Headspace Reading (ppm): 1.0

Time @ Start Purging: 11:03

Time @ Stop Purging: 11:58

Time @ Stop Sampling: 12:20

Purge Volume (gallons): 3.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:53	10.40	Before pump installed						
10:58	10.17	After Pump Installed						
11:03	10.40	28.10	1370	7.70	7.01	212	3.4	225
11:08	10.40	27.90	1340	7.19	6.94	212	1.2	125
11:13	10.44	27.85	1350	7.85	6.92	211	0	150
11:18	10.46	27.70	1340	7.18	6.93	209	0	150
11:23	10.48	28.00	1340	6.84	6.94	208	0	150
11:28	10.51	27.77	1340	6.59	6.92	208	0	200
11:33	10.52	27.99	1340	6.10	6.93	206	2.7	175
11:38	10.55	27.81	1340	5.81	6.93	204	9.3	125
11:43	10.55	27.87	1340	5.48	6.92	203	10.6	200
11:48	10.54	28.04	1340	5.15	6.94	200	9.8	200
11:53	10.54	27.86	1340	4.99	6.93	199	7.5	200
11:58	10.55	27.45	1350	4.95	6.92	196	5.7	150
		Conditions stable, sampling can begin						

Comments:

Sample Time: 12:20 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear/colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, PEST, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-41S

Site Name, Location: BMS Humacao PR

Personnel: H Rayer R Stuart

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump

Date: 3/9/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 24.78

Top of Screen (ft from TOC): 14.48

Bottom of Screen (ft from TOC): 24.48

Pump Intake Level (ft from TOC): ~19

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 12.67 / 1207

Measured DTB (ft from TOC)/Time: (24.78) /

Headspace Reading (ppm): 1.7

Time @ Start Purging: 12:42

Time @ Stop Purging: 13:43

Time @ Stop Sampling: 14:11

Purge Volume (gallons): 2.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
12:07	12.67	Before	installing	pump				
12:40	12.67	After	installing	pump				
12:42	12.98	27.99	1330	8.79	6.94	-81	26.8	400 ↓
12:47	13.10	27.71	1330	7.46	6.87	-93	3.7	250 ↓
12:52	12.96	27.88	1330	6.80	6.87	-101	0	150
12:57	12.91	27.85	1330	6.29	6.90	-109	0	100
13:02	12.92	27.94	1330	5.79	6.91	-111	0	100
13:07	12.91	27.96	1320	5.40	6.90	-109	0	75
13:12	12.91	27.82	1320	5.20	6.90	-107	0	125
13:17	12.91	27.63	1320	4.66	6.89	-106	0	100
13:23	12.91	27.68	1320	4.45	6.90	-106	0	100
13:27	12.91	27.64	1320	4.18	6.90	-106	0	125
13:33	12.92	27.67	1320	3.86	6.89	-105	0	75
13:37	12.93	27.62	1320	3.70	6.90	-105	0	125
13:43	12.93	27.66	1320	3.58	6.89	-104	0	125

Comments:

Sample Time: 14:11 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear / colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOA LMA, VPH, EPH, PEST, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV;
Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: BR-3

Site Name, Location: BMS - Humacao

Personnel: J Del Valle / N. Rivera

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: March 10, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 12.6

Top of Screen (ft from TOC): 2.6

Bottom of Screen (ft from TOC): 12.6

Pump Intake Level (ft from TOC): ~9 - 12.6

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.87 / 1409

Measured DTB (ft from TOC)/Time: 12.6 / ____

Headspace Reading (ppm): 0.1

Time @ Start Purging: 1421

Time @ Stop Purging: 1506

Time @ Stop Sampling: 1559

Purge Volume (gallons): 125

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1421	5.62	start						
1431	6.43	29.16	1020	2.55	6.92	181	0.9	100
1436	7.78	29.17	1020	1.66	6.85	156	0.0	300 ↓
1441	7.98	29.19	1030	1.30	6.84	73	0.0	100
1446	8.01	29.23	1030	1.29	6.85	27	0.0	100
1451	8.03	29.24	1040	1.16	6.84	-13	0.0	100
1456	8.07	29.24	1020	1.21	6.83	-36	0.0	100
1501	8.12	29.25	995	1.22	6.81	-41	0.0	100
1506	8.17	29.24	990	1.16	6.81	-45	0.0	100
1511								
1516								

Comments:

Sample Time: 1359 DUP — MS — MSD — Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, LMA, SVOC, EPH DUP — MS — MSD —

Additional Comments: TB031017 NR + No time

Needed to take pump to the bottom to be able to get the water volume needed

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: BIR-2

Site Name, Location: BMS Humacao PR

Personnel: H Royes R Stuart

Equipment Used: Dedicated bladder, ~~pump~~ tubing, C cord decontaminated pump.

Date: 3/10/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 12.7

Top of Screen (ft from TOC): 2.7

Bottom of Screen (ft from TOC): 12.7

Pump Intake Level (ft from TOC): ~ 10

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.78 / 1130

Measured DTB (ft from TOC)/Time: (12.7) /

Headspace Reading (ppm): 0.1

Time @ Start Purging: 11:42

Time @ Stop Purging: 12:08

Time @ Stop Sampling: 1313

Purge Volume (gallons): 1.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:30	6.78	Before	installing	pump				
11:38	6.78	After	installing	pump				
11:42	6.80	29.48	1380	3.86	7.04	-76	0	200
11:47	6.80	28.78	1410	1.87	6.99	-93	0	100
11:52	6.80	28.49	1350	1.11	6.93	-99	0	75
11:57	6.80	28.25	1270	0.87	6.91	-100	0	100
12:02	6.80	28.06	1210	0.65	6.89	-97	0	100
12:07	6.82	28.02	1160	0.71	6.86	-99	0	100
12:08	conditions stable; sampling begins							

Comments:

Sample Time: 12:28 DUP ✓ MS 13:03 MSD 13.13

Water Quality/Appearance: clear/colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, SVOC, EPH,

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: BR-4

Site Name, Location: BMS. Humacao

Personnel: N. Rivera/J. Del Valle

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: May 10, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.25

Top of Screen (ft from TOC): 5.95

Bottom of Screen (ft from TOC): 15.95

Pump Intake Level (ft from TOC): ~11

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.10 / 1100

Measured DTB (ft from TOC)/Time: (16.25) /

Headspace Reading (ppm): 1.1

Time @ Start Purging: 1117

Time @ Stop Purging: 1151

Time @ Stop Sampling: 1243

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1107	4.89							
1121	6.12	28.27	711	3.05	8.22	182	92.1	200 ↓
1126	6.75	28.45	675	2.09	8.45	175	69.0	100
1131	7.17	28.41	669	1.72	8.51	164	55.5	100
1136	8.53	28.39	668	1.69	8.52	144	55.3	100
1141	9.39	28.32	667	1.88	8.57	113	57.2	100
1146	10.02	28.31	668	1.87	8.58	106	58.1	100
1151	10.50	28.23	668	2.02	8.59	103	59.5	100
			Ready to sample					

Comments:

Sample Time: 1243 DUP ___ / MS ___ / MSD ___ / Water Quality/Appearance: cloudy

Sample Analysis: VOC, VPH, LMA, SVOC, EPH DUP ___ / MS ___ / MSD ___ /

Additional Comments: Time

FB031017 1312 VOC, VPH, LMA, SVOC, Eph

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: **DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.**

AMAI Well Purging and Low Flow Sampling Form

Well Number: BR-1

Site Name, Location: BMS Humacao PR

Personnel: H Royer & R Stuart

Equipment Used: Dedicated bladder, cord, & tubing decontaminated pump

Date: 3/10/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 12.8

Top of Screen (ft from TOC): 2.8

Bottom of Screen (ft from TOC): 12.8

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.95 / 956

Measured DTB (ft from TOC)/Time: (12.8) /

Headspace Reading (ppm): 250.8

Time @ Start Purging: 10:06

Time @ Stop Purging: 10:26

Time @ Stop Sampling: 11:08

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (uS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
9:56	5.95	Before installing pump						
10:03	5.95	After installing pump						
10:06	6.00	29.91	1220	2.24	6.76	-89	24.4	250
10:11	5.95	30.36	1090	1.03	6.84	-109	15.3	75
10:16	6.00	30.64	1050	0.76	6.86	-124	2.4	200
10:21	6.00	30.95	1040	0.62	6.90	-130	0	200
10:26	6.00	30.83	1030	0.59	6.90	-131	0	200
		Conditions stable; sampling begins						

Comments:

Sample Time: 10:44 DUP 11:08 MS — MSD —

Water Quality/Appearance: clear / colorless

Sample Analysis: DUP MS — MSD —

Additional Comments: VOC, LMA, VPH, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-15

Site Name, Location: BMS, Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated pump, bladder, tubing & cord

Date: March 13, 2017

Monitoring Well Information:

