AMAI Well Purging and Low Flow Sampling Form

Well Number: BR-1

Site Name, Location: BMS

Equipment Used: YSI 556 MPS
dedicated bladder, tubing, cord

Personnel: N. Rivera / R. Stuart

Date: September 13, 2016

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): ~9
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.44 / 1231
Measured DTB (ft from TOC)/Time: 12.8 /
Headspace Reading (ppm):
Time @ Start Purging: 1250
Time @ Stop Purging: 1336
Time @ Stop Sampling: 1417
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)
1243	5.39	After installing the tubing / pump						
1250	START							
1251	5.44	1.81	1,629	29.00	6.95	-57.4	3.61	400 ↓
1256	5.42	1.63	1,607	13.78	6.76	-103.2	3.38	300 ↓
1301	5.42	3.20	1,525	12.33	6.99	-107.8	3.24	150
1306	5.40	2.70	1,558	11.28	7.03	-108.6	2.67	100
1311	5.40	2.09	1,597	11.33	7.05	-103.1	2.92	125
1316	5.41	3.07	1,534	8.65	7.05	-106.2	3.24	125
1321	5.41	3.00	1,550	7.98	7.06	-103.3	2.94	125
1326	5.40	2.78	1,579	7.52	7.06	-102.6	3.53	100
1331	5.40	2.05	1,601	7.81	7.06	-96.4	3.71	125
1336	5.40	2.12	1,603	7.84	7.07	-97.7	2.97	100
			Ready to sample					

Comments:
Sample Time: 1417 DUP 1358 MS ✓ MSD ✓ Water Quality/Appearance: slightly turbidted
Sample Analysis: DUP MS ✓ MSD ✓

Additional Comments: VOC, SVOC, EPH, 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: BR-2

Site Name, Location: BMS (Brule)

Personnel: N. Rivera / R. Stuart

Equipment Used: YSI 556 MDS
decontaminated bladder, tubing, cord

Date: September 13, 2016.

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: 6.19 / 1425
Measured DTB (ft from TOC)/Time: (12.7) /
Headspace Reading (ppm):
Time @ Start Purging: 1515
Time @ Stop Purging: 1546
Time @ Stop Sampling: 1605
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)
1434	6.17		After the pump and tubing install					
			START					
1517	6.23	23.24	1,228	2.04	7.03	-18.8	5.66	350 ↓
1522	6.32	23.11	1,213	0.54	6.59	-55.2	3.41	225
1527	6.32	22.99	1,156	0.26	6.78	-75.9	2.13	250
1532	6.32	22.95	1,112	0.27	6.91	-88.6	1.68	225
1537	6.32	22.80	1,074	0.25	6.95	-93.5	1.66	225
1542	6.32	22.61	1,056	0.19	6.96	-96.2	1.65	200
1547								
			Ready to sample					

Comments:
Sample Time: 1605 DUP ✓ MS 1622 MSD 1638 Water Quality/Appearance: Clear
Sample Analysis: DUP ✓ MS MSD

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

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 Buffalo

Personnel: R. Stuart / J. Del Valle

Equipment Used: YSI 650 MDS

Date: September 14, 2016

dedicated bladder, tubing, cord

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 15.97
Top of Screen (ft from TOC): 5.97
Bottom of Screen (ft from TOC): 15.97
Pump Intake Level (ft from TOC): 10.74
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.23 / 1137
Measured DTB (ft from TOC)/Time: 15.97 /
Headspace Reading (ppm):
Time @ Start Purging: 1151
Time @ Stop Purging: 1241
Time @ Stop Sampling: ~~1642~~ RSD
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)
1150	4.92	—	START		—		—	
1156	6.08	31.67	914	2.35	6.91	168.4	7.9	150
1201	6.54	31.88	915	1.12	6.94	181.4	4.1	200
1206	7.05	32.02	925	1.09	6.92	152.9	7.5	200
1211	7.28	31.90	988	1.41	6.89	94.5	11.6	150
1216	7.12	32.07	995	1.37	6.91	60.2	9.7	100
1221	7.20	32.50	996	1.32	6.92	28.9	5.6	150
1226	7.42	32.25	949	1.09	6.88	3.0	2.9	175
1231	7.85	31.90	889	0.96	6.83	-39.7	2.0	150
1236	8.11	31.75	892	0.88	6.85	-47.4	1.5	200
1241	—	32.23	892	0.89	6.89	-37.3	1.1	—

Comments:

Sample Time: ~~1642~~ RSD DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: Clear

Sample Analysis: DUP ✓ MS ✓ MSD ✓

Additional Comments: At 1241 no water was running out. The pump was lowered, sampling was able to start 1322.