Diameter/Material: 2, PVC

Depth to Bottom (ft from TOC): 17.5

Top of Screen (ft from TOC): 7.5

Bottom of Screen (ft from TOC): 17.5

Pump Intake Level (ft from TOC): ~12

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.88 / 1028

Measured DTB (ft from TOC)/Time: 17.5 / ____

Headspace Reading (ppm): 0.0

Time @ Start Purging: 1044

Time @ Stop Purging: 1110

Time @ Stop Sampling: 1138

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1033	START							
1037	Stop.	Removed pump. Both ball valves were stuck						
1040	START	After putting them back in the well						
1042	Stop.	Removed pump. Loose Both ball valves						
1044	START							
1045	5.88	28.35	549	1.78	6.98	-102	8.9	100
1050	5.95	28.50	552	1.42	6.91	-108	6.3	150
1055	5.93	28.56	543	1.47	6.92	-102	6.2	150
1100	5.93	28.61	538	1.69	6.94	-101	5.2	150
1105	5.93	28.74	531	1.86	6.97	-102	2.7	150
1110	5.93	28.78	527	1.97	6.99	-104	2.1	150
			Ready to sampl					

Comments:

Sample Time: 1138 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, VPH, LMA, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW - ~~08~~ 14

Site Name, Location: BMS Humacao PR

Personnel: H Rayes R Stuart

Equipment Used: Dedicated pump, bladder, tubing, & cord

Date: 3/13/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 15.8

Top of Screen (ft from TOC): 5.8

Bottom of Screen (ft from TOC): 15.8

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.26 / 1002

Measured DTB (ft from TOC)/Time: 15.8 /

Headspace Reading (ppm): 2.0

Time @ Start Purging: 10:10

Time @ Stop Purging: 10:33

Time @ Stop Sampling: 11:11

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1002	5.26	Pump dedicated/already installed						
10:10	5.32	28.78	2	6.55	6.56	58	7.8	500 ↓
10:16	5.31	29.71	510	0.77	6.57	-91	14.1	300 ↓
10:21	5.31	29.59	502	0.69	6.59	-91	4.6	250 ↓
10:26	5.28	29.59	500	0.67	6.59	-89	3.2	125
10:31	5.31	29.59	498	0.62	6.60	-87	3.0	125
10:33	Conditions stable; sampling begins							

Comments:

Sample Time: 10:56 DUP 11:11 MS — MSD —

Water Quality/Appearance: clear/colorless

Sample Analysis: DUP MS MSD

Additional Comments: VOC, LMP, VPH, EPH, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-~~14~~ 13

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart

Equipment Used: Dedicated bladder, pump, & tubing

Date: 3/13/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 15

Top of Screen (ft from TOC): 5

Bottom of Screen (ft from TOC): 15

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.20 / 1149

Measured DTB (ft from TOC)/Time: (15) /

Headspace Reading (ppm): 2.6

Time @ Start Purging: 11:55

Time @ Stop Purging: 12:18

Time @ Stop Sampling: 1231

Purge Volume (gallons):

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:49	5.20	Pump dedicated/already installed						
11:55	5.21	28.52	420	1.71	6.63	82	26.3	500 ↓
12:00	5.20	28.57	422	1.08	6.58	40	17.0	100
12:05	5.20	28.50	421	0.91	6.56	32	11.2	100
12:10	5.20	28.32	422	0.80	6.54	29	4.7	75
12:15	5.20	28.15	424	0.67	6.52	27	2.3	100
12:18	Conditions stable; sampling can begin							

Comments:

Sample Time: 12:31 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear/colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-7

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart

Equipment Used: Dedicated pump, bladder, & tubing

Date: 3/14/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.7

Top of Screen (ft from TOC): 6.7

Bottom of Screen (ft from TOC): 16.7

Pump Intake Level (ft from TOC): ~12

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.17 / 1331

Measured DTB (ft from TOC)/Time: (16.7) /

Headspace Reading (ppm): 0.8

Time @ Start Purging: 13:52

Time @ Stop Purging: 14:15

Time @ Stop Sampling: 14:42

Purge Volume (gallons): 1.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
13:31	5.17	Pump dedicated/already installed						
13:52		30.11	1040	2.52	6.69	-10	13.7	150
13:57	5.40	30.32	1030	1.43	6.67	-71	6.8	125
14:02	5.37	30.51	1040	1.00	6.70	-76	3.0	100
14:07	5.42	30.44	1030	0.91	6.68	-75	2.9	100
14:12	5.26	30.47	1030	0.82	6.68	-75	3.3	50
14:15	Conditions stable; sampling can begin							

Comments:

Sample Time: 1442 DUP / MS / MSD /

Water Quality/Appearance: clear / colorless

Sample Analysis: DUP / MS / MSD /

Additional Comments: Some flakes observe while purging and sampling.

VOC, VPH, LMS

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV;
Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-3

Site Name, Location: BMS Humacao PR

Personnel: H Dayer R Stuart

Equipment Used: Dedicated pump, bladder, & tubing

Date: 3/14/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.8

Top of Screen (ft from TOC): 6.8

Bottom of Screen (ft from TOC): 16.8

Pump Intake Level (ft from TOC): ~13

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 9.79 / 11:51

Measured DTB (ft from TOC)/Time: 16.8 / ____

Headspace Reading (ppm): 0.0

Time @ Start Purging: 11:58

Time @ Stop Purging: 12:25

Time @ Stop Sampling: 13:09

Purge Volume (gallons): 1.0

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:51	9.79	Pump dedicated / already installed						
11:58	9.82	28.11	985	4.44	6.27	-35	12.9	25 ↑
12:03	9.92	27.94	1090	1.72	6.16	-45	7.3	100
12:08	9.92	27.99	1130	0.93	6.13	-50	9.0	75
12:13	9.92	27.96	1130	0.67	6.12	-53	10.6	125
12:18	9.92	27.98	1120	0.57	6.11	-54	3.1	50
12:23	9.94	27.99	1110	0.63	6.12	-55	2.6	100
12:25	Conditions stable; sampling can begin							

Comments:

Sample Time: 13:09 DUP ✓ MS ✓ MSD ✓

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear/colorless w/ brown flecks & a sheen on the top of the purge water

Additional Comments: VOC, LMA, VPH, EPH, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV;
Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-5

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart

Equipment Used: Dedicated bladder, pump, & tubing

Date: 3/14/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 15.3

Top of Screen (ft from TOC): 5.3

Bottom of Screen (ft from TOC): 15.3

Pump Intake Level (ft from TOC): ~13

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 10.43 / 9:59

Measured DTB (ft from TOC)/Time: (15.3)

Headspace Reading (ppm): 0.5

Time @ Start Purging: 10:06

Time @ Stop Purging: 10:48

Time @ Stop Sampling: 11:37

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
9:59	10.43	Pump dedicated / already installed						
10:06	meter pump not working	28.49	1230	1.82	6.44	-13	8.1	425
10:11	meter pump not working	27.47	1040	0.61	6.44	-39	11.5	300 ↓
10:16	11.7 meter not working	28.46	887	0.70	6.48	-51	5.1	25 ↑
10:21	11.66	28.34	816	0.66	6.52	-59	2.8	100
10:27	11.62	28.41	745	0.60	6.55	-66	2.7	100
10:31	11.60	28.09	721	0.52	6.55	-70	1.0	100
10:36	11.60	27.93	718	0.50	6.53	-69	0.8	100
10:41	11.60	27.88	718	0.48	6.55	-68	0.8	100
10:48	Conditions stable; sampling can begin							

Comments:

Sample Time: 11:37 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear / colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, VPH, LMA, SVOC, EPA

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-16

Site Name, Location: BMS, Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder w/ pump, tubing & cord

Date: March 13, 2017

Monitoring Well Information:

Diameter/Material: 2" PVC

Depth to Bottom (ft from TOC): 16.4

Top of Screen (ft from TOC): 6.4

Bottom of Screen (ft from TOC): 16.4

Pump Intake Level (ft from TOC): ~12

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 7.37 / 1224

Measured DTB (ft from TOC)/Time: (16.4) /

Headspace Reading (ppm): 0.6

Time @ Start Purging: 1232

Time @ Stop Purging: 1302

Time @ Stop Sampling: 1323

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1232	start							
1242	7.47	29.16	719	1.44	7.09	56	97.8	200
1247	7.47	29.14	732	1.29	7.15	55	72.2	150
1252	7.47	29.17	733	1.14	7.04	6	7.5	150
1257	7.47	29.15	728	1.09	7.06	4	4.3	150
1302	7.47	29.15	722	1.19	7.01	-1	3.3	150
			Ready to Sample					

Comments:

Sample Time: 1323 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: VOC, VPH, LMA DUP ✓ MS ✓ MSD ✓

SVOC, EPH

Additional Comments: FB031317 @ 1248 VOC, VPH, LMA, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-17

Site Name, Location: BWW, FSF, Humacao

Personnel: J. Del Valle, N. Rivera

Equipment Used: dedicated Pump, tubing, cord, bladder

Date: March 14, 2017

Monitoring Well Information:

Diameter/Material: 2, PVC

Depth to Bottom (ft from TOC): 13.7

Top of Screen (ft from TOC): 3.7

Bottom of Screen (ft from TOC): 13.7

Pump Intake Level (ft from TOC): ≈10

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.43 / 1022

Measured DTB (ft from TOC)/Time: (13.7) /

Headspace Reading (ppm): 237.0

Time @ Start Purging: 1037

Time @ Stop Purging: 1106

Time @ Stop Sampling: 1155

Purge Volume (gallons): 3

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1032	Start							
1033	Stop. water is leaking from multimeter chas							
1037	Start again							
1041	5.50	27.19	295	2.64	6.58	-91	4.3	500 ↓
1046	5.58	27.22	297	1.74	6.60	-98	3.5	400 ↓
1051	5.62	27.02	297	1.34	6.59	-103	3.0	400 ↓
1056	5.67	27.24	297	1.16	6.59	-107	2.5	300 ↓
1101	5.58	27.22	296	1.07	6.57	-111	1.1	300 ↓
1106	5.58	27.23	296	1.04	6.58	-112	1.0	300
			Ready to sample					

Comments:

Sample Time: 1121 DUP / MS 1138 MSD 1155 Water Quality/Appearance: clear

Sample Analysis: DUP / MS MSD

Additional Comments: VOC, LMA, VPH, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-18

Site Name, Location: BMS - FTF - Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder pump, tubing, cord

Date: March 14, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14

Top of Screen (ft from TOC): 4

Bottom of Screen (ft from TOC): 14

Pump Intake Level (ft from TOC): -10

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.18 / 1318

Measured DTB (ft from TOC)/Time: 14 /

Headspace Reading (ppm): 0.2

Time @ Start Purging: 1325

Time @ Stop Purging: 1356

Time @ Stop Sampling: 1420

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1325	start							
1326	5.18	28.48	920	1.55	6.15	-97	90.3	300+
1331	5.21	28.47	958	1.01	6.14	-94	50.0	150
1336	5.21	28.43	961	0.98	6.15	-92	38.6	200
1341	5.21	28.41	956	0.98	6.14	-89	26.0	100
1346	5.21	28.44	951	0.96	6.13	-87	24.4	150
1351	5.21	28.44	947	0.93	6.14	-85	23.0	150
1356	5.21	28.39	941	0.92	6.15	-85	22.9	150
			Ready to sample					

Comments:

Sample Time: 1420 DUP / MS / MSD /

Water Quality/Appearance: somewhat cloudy

Sample Analysis: VOC, VPH, LMA, SVOC, EPH DUP / MS / MSD /

Additional Comments: Discarded turbidity readings

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-39S

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Royer

Equipment Used: Dedicated bladder, cord, & tubing, decontaminated pump

Date: 3/15/17

Monitoring Well Information:

Diameter/Material: ___ / ___

Depth to Bottom (ft from TOC): 20.20

Top of Screen (ft from TOC): 9.90

Bottom of Screen (ft from TOC): 19.90

Pump Intake Level (ft from TOC): ~11

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 10.79 / ___

Measured DTB (ft from TOC)/Time: (20.20) / ___

Headspace Reading (ppm): 1.6

Time @ Start Purging: 12:39

Time @ Stop Purging: 13:21

Time @ Stop Sampling: 13:38

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
	10.79	Before installing pump						
	10.96	after installing pump						
12:39	11.28	29.65	1300	1.53	6.73	-86	55.0	425 ↓
12:44	11.27	29.72	1310	1.50	6.76	-89	30.3	200 ↓
12:49	11.15	29.69	1310	3.24	6.57	-75	24.2	100
12:54	11.15	29.48	1310	6.11	6.61	-78	15.2	100
12:59	11.13	29.30	1310	4.69	6.64	-77	14.0	125
13:04	11.17	29.45	1310	4.61	6.73	-83	14.3	100
13:09	11.10	29.24	1310	0.74	6.72	-82	13.2	125
13:14	11.10	29.31	1320	0.66	6.65	-79	9.8	100
13:19	11.09	29.38	1340	0.44	6.70	-80	2.9	100
13:21	Conditions stable; sampling begins							

Comments:

Sample Time: 13:38 DUP ✓ MS ✓ MSD ✓

Sample Analysis: ___ DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear & colorless

Additional Comments: Due to the erratic behavior of DO it was ignored as a parameter

VOC, LMD, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV;
Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-39D

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Rayer

Equipment Used: Dedicated bladder, cord, & tubing decontaminated pump

Date: 3/15/17

Monitoring Well Information:

Diameter/Material: 2 / PVC / SS

Depth to Bottom (ft from TOC): 29.80

Top of Screen (ft from TOC): 19.50

Bottom of Screen (ft from TOC): 29.50

Pump Intake Level (ft from TOC): ~25

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 10.82 / 1100

Measured DTB (ft from TOC)/Time: (29.80) / ____

Headspace Reading (ppm): 0.6

Time @ Start Purging: 11:13

Time @ Stop Purging: 12:10

Time @ Stop Sampling: 12:36

Purge Volume (gallons): 2.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:00	10.82	Before installing pump						
11:09	10.81	after installing pump						
11:13	11.20	29.66	1200	2.64	7.06	-53	163	300
11:17	11.21	29.69	1190	7.50	6.94	-81	128	300 ↓
11:23	10.99	29.68	1180	6.96	6.89	-79	125	125
11:28	11.01	29.60	1180	6.35	7.07	-94	117	125
11:33	11.04	29.47	1180	5.81	6.97	-84	113	125
11:38	11.04	29.29	1170	5.32	7.10	-92	108	125
11:43	11.06	29.21	1170	4.94	7.12	-95	98.4	125
11:48	11.01	29.11	1170	1.46	6.99	-87	92.3	125
11:53	11.02	29.11	1170	7.41	6.96	-87	84.5	125
11:58	11.04	29.07	1170	6.73	6.98	-87	76.0	125
12:03	11.07	29.22	1170	5.40	7.12	~~-93~~ -96	54.6	125
12:08	11.05	29.37	1170	0.93	7.13	-98	39.7	125
12:10	Conditions stable; sampling begins							

Comments:

Sample Time: 12:36 DUP ✓ MS ✓ MSD ✓

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: turbid w/ no color

Additional Comments: Due to the erratic behavior of DO, it was ignored as a parameter

VOC, LMA, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-40S

Site Name, Location: BMS, Hwy 5 Humacao

Personnel: N. Rivera / J.

Equipment Used: Decontaminated bladder, tubing, cord. Decontaminated pump

Date: March 15, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 23.50

Top of Screen (ft from TOC): 13.20

Bottom of Screen (ft from TOC): 23.20

Pump Intake Level (ft from TOC): ~18

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 13.59 / 1220

Measured DTB (ft from TOC)/Time: (23.50) / ____

Headspace Reading (ppm): 2.1

Time @ Start Purging: 1258

Time @ Stop Purging: 1323

Time @ Stop Sampling: 1356

Purge Volume (gallons): 7.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1132	13.46							
1258	13.54	START		1.90				
1303	13.93	27.06	1130	~~6.80~~	6.80	-83	12.3	300 ↓
1308	13.93	27.07	1130	1.21	6.76	-87	12.7	200
1313	13.93	27.17	1140	1.10	6.74	-89	12.5	200
1318	13.93	27.12	1130	1.09	6.71	-87	12.2	200
1323	13.93	27.06	1130	1.06	6.69	-87	12.0	200
			Ready to sample					

Comments:

Sample Time: 1356 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: TB 031517N (no time) from lab

VOC, LMA, VPH, SVOC, EPA, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-40D

Site Name, Location: BMS HUMACAO

Personnel: N. RIVERA / J. DEL VALLE

Equipment Used: dedicated bladder, tubing, cord, decontaminated pump

Date: 3-15-17

Monitoring Well Information:

Diameter/Material: 2 / PVC/SS

Depth to Bottom (ft from TOC): 35.10

Top of Screen (ft from TOC): 24.80

Bottom of Screen (ft from TOC): 34.80

Pump Intake Level (ft from TOC): ~ 30

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 12.85 / 1222

Measured DTB (ft from TOC)/Time: (35.10) /

Headspace Reading (ppm): 2.1

Time @ Start Purging: ~~1140~~ 1135

Time @ Stop Purging: 1200

Time @ Stop Sampling: 1248

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1130	12.55							
1135	1315	27.56	1.10	2.68	6.98	215	0.0	250
1140	1290	27.75	1.10	2.52	6.96	215	0.0	↓ 200
1145	1290	26.64	1.09	2.47	6.95	214	0.0	200
1150	1320	26.47	1.09	1.55	6.90	214	0.0	200
1155	1328	26.51	1.08	1.45	6.92	2.15	0.0	200
1200	1328	26.50	1.09	1.40	6.92	2.13	0.0	200
		Ready To Sample						

Comments:

Sample Time: 1248 DUP / MS / MSD / Water Quality/Appearance: Clear

Sample Analysis: VOC, VPH, LMA, SVOC, PESTI, EPA DUP / MS / MSD

Additional Comments:

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-34

Site Name, Location: BMS Humacao

Personnel: J. DeL Valle / N. Rivera

Equipment Used: dedicated bladder, pump, cord tubing

Date: 3-16-17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 21.2

Top of Screen (ft from TOC): 11.2

Bottom of Screen (ft from TOC): 21.2

Pump Intake Level (ft from TOC): -1

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 17.68 / 1000 AM

Measured DTB (ft from TOC)/Time: 21.2 /

Headspace Reading (ppm): 3.0

Time @ Start Purging: 10:05

Time @ Stop Purging: 10.32

Time @ Stop Sampling: 1105

Purge Volume (gallons): 1.25

	Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
Started	10:05	17.68							
	10:07	18.23	27.40	.975	2.03	6.55	-92	11.9	300↓
	10:12	18.17	27.54	.967	1.48	6.47	-79	2.4	100
	1017	18.25	27.64	.961	1.42	6.46	-70	1.2	100
	1022	18.52	27.26	.941	1.07	6.48	-61	0.0	125
	1027	18.65	27.18	939	1.04	6.50	-62	0.0	125
	1032	18.69	27.22	935	0.99	6.49	-61	0.0	175
				Ready to sample					

Comments:

Sample Time: 1105 DUP ✓ MS ✓ MSD ✓

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear

Additional Comments: FB031617 @1052
VOC, SVOC, LMA, VPH, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-32

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart

Equipment Used: Dedicated pump, bladder, cord, & tubing

Date: 3/16/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 21.6

Top of Screen (ft from TOC): 11.6

Bottom of Screen (ft from TOC): 21.6

Pump Intake Level (ft from TOC): -18

Desired Pumping Rate (Lpm): 0.1 -0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 13.70 / 1231

Measured DTB (ft from TOC)/Time: (21.6) / ____

Headspace Reading (ppm): 1915

Time @ Start Purging: 12:37

Time @ Stop Purging: 13:04

Time @ Stop Sampling: 13:53

Purge Volume (gallons): 2.0

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
12:31	Pump 13.70 dedicated / already installed							
12:37	13.96	32.60	1130	0.53	6.37	-91	24.5	300 ↓
12:42	13.92	32.33	1110	0.49	6.33	-93	12.9	250 ↓
12:47	13.87	31.97	1100	0.47	6.26	-90	5.7	150 ↓
12:52	13.81	31.82	1100	0.46	6.20	-85	4.5	100
12:57	13.83	31.30	1100	0.47	6.12	-80	3.4	100
13:04	Conditions stable; sampling can begin							

Comments:

Sample Time: 13:53 DUP / MS / MSD /

Water Quality/Appearance: clear / colorless

Sample Analysis: ____ DUP / MS / MSD /

Additional Comments: VOC, LMA, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-33

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Royer

Equipment Used: Dedicated pump, cord, tubing, & bladder

Date: 3/16/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 20.1

Top of Screen (ft from TOC): 10.1

Bottom of Screen (ft from TOC): 20.1

Pump Intake Level (ft from TOC): ~18

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 15.33 / 1001

Measured DTB (ft from TOC)/Time: (20.1) /

Headspace Reading (ppm): 0.5

Time @ Start Purging: 10:05

Time @ Stop Purging: 10:27

Time @ Stop Sampling: 12:11

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:01	15.33	Pump dedicated/already installed						
10:05	15.37	29.15	966	1.18	6.30	-63	4.9	375
10:10	15.37	29.22	934	0.94	6.34	-77	22.1	175
10:15	15.37	29.31	927	0.84	6.33	-76	9.5	100
10:20	18:38	29.38	919	0.78	6.34	-76	5.0	100
10:25	15.37	29.33	924	0.73	6.33	-75	1.5	100
10:27	Conditions stable; sampling begins							

Comments:

Sample Time: 11:19 DUP / MS 11:44 MSD 12:11

Sample Analysis: DUP / MS MSD

Water Quality/Appearance: clear & colorless with a sheen

Additional Comments: VOC, LMA, VPH, PEST, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-36

Site Name, Location: BMS - Bldg 5

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated pump, bladder, tubing, cord

Date: March 16, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 19.5

Top of Screen (ft from TOC): 9.5

Bottom of Screen (ft from TOC): 19.5

Pump Intake Level (ft from TOC): ~18

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 15.78 / 1200

Measured DTB (ft from TOC)/Time: (19.5) /

Headspace Reading (ppm): 2.0

Time @ Start Purging: 1202

Time @ Stop Purging: 1230

Time @ Stop Sampling: 1303

Purge Volume (gallons): 1

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1202	Start							
1210	15.94	29.42	1190	1.65	6.52	-37	0.9	200
1215	16.12	29.20	1120	1.50	6.56	-49	0.0	250 ↓
1220	16.21	29.26	1120	1.31	6.53	-46	0.0	200 ↓
1225	16.19	29.34	1110	1.30	6.55	-46	0.0	125
1230	16.16	29.42	1110	1.23	6.50	-46	0.0	125
			Ready to sample					

Comments:

Sample Time: 1302 DUP / MS / MSD /

Water Quality/Appearance: clear

Sample Analysis: DUP / MS / MSD /

Additional Comments: TB031617 NR (3/16/17)

VOC, LMA, VPH, SVOC, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: UP-2

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart

Equipment Used: Dedicated pump, bladder, cord, & tubing

Date: 3/17/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14

Top of Screen (ft from TOC): 4

Bottom of Screen (ft from TOC): 14

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.62 / 1128

Measured DTB (ft from TOC)/Time: (14) /

Headspace Reading (ppm): 0.8

Time @ Start Purging: 11:38

Time @ Stop Purging: 12:08

Time @ Stop Sampling: 12:26

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
11:28	6.62	Pump dedicated/already installed						
11:38	6.77	29.87	990	4.37	6.86	58	45.0	225
11:44	6.74	29.32	999	2.59	6.92	-82	31.9	100
11:49	6.74	29.26	998	1.78	6.98	-99	22.4	100
11:54	6.74	29.18	997	1.03	6.94	-99	15.2	100
11:59	6.74	29.25	994	1.16	6.96	-104	11.0	100
12:04	6.74	29.20	991	1.11	6.94	-103	7.7	125
12:08	Conditions stable; sampling begins							

Comments:

Sample Time: 12:26 DUP / MS / MSD /

Sample Analysis: DUP / MS / MSD /

Water Quality/Appearance: slightly turbid w/ yellow color

Additional Comments: VOC, LMA, VPH, SVOC, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: UP-1

Site Name, Location: BMS Humacao PR

Personnel: H Royer R Stuart R O'Reilly

Equipment Used: Dedicated Pump, cord, tubing, & bladder

Date: 3/17/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14

Top of Screen (ft from TOC): 4

Bottom of Screen (ft from TOC): 14

Pump Intake Level (ft from TOC): ~9

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 3.67 / 1005

Measured DTB (ft from TOC)/Time: (14) /

Headspace Reading (ppm): 0.5

Time @ Start Purging: 10:12

Time @ Stop Purging: 10:35

Time @ Stop Sampling: 11:05

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:05	3.67							
10:12	3.65	30.00	451	0.86	6.60	1	10.6	225
10:17	3.77	30.10	438	0.55	6.77	-91	3.9	275 ↓
10:22	3.77	30.10	439	0.50	6.82	-102	2.4	175
10:27	3.77	30.11	441	0.49	6.77	-103	1.2	125
10:32	3.77	30.12	442	0.48	6.76	-101	0.6	125
10:35	Conditions stable; sampling begins							

Comments:

Sample Time: 10:50 DUP 11:05 MS / MSD /

Water Quality/Appearance: clear & colorless

Sample Analysis: DUP MS / MSD /

Additional Comments: VOC, LMA, VPH, PEST, SVOC, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: 5-28

Site Name, Location: BWS - Bldg. 5

Personnel: N. Rivera / T. Del Valle

Equipment Used: dedicated bladder, pump, cord + tubing

Date: March 17, 17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 19.8

Top of Screen (ft from TOC): 9.8

Bottom of Screen (ft from TOC): 19.8

Pump Intake Level (ft from TOC): 14

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 9.70 / 1019

Measured DTB (ft from TOC)/Time: (19.8) / ____

Headspace Reading (ppm): 0.4

Time @ Start Purging: 10:20

Time @ Stop Purging: 10:50

Time @ Stop Sampling: 1112

Purge Volume (gallons): 2.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1020	Start					-0.71		
1025	9.80	28.33	1290	2.44	6.57	~~2.44~~	3.2	150
1030	9.93	28.44	1290	1.26	6.40	-0.81	5.0	225
1035	9.93	28.41	1260	1.65	6.40	-0.71	5.6	200
1040	9.93	28.26	1250	1.99	6.45	-0.62	6.5	200
1045	9.93	28.27	1260	2.12	6.46	-0.58	6.8	200
1050	9.93	28.24	1240	2.06	6.50	-0.58	7.6	200
			Ready	to Sample				

Comments:

Sample Time: 1112 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-37

Site Name, Location: BMS. Bldg 5

Personnel: N Rivera / J Del Valle

Equipment Used: dedicated pump, bladder, cord tubing

Date: March 17, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 31.7

Top of Screen (ft from TOC): 21.7

Bottom of Screen (ft from TOC): 31.7

Pump Intake Level (ft from TOC): ~27

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 21.03 / 1149

Measured DTB (ft from TOC)/Time: (31.7) / ___

Headspace Reading (ppm): 1.0

Time @ Start Purging: 1154

Time @ Stop Purging: 1215

Time @ Stop Sampling: 1242

Purge Volume (gallons): 1.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1154	start							
1155	21.22	28.36	968	5.50	7.61	81	0.5	200 ↓
1200	21.22	27.74	979	2.58	7.06	-74	0.4	200 ↓
1205	21.18	28.15	964	2.45	7.00	-71	0.4	100
1210	21.23	28.07	975	2.55	6.98	-72	0.5	150
1215	21.23	28.06	975	2.61	6.96	-73	1.0	150
			Ready to Sample					

Comments:

Sample Time: 1242 DUP ✓ MS ✓ MSD ✓

Sample Analysis: ___ DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: Clear

Additional Comments: FB031717 @ 1210

VOC, VPH, LMA, EPH, PEST, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-19

Site Name, Location: BMS Humacao PR2

Personnel: H Rogers R Stuart

Equipment Used: Dedicated bladder, tubing, & cord decontaminated pump

Date: 3/20/2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14.01

Top of Screen (ft from TOC): 3.71

Bottom of Screen (ft from TOC): 13.71

Pump Intake Level (ft from TOC): 9

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 2.70 / 1332

Measured DTB (ft from TOC)/Time: 14.01 /

Headspace Reading (ppm): 1,159.6

Time @ Start Purging: 13:42

Time @ Stop Purging: 14:30

Time @ Stop Sampling: 14:50

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
13:32	2.70	Before	Installing	pump				
13:42 ~~14:[illegible]~~	2.70	After	installing	pump				
13:42	2.70	29.35	608	2.55	6.20	-83	230	
13:44	pump	restarted						
13:47	2.70	28.86	629	5.63	6.39	-90	321	325 ↓
13:53	2.70	29.19	627	4.91	6.37	-94	221	100
13:58	2.70	29.35	628	4.54	6.36	-88	139	100
14:03	2.70	29.42	629	4.26	6.38	-91	78.7	100
14:08	2.70	29.46	631	3.93	6.39	-90	52.5	100
14:13	2.70	29.41	630	3.71	6.38	-89	27.9	100
14:18	2.70	29.36	631	3.36	6.38	-88	20.3	100
14:23	2.70	29.33	630	2.98	6.39	-89	14.2	100
14:28	2.70	29.36	630	2.68	6.39	-90	12.0	100
14:30	Conditions stable; sampling begins							

Comments:

Sample Time: 14:50 DUP / MS / MSD /

Sample Analysis: DUP / MS / MSD /

Water Quality/Appearance: Slightly cloudy

Additional Comments: VOC, LMA, VPH, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-11

Site Name, Location: BMS Humacao PR

Personnel: H Ryer R Stuart

Equipment Used: Dedicated bladder, cord, & tubing

Date: 3/20/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 20.5

Top of Screen (ft from TOC): 10.5

Bottom of Screen (ft from TOC): 20.5

Pump Intake Level (ft from TOC): ~15

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 11.15 / 1020

Measured DTB (ft from TOC)/Time: (20.5) /

Headspace Reading (ppm): 0.0

Time @ Start Purging: 10:40

Time @ Stop Purging: 11:30

Time @ Stop Sampling: 12:40

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:20	11.15	Before installing pump						
10:31	11.15	After installing pump						
10:40	11.58	27.62	559	7.64	6.15	22	4.1	125
10:45	11.60	26.87	517	7.13	6.27	-6	1.4	100
10:50	11.61	26.33	505	6.73	6.31	-7	0.9	100
10:55	11.60	25.92	502	6.53	6.24	-4	0.4	100
11:00	11.58	25.92	501	6.00	6.31	-8	0.5	125
11:05	11.59	25.72	499	5.88	6.20	-5	0.7	125
11:10	11.58	25.50	497	5.45	6.29	-7	0.5	125
11:15	11.58	25.36	497	5.25	6.28	-6	0.4	100
11:20	11.58	25.32	495	4.88	6.28	-6	0.3	100
11:25	11.58	25.47	495	4.57	6.24	-4	0.3	125
11:30	Conditions mostly stable; sampling begins							

Comments:

Sample Time: 11:59 DUP 1 / MS 12:21 MSD 12:40 Water Quality/Appearance: clear

Sample Analysis: DUP / MS MSD

VOC, LMB, VPH, EPH, SVOC

Additional Comments: DO decreased consistently throughout the purging process but never stabilized, so it is being overlooked as a parameter since all others are stable.

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: MW-9

Site Name, Location: BMS Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated bladder, tubing, cord, decontaminated pump

Date: March 20, 2017

Monitoring Well Information:

Diameter/Material: 2, PVC

Depth to Bottom (ft from TOC): 20.6

Top of Screen (ft from TOC): 10.6

Bottom of Screen (ft from TOC): 20.6

Pump Intake Level (ft from TOC): ~16

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.56 / 1021

Measured DTB (ft from TOC)/Time: (20.6) /

Headspace Reading (ppm): 0.0

Time @ Start Purging: 1036

Time @ Stop Purging: 1115

Time @ Stop Sampling: 1133

Purge Volume (gallons): 0.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1028	8.56							
1036	START							
1040	8.61	27.37	1010	2.93	6.38	279	156	200
1045	8.61	27.63	1000	1.26	6.41	285	75.7	100
1050	8.61	27.50	999	1.18	6.45	287	51.6	100
1055	8.61	27.40	1000	1.08	6.44	285	42.8	100
1100	8.61	27.22	999	1.02	6.44	284	33.0	100
1105	8.61	27.19	996	0.95	6.44	284	24.5	100
1110	8.61	27.09	992	1.11	6.43	281	23.5	100
1115	8.61	27.10	994	1.13	6.43	280	22.6	100
			Ready to sample					

Comments:

Sample Time: 1133 DUP — MS — MSD —

Water Quality/Appearance: cloudy

Sample Analysis: DUP — MS — MSD —

Additional Comments: FB 032017 1110

VOC, LMA, VPH, EPH, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-30

Site Name, Location: BMS Humacao

Personnel: March 20, 2017

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: N. Rivera / J. Del Valle

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 22.6

Top of Screen (ft from TOC): 12.6

Bottom of Screen (ft from TOC): 22.6

Pump Intake Level (ft from TOC): -18

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 9.00 / 1311

Measured DTB (ft from TOC)/Time: (22.6) /

Headspace Reading (ppm): 0.8

Time @ Start Purging: 13:22

Time @ Stop Purging: 13:46

Time @ Stop Sampling: 14:12

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1320	8.95	After	installing	pump,	hosing			
1322	START							
1326	9.03	30.62	893	4.05	6.50	-41	4.3	200
1331	9.04	30.31	886	1.01	6.52	-57	1.0	200
1336	9.04	30.24	889	0.78	6.51	-59	0.5	200
1341	9.04	30.24	894	0.68	6.52	-60	0.6	200
1346	9.04	30.25	898	0.61	6.52	-60	0.7	200
			Ready	to Sampl				

Comments:

Sample Time: 1412 DUP / MS / MSD /

Water Quality/Appearance: clear

Sample Analysis: DUP / MS / MSD /

Additional Comments: 1340 FB032017

TB032017 VOC, EPH, LMA, VPH, PEST, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: D-12

Site Name, Location: BMS Humacao PR

Personnel: H Rayes R Stuart

Equipment Used: Dedicated pump, bladder, cord, & tubing

Date: 3/21/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.1

Top of Screen (ft from TOC): 6.1

Bottom of Screen (ft from TOC): 16.1

Pump Intake Level (ft from TOC): ~12

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.38 / 1204

Measured DTB (ft from TOC)/Time: (16.1) / ____

Headspace Reading (ppm): 0.3

Time @ Start Purging: 12:13

Time @ Stop Purging: 12:34

Time @ Stop Sampling: 12:50

Purge Volume (gallons): 0.75

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
12:04	8.38	Pump dedicated, already installed						
12:13	8.42	30.21	1400	1.89	6.33	-63	62.6	225
12:18	8.40	30.09	1380	1.15	6.42	-81	71.5	100
12:23	8.37	30.11	1400	0.92	6.45	-86	41.9	100
12:28	8.38	30.17	1410	0.91	6.44	-86	31.3	100
12:33	8.38	30.25	1410	0.89	6.48	-89	25.6	100
12:34	Conditions stable; sampling begins							

Comments:

Sample Time: 12:50 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear/colorless

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, VPH, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: E-1R

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Royer

Equipment Used: Dedicated pump, ~~pla~~ bladder, cond, & tubing

Date: 3/21/17

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 20.7
Top of Screen (ft from TOC): 10.7
Bottom of Screen (ft from TOC): 20.7
Pump Intake Level (ft from TOC): ~16
Desired Pumping Rate (Lpm): 0.1 ~0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.52 / 1018
Measured DTB (ft from TOC)/Time: (20.7) /
Headspace Reading (ppm): 1.6
Time @ Start Purging: 10:20
Time @ Stop Purging: 10:42
Time @ Stop Sampling: 11:36
Purge Volume (gallons): 2.35

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:18	~~8.2~~ 8.52	~~Before~~ Pump dedicated/already installed						
10:20	8.60	28.93	905	1.53	6.11	-73	41.4	50 ↑
10:25	8.60	29.02	901	1.48	6.11	-77	28.4	200 ↓
10:30	8.59	29.13	905	1.50	6.14	-73	16.8	125
10:35	8.59	29.22	897	1.33	6.12	-71	15.2	100
10:40	8.59	29.25	897	1.20	6.09	-68	12.0	125
10:42	Conditions stable; sampling begins							

Comments:
Sample Time: 11:04 DUP ✓ MS 11:20 MSD 11:36
Sample Analysis: DUP ✓ MS MSD

Water Quality/Appearance: clear/colorless w/ orange flecks

Additional Comments: VOC, LMP, VPH, SVOC, EPH, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: G-1R3

Site Name, Location: BMS - Humacao

Personnel: N. Riveros / J. Del Valle

Equipment Used: dedicated pump, bladder, tubing & cord

Date: March 21, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 15.7

Top of Screen (ft from TOC): 5.7

Bottom of Screen (ft from TOC): 15.7

Pump Intake Level (ft from TOC): ~16

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.78 / 1027

Measured DTB (ft from TOC)/Time: (15.7) / ____

Headspace Reading (ppm): 450.6

Time @ Start Purging: 1132

Time @ Stop Purging: 1226

Time @ Stop Sampling: 1251

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1102	start							
1106	6.78	32.73	475	0.84	6.37	-19	12.7	150
1111	6.98	32.39	458	0.65	6.35	-26	12.5	125
1116	7.19	32.04	437	0.55	6.35	-28	12.1	125
1121	7.45	32.86	428	0.50	6.33	-30	12.4	125
1126	7.45	31.61	444	0.44	6.32	-37	12.2	100
			Ready to sample					

Comments:

Sample Time: 1251 DUP ✓ MS ✓ MSD ✓

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: Slightly cloudy w/ brown/black flake

Additional Comments: FB032117@1038

VOC, LMA, VPH, SVOC, PEST, EPH

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-38

Site Name, Location: Bays - Blg 5

Personnel: N. Rivera / J. Del Valle

Equipment Used: Dedicated pump, bladder, cord tubing

Date: March 21, 17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14

Top of Screen (ft from TOC): 4

Bottom of Screen (ft from TOC): 14

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1 ~ 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.86 / 1246

Measured DTB (ft from TOC)/Time: (14) /

Headspace Reading (ppm): 0.2

Time @ Start Purging: 1247

Time @ Stop Purging: 1321

Time @ Stop Sampling:

Purge Volume (gallons): 1.5

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1247	START							
1251	6.03	29.64	719	3.71	6.45	122	56.5	250 *
1256	5.96	29.44	719	0.92	6.46	43	40.7	150
1301	5.94	29.42	713	0.74	6.43	38	29.8	150
1306	5.94	29.42	711	0.64	6.44	36	20.7	150
1311	5.94	29.54	711	0.55	6.46	35	13.0	150
1316	5.93	29.62	713	0.55	6.48	33	12.6	150
1321	5.93	29.65	714	0.51	6.45	31	11.9	150
			Ready to sample					

Comments:

Sample Time: 1349 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, VPH, LMA, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-29R

Site Name, Location: BMS - Bldg 5

Personnel: N. Fiveson / R. O'Reilly

Equipment Used: dedicated pump, bladder, cord, tubing

Date: March 22, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 21.4

Top of Screen (ft from TOC): 11.4

Bottom of Screen (ft from TOC): 21.4

Pump Intake Level (ft from TOC): ~16

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.94 / 1020

Measured DTB (ft from TOC)/Time: (21.4) / ____

Headspace Reading (ppm): 0.0

Time @ Start Purging: 1022

Time @ Stop Purging: 1042

Time @ Stop Sampling: 1111

Purge Volume (gallons): 2

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1022	START							
1022	8.99	30.53	1010	1.18	5.99	-94	6.4	250 ↓
1027	8.96	30.60	1000	0.98	5.99	-97	5.2	—
1032	8.99	30.54	1000	0.97	5.98	-97	2.9	250
1037	9.03	30.73	996	0.97	5.98	-97	0.9	250
1042	9.03	30.74	994	0.92	5.99	-97	0.0	250
			Ready to sample					

Comments:

Sample Time: 1111 DUP / MS / MSD /

Water Quality/Appearance: clear

Sample Analysis: ____ DUP / MS / MSD /

Additional Comments: FB032217 @ 1100

VOC, EPH, LMA, VPH, PEST, SVOC

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: S-31R (2)

Site Name, Location: BMS. Humacao

Personnel: N. Rivera / J Del Valle

Equipment Used: dedicated pump, bladder, tubing & cord

Date: March 22, 2017

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 15.6

Top of Screen (ft from TOC): 5.6

Bottom of Screen (ft from TOC): 15.6

Pump Intake Level (ft from TOC):

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 8.60 / 1148

Measured DTB (ft from TOC)/Time: (15.6) /

Headspace Reading (ppm): 27.0

Time @ Start Purging: 1149

Time @ Stop Purging: 1215

Time @ Stop Sampling: 1229

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1149	Start							
1150	8.12	31.14	843	1.89	6.04	-98	73.5	150
1155	8.15	31.21	803	1.18	5.91	-101	31.4	150
1200	8.15	31.30	795	0.91	5.86	-102	24.5	150
1205	8.15	31.35	789	0.89	5.87	-101	21.3	150
1210	8.15	31.43	786	0.86	5.85	-98	20.8	150
1215	8.16	31.45	784	0.87	5.85	-95	19.9	150
			Ready	to Sample				

Comments:

Sample Time: 1229 DUP ✓ MS ✓ MSD ✓

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: Rotten odor, Apple flakes

Additional Comments: VOC, LMA, VPH, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: A - 2R2

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Rayer

Equipment Used: Dedicated pump, tubing, cord, & bladder

Date: 3/22/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 12.7

Top of Screen (ft from TOC): 2.7

Bottom of Screen (ft from TOC): 12.7

Pump Intake Level (ft from TOC): ~10

Desired Pumping Rate (Lpm): 0.1 – 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.56 / 958

Measured DTB (ft from TOC)/Time: (12.7) /

Headspace Reading (ppm): 2.7

Time @ Start Purging: 10:00

Time @ Stop Purging: 10:22

Time @ Stop Sampling: 10:39

Purge Volume (gallons): 1

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
9:58	5.56	Pump dedicated/already installed						
10:00	5.80	28.71	848	2.41	6.53	283	14.2	200 ↓
10:05	5.80	28.78	879	1.25	6.56	281	4.2	125
10:10	5.77	28.78	889	0.98	6.57	281	0.8	125
10:15	5.77	28.84	892	0.88	6.59	281	0	100
10:20	5.77	28.93	893	0.81	6.58	282	0	125
10:22	Conditions stable; sampling begins							

Comments:

Sample Time: 10:39 DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: clear/colorless

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, SMA, VPH, EPH, SVOC, PEST

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

AMAI Well Purging and Low Flow Sampling Form

Well Number: A-124

Site Name, Location: BMS Humacao PR

Personnel: R Stuart H Royer

Equipment Used: Dedicated bladder pump, cord, & tubing

Date: 3/22/17

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 14.1

Top of Screen (ft from TOC): 4.1

Bottom of Screen (ft from TOC): 14.1

Pump Intake Level (ft from TOC): ~9

Desired Pumping Rate (Lpm): 0.1 - 0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.53 / 1055

Measured DTB (ft from TOC)/Time: 14.1 / 36.8

Headspace Reading (ppm):

Time @ Start Purging: 10:58

Time @ Stop Purging: 11:23

Time @ Stop Sampling: 11:58

Purge Volume (gallons): 1.25

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
10:55	5.53	Pump dedicated/Already installed						
10:58	5.79	29.10	1880	1.28	6.58	-87	28.1	175 ↓
11:03	5.71	28.02	1850	1.22	6.55	-91	44.4	125
11:08	5.70	28.95	1910	0.90	6.54	-88	27.7	100
11:13	5.70	28.87	1960	0.82	6.51	-85	27.0	75
11:18	5.80	28.82	2000	0.76	6.52	-84	31.5	200
11:23	Conditions stable; sampling begins							

Comments:

Sample Time: 11:58 DUP ✓ MS ✓ MSD ✓

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Water Quality/Appearance: slightly turbid w/ a yellow hue

Additional Comments: VOC, VPH, LMA, EPH, SVOC, PBS.

Well Stabilization : is considered to be achieved when three consecutive readings, taken at 5 minute intervals are within the following limits: DO +/- 0.3 mg/L; Spec. Cond. +/-3%; Temp. +/-3%; pH +/- 0.1 unit; ORP +/-10 mV; Addn'l Guidelines: Drawdown <= 0.33 feet; Pumping rates = 100 to 400 ml/min; Turbidity +/-10% or < 10 NTU.

Instrument Calibration Log

Site Name, Location: BMS Humacao
Personnel: N
Instrument Model: Horiba U-5000
Instrument Serial #: 16899

Day #: ____ Date: 3/3/17 Time: 0913

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.72	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	4.05	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	4.	4.49	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Day #: ____ Date: 3/6/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.42	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		4.00	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS		4.51	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674/1/31/2021	240	

Day #: ____ Date: 3/7/17 Time: 0830

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.67	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		4.01	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 Ms/cm		4.54	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240		240	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Personnel: N
Instrument Model: Horiba U-5000
Instrument Serial #: 16899

Day #: ____ Date: 3/8/17 Time: 0845

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.69	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	692328	4.04	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.54	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674: 1/31/21	240	

Day #: ____ Date: 3/9/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	~~9.13~~ 9.07	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.52	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Day #: ____ Date: 3/10/17 Time: 0840

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.92	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		4.0	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.50	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Instrument Model: Horiba U-5000

Personnel: _____
Instrument Serial #: 16899

Day #: _____ Date: 3/13/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.84	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C6923.28	4.00	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.50	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Day #: _____ Date: 3/14/17 Time: 0850

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.50	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	3.98	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.55	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.3	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240	

Day #: _____ Date: 3/15/17 Time: 0940

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.64	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.98	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.50	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Personnel: HR
Instrument Model: Horiba U-5000
Instrument Serial #: 16899

Day #: ____ Date: 3/16/17 Time: 0839

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	7.96	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	CG92328	3.98	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 ms/cm		4.50	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.7	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 : 1/31/21	240	

Day #: ____ Date: 3/17/17 Time: 0910 (RO)

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.63	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	CG92328/11/30/17	3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	CG92328 11/30/17	4.41 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	CG92328 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 / 1/31/21	240	

Day #: ____ Date: 3/20/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.80	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	CG92328 / 11/30/17	3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	CG92328 / 11/30/17	4.44 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	CG92328 / 11/30/17	0.1	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 / 1/31/21	240	

Instrument Calibration Log

Site Name, Location: BMS - Humacao
Personnel: RC
Instrument Model: Horiba U-5000
Instrument Serial #: 16899

Day #: _____ Date: 3/21/17 Time: 0840

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.65	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 / 11/30/17	4.00	
7.0 Standard	~~C692328 11/~~		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	~~26~~ C692328 11/30/17	4.48 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 1/31/21	240	

Day #: _____ Date: 3/22/17 Time: 0915

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.70	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 11/30/17	3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	C692328 11/30/17	4.52 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 1/31/21	240	

Day #: _____ Date: _____ Time: _____

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard			
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Instrument Calibration Log

Site Name, Location: BNS - Humacao

Personnel: RO

Instrument Model:

Instrument Serial #: 18360 / 16972

Day #: _____ Date: 3/21/17 Time: 0850

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.69	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 11/30/17	3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	C692328 11/30/17	4.50 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 11/30/17	0.1 NTU	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 1/31/21	240	

Day #: _____ Date: 3/22/17 Time: 0905

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.82	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 11/30/17	4.01	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	C692328 11/30/17	4.51 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard	C692328 11/30/17	0.0	

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 1/31/21	240	

Day #: _____ Date: _____ Time: _____

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard			
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Instrument Calibration Log

Site Name, Location: BMS Humacao
Instrument Model: Horiba U-5000

Personnel: _____
Instrument Serial #: 21908

Day #: _____ Date: _____ Time: _____

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard			
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Day #: _____ Date: _____ Time: _____

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard			
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Day #: 3 Date: 3/3/17 Time: 09

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
	8.55	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 11/30/17	3.99	3.
7.0 Standard	—	—	

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
	C692328 / 11/30/17	4.49	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 / 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674 / 1/31/21	240	

Instrument Calibration Log

Site Name, Location: BMS, HUMACAO
Personnel: RO
Instrument Model:
Instrument Serial #: 18360 / 16972

Day #: ____ Date: 3/17/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.90	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 / 11/30/17	3.95	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	C692328 / 11/30/17	4.52 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 / 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	96471 / 1/31/21	240	

Day #: ____ Date: _____ Time: _____

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard			
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard			
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments

Day #: ____ Date: 3/20/17 Time: 0910

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.75	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328 / 11/30/17	3.99	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm	C692328 / 11/30/17	4.52 mS/cm	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard	C692328 / 11/30/17	0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	96774 / 1/31/21	240	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Instrument Model: Horiba U-5000

Personnel:
Instrument Serial #: ~~21908~~ 21908 ~~10849~~

Day #: ____ Date: 3/9/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.87	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.96	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 ms/cm		4.50	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Day #: ____ Date: 8/10/17 Time: 0840 new meter 18360

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.98	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.93	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.51	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Day #: ____ Date: 3/13/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.46	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	4.01	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.4 mS/cm		4.51	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.1	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Instrument Model: Horiba U-5000
Personnel:
Instrument Serial #: 21905

Day #: ____ Date: 3/6/17 Time: 0900

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92		

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	3.96	
7.0 Standard	11/30/12		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 ms/cm		4.49	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240		240	

Day #: ____ Date: 3/7/17 Time: 0830

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.67	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.97	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 Ms/cm		4.51	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240		240	

Day #: ____ Date: 3/8/17 Time: 0945

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	9.02	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.98	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 ms		2.26	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240		240	

Instrument Calibration Log

Site Name, Location: BMS Humacao
Instrument Model: Horiba U-5000

Personnel: _____
Instrument Serial #: 18360/16972

Day #: _____ Date: 3/14/17 Time: 0850

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92 /	8.94	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	3.86	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.51	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240	

Day #: _____ Date: 3/15/17 Time: 0940

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.75	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard		3.88	
7.0 Standard			

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49 mS/cm		4.53	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240.0		240.0	

Day #: _____ Date: 3/16/17 Time: 0839

DO

DO Reading (mg/L) / Temp (°C)	Stabilization Range (+/- 0.02) mg/l)	Comments
8.92	8.88	

pH

Calibration Solutions	Lot # / Expiration Date	Stabilization Range (+/- 0.2 units)	Comments
4.0 Standard	C692328	4.0	
7.0 Standard	11/30/17		

Specific Conductivity

Calibration Standard (µS/cm)	Lot # / Expiration Date	Stabilization Range (+/- 0.02 µS/cm)	Comments
4.49mS/cm		4.46	

Turbidity

Calibration Solution	Lot # / Expiration Date	Stabilization Range (1 NTU)	Comments
0 Standard		0.9	
Standard			

ORP

Calibration Standard (mV)	Lot # / Expiration Date	Stabilization Range (+/- 20 mV)	Comments
240	9674: 1/31/21	240	

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 21309
Description Horiba U-52
Calibrated 2/23/2017 11:12:09AM

Manufacturer Horiba
Model Number U-5000
Serial Number/ Lot Number DJBSVLE7
Location New Jersey
Department

State Certified
Status Pass
Temp °C 20.1
Humidity % 32

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.01 / 7.01	PH	7.01	PH	7.00	7.00	-0.14%	Pass
4.01 / 4.01	PH	4.01	PH	4.00	4.00	-0.25%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	NTU	0.00	NTU	0.00	0.00	0.00%	Pass
800.00 / 800.00	NTU	800.00	NTU	800.00	800.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.718 / 0.718	ms/cm	0.718	ms/cm	0.718	0.718	0.00%	Pass
5.000 / 5.000	ms/cm	5.000	ms/cm	5.000	5.000	0.00%	Pass
80.000 / 80.000	ms/cm	80.000	ms/cm	80.000	80.000	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 21309
Description Horiba U-52
Calibrated 2/23/2017 11:12:09AM

Group # 5
Group Name Disolved Oxygen Zero
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	mg/L	0.00	mg/L	0.00	0.00	0.00%	Pass

Group # 6
Group Name Temperature DO Span
Stated Accy Plus / Minus
Range Acc % 0.0000
Reading Acc % 0.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
20.00 / 20.00	degrees C	8.84	mg/L	8.84	8.84	0.00%	Pass

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
NJ AUTOCAL: C692328	Auto Cal Solution: 4.01 PH / 0.0 NTU / 4.49 mS/cm	GFS	AUTO CAL. 8483	C692328	1/9/2017	11/30/2017
NJ COND 5K: 6GL809	Conductivity 5000 uS/cm	AquaPhoenix Scientific	5000	6GL809	1/9/2017	12/31/2017
NJ COND 718: 6GL807	Conductivity 718 uS/cm	AquaPhoenix Scientific	718	6GL807	1/9/2017	12/31/2017
NJ COND 80K: 6GJ939	Conductivity 80K uS/cm	AquaPhoenix Scientific	80, 000	6GJ939	1/9/2017	10/31/2017
NJ DO ZERO 2014120373	HORIBA SODIUM SULFITE	EMD	SX07853	2014120373	2/18/2017	5/18/2017
NJ ORP 240: 0207	ORP solution 240mv	Hanna	240Mv	0207	1/9/2017	5/31/2017
NJ PH 7: 6GL570	BUFFER, PH7 YELLOW	AquaPhoenix Scientific	PH7	6GL570	1/9/2017	12/31/2018
NJ TURB 800 201046-4	Turbidity 800 NTU	Horiba		201046-4		

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Amadu Bah

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 21309
Description Horiba U-52
Calibrated 2/23/2017 11:12:09AM

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

INSTRUMENT QC/ PACKING LIST

Description	Horiba U-52/ U-53
Sonde ID#	16972
Display ID#	18360
Date Calibrated	3-7-17

PINE
www.pine-environmental.com

Standard Items	Prepared	QC check	Received by customer	Returned to Pine
Horiba U-52/ 53 w/ _____' cable and display w/ case	✓			
Manual	✓			
Quick reference card	✓			
(4) C Alkaline batteries	✓			
Probe Guard	✓			
Calibration cup (clear)	✓			
Sample cup (Black)	✓			
Flow cell	✓			
• Cell body	✓			
• Center window	✓			
• Base and black bottom	✓			
• O-ring cover	✓			
• Threaded ring	✓			
• (2) black O-rings	✓			
• (1) red O-ring	✓			
• 2 of each black barb sizes (1/4, 3/8, and 1/2)	✓			
D.O. probe reconditioning kit	✓			
330 internal pH reference solution (1)	✓			
250 ml Autocal solution	✓			
ProCal calibration sheet	✓			
Optional Items				
U-50 Data Collection Software				
USB Cable				

Prepared by: AB

QC checked by: _____

Date: _____

This packing list is to ensure that every item needed to operate the unit was sent and received. Upon receiving a shipment, please fill out the "Received by customer" column. Call Pine within 24 hours of receiving the equipment if any pieces are missing, damaged, or malfunctioning. Thank you for choosing Pine Environmental Services LLC

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 16972
Description Horiba U-52
Calibrated 3/7/2017 1:28:53PM

Manufacturer Horiba
Model Number U-52
Serial Number/ Lot Number rfvp0u4x
Location New Jersey
Department

State Certified
Status Pass
Temp °C 21.8
Humidity % 28

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass

Group # 2
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	NTU	0.00	NTU	0.00	0.00	0.00%	Pass
800.00 / 800.00	NTU	800.00	NTU	800.00	800.00	0.00%	Pass

Group # 3
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.718 / 0.718	ms/cm	0.718	ms/cm	0.718	0.718	0.00%	Pass
5.000 / 5.000	ms/cm	5.000	ms/cm	5.000	5.000	0.00%	Pass
80.000 / 80.000	ms/cm	80.000	ms/cm	80.000	80.000	0.00%	Pass
0.000 / 0.000	ms/cm	0.000	ms/cm	0.000	0.000	0.00%	Pass

Group # 4
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Range Acc % 0.0000
Reading Acc % 3.0000

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 16972
Description Horiba U-52
Calibrated 3/7/2017 1:28:53PM

Group # 5
Group Name Disolved Oxygen Zero
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
0.00 / 0.00	mg/L	0.00	mg/L	0.00	0.00	0.00%	Pass

Group # 6
Group Name Temperature DO Span
Stated Accy Plus / Minus
Range Acc % 0.0000
Reading Acc % 0.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
20.00 / 20.00	degrees C	8.84	mg/L	8.84	8.84	0.00%	Pass

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
NJ AUTOCAL: C692328	Auto Cal Solution: 4.01 PH / 0.0 NTU / 4.49 mS/cm	GFS	AUTO CAL. 8483	C692328	1/9/2017	11/30/2017
NJ COND 5K: 6GL809	Conductivity 5000 uS/cm	AquaPhoenix Scientific	5000	6GL809	1/9/2017	12/31/2017
NJ COND 718: 6GL807	Conductivity 718 uS/cm	AquaPhoenix Scientific	718	6GL807	1/9/2017	12/31/2017
NJ COND 80K: 6GJ939	Conductivity 80K uS/cm	AquaPhoenix Scientific	80, 000	6GJ939	1/9/2017	10/31/2017
NJ DO ZERO 2014120373	HORIBA SODIUM SULFITE	EMD	SX07853	2014120373	2/18/2017	5/18/2017
NJ ORP 240: 0207	ORP solution 240mv	Hanna	240Mv	0207	1/9/2017	5/31/2017
NJ PH 7: 6GL570	BUFFER, PH7 YELLOW	AquaPhoenix Scientific	PH7	6GL570	1/9/2017	12/31/2018
NJ TURB 800 201046-4	Turbidity 800 NTU	Horiba		201046-4		

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Amadu Bah

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC

92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 16972
Description Horiba U-52
Calibrated 3/7/2017 1:28:53PM

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Please call 800-301-9663 for Technical Assistance

Thermo
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Rev.2
4/8/15

Certificate of Analysis

STOCK CODE PP140-40CEP.2HA **LOT NO** HA6349060

DESCRIPTION 40ml Clear B Vial w/24-414 .125 Cap

CONTAINER VOLATILES QUALITY ASSURANCE

The empty containers used for Thermo Fisher Scientific certified products have been tested and found to comply with or to be lower than the EPA detection limits as stated in OSWER Directive # 9240.0-05A "Specifications And Guidance For Contaminant-Free Sample Containers 12/92".

Compound	Quantitation Limit (µg/L)	Compound	Quantitation Limit (µg/L)
Acetone	< 5.0	Ethylbenzene	< 0.5
Acrylonitrile	< 1.0	Hexachlorobutadiene	< 0.5
Benzene	< 0.5	2-Hexanone	< 5.0
Bromobenzene	< 0.5	Iodomethane	< 0.5
Bromochloromethane	< 0.5	Isopropylbenzene	< 0.5
Bromodichloromethane	< 0.5	m+p Xylenes	< 0.5
Bromoform	< 0.5	4-Methyl-2-pentanone	< 5.0
Bromomethane	< 0.5	Methyl t-butylether (MTBE)	< 0.5
2-Butanone	< 5.0	Naphthalene	< 0.5
Carbon Disulfide	< 0.5	n-Butylbenzene	< 0.5
Carbon Tetrachloride	< 0.5	Nitrobenzene	< 0.5
Chlorobenzene	< 0.5	n-Propylbenzene	< 0.5
Chloroethane	< 0.5	o-Xylene	< 0.5
Chloroform	< 0.5	p-Isopropyltoluene	< 0.5
Chloromethane	< 0.5	sec-Butylbenzene	< 0.5
2-Chlorotoluene	< 0.5	Styrene	< 0.5
4-Chlorotoluene	< 0.5	tert-Butylbenzene	< 0.5
cis-1,2-Dichloroethene	< 0.5	Tertiary amyl methyl ether (TAME)	< 3.0
cis-1,3-Dichloropropene	< 0.5	Tertiary butyl alcohol (TBA)	< 2.0
1,2-Dibromo-3-chloropropane	< 0.02	1,1,2,2-Tetrachloroethane	< 0.5
Dibromochloromethane	< 0.5	Tetrachloroethene	< 0.5
1,2-Dibromoethane (EDB)	< 0.01	Toluene	< 0.5
Dibromomethane	< 0.5	trans-1,2-Dichloroethene	< 0.5
1,2-Dichlorobenzene	< 0.5	trans-1,3-Dichloropropene	< 0.5
1,3-Dichlorobenzene	< 0.5	1,1,2-Trichloro-1,2,2Trifluoroethane(Freon113)	< 0.5
1,4-Dichlorobenzene	< 0.5	1,2,3-Trichlorobenzene	< 0.5
Dichlorodifluoromethane (Freon-12)	< 0.5	1,2,4-Trichlorobenzene	< 0.5
1,1-Dichloroethane	< 0.5	1,1,1-Trichloroethane	< 0.5
1,2-Dichloroethane	< 0.5	1,1,2-Trichloroethane	< 0.5
1,1-Dichloroethene	< 0.5	Trichloroethene	< 0.5
Dichloromethane	< 0.5	Trichlorofluoromethane	< 0.5
1,2-Dichloropropane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,3-Dichloropropane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
2,2-Dichloropropane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloropropene	< 0.5	Vinyl Acetate	< 0.5
Ethyl tertiary butyl ether (ETBE)	< 3.0	Vinyl Chloride	< 0.5
Octa methyl cycle tetrasiloxane	***< 5.0***	***Deca methyl cyclo pentasiloxane***	***< 5.0***

In addition to the above analytes, 20mL, 40 mL and 60 mL vials are certified for:

Compound	Quantitation Limit (µg/L)
Total Organic Carbon	<600

If Thermo Fisher Scientific can be of any further assistance, please call (800) 331-7425 and ask for our technical service department.

Approved By: Kim Meeks 12-15-16

Kim Meeks
Quality Assurance