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 - Brute

Personnel: N. Rivera

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: Sept 14, 2016

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 16.25

Top of Screen (ft from TOC): 7.95

Bottom of Screen (ft from TOC): 17.95

Pump Intake Level (ft from TOC): ~13

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.41 / 1157

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

Headspace Reading (ppm):

Time @ Start Purging: 1215

Time @ Stop Purging: 1247

Time @ Stop Sampling: 1357

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)
1150	4.42	After	installing	pump	/ tu	bing		
1215	4.42	Starts						
1222	6.32	25.55	567	1.91	9.04	140.7	11.78	125
1227	7.01	25.24	565	0.96	9.12	122.5	7.66	150
1232	7.77	25.06	565	0.66	9.21	107.2	8.09	150
1237	8.05	24.92	567	0.60	9.25	97.5	7.53	150
1242	8.81	24.82	569	0.68	9.27	93.7	6.13	150
1247	9.42	23.72	571	0.79	9.28	88.4	9.20	150
			Ready to sample					

Comments:

Sample Time: 1357 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: Clear / turbid

Sample Analysis: DUP ✓ MS ✓ MSD ✓

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

Needed to lower the pump intake for obtaining water for sampling

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 - FTF - Humacao

Personnel: N. Rivera / J. Del Valle

Equipment Used: dedicated pump, tubing, cord, hose

Date: Sept 2, 2014

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: 10.35 / 1110
Measured DTB (ft from TOC)/Time: (15.3) /
Headspace Reading (ppm):
Time @ Start Purging: 12.24
Time @ Stop Purging: 1305
Time @ Stop Sampling: 1334
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)
	Needed	to remove	pump	to loose	both	ball	valve	
11:25	9.55	After	installing	pump.				
11:42	9.82							
12:16	9.78							
12:24	9.79	START						
1232	11.12	31.51	792	2.25	6.51	-31.9	14.3	100
1237	11.28	31.12	775	1.62	6.48	-35.0	19.4	100
1242	11.38	30.93	743	1.42	6.49	-41.0	10.9	100
1247	11.45	30.91	715	1.21	6.51	-44.5	9.76	100
1252	11.52	30.82	670	0.87	6.54	-51.2	7.48	100
1257	11.63	30.46	630	0.71	6.56	-57.5	5.26	150
1302	11.65	30.61	627	0.53	6.57	-61.5	5.44	100
1305	11.54	30.75	624	0.46	6.58	-62.2	5.77	100
			Ready to	sample				

Comments:
Sample Time: 1334 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear
Sample Analysis: DUP ✓ MS ✓ MSD ✓

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-17

Site Name, Location: BMS F.F. Humacao **Personnel:** N. Rivera / J. Del Valle

Equipment Used: dedicated bladder pump, tubing, cord **Date:** Sept 2, 2016

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:	5.38 / 1545
Measured DTB (ft from TOC)/Time:	(13.7) /
Headspace Reading (ppm):	
Time @ Start Purging:	1548
Time @ Stop Purging:	1615
Time @ Stop Sampling:	1638
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)
1547	5.38	after installing system & lifting the pump						
1548	START							
1550	5.42	31.46	342	0.42	6.89	-95.3	7.39	200 ↓
1555	5.44	31.46	338	0.06	6.79	-93.0	5.00	100
1600	5.44	31.35	367	0.04	6.73	-100.9	3.15	300 ↓
1605	5.44	31.38	380	0.07	6.72	-98.8	3.09	200
1610	5.44	31.42	387	0.04	6.71	-105.3	2.39	200
1615	5.44	31.38	389	0.04	6.71	-109.7	2.06	200
			READY TO SAMPLE					

Comments:

Sample Time: 1627 DUP 1638 MS ✓ MSD ✓ 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-14

Site Name, Location: BMS - FIF, Humacao

Personnel: N. Rivera

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

Date: Sept 14, 2012

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: 4.30 / 1547
Measured DTB (ft from TOC)/Time: 15.8 /
Headspace Reading (ppm):
Time @ Start Purging: 1554
Time @ Stop Purging: 1652
Time @ Stop Sampling: 1722
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)
1549	START							
1551	Stop	Needed	to loose	bottom	ball	valve		
1553	4.30							
1554	Start							
1557	4.35	23.40	424	2.61	6.32	20.2	66.3	100
1602	4.38	23.45	420	0.75	6.17	-37.3	83.8	150
1607	4.38	23.48	415	0.39	6.50	-66.9	78.6	150
1612	4.38	23.40	410	0.31	6.56	-73.6	48.6	150
1617	4.38	23.41	406	0.27	6.59	-75.5	32.8	125
1622	4.38	22.92	410	0.28	6.59	-77.2	21.8	125
1627	4.38	22.72	413	0.26	6.59	-77.1	17.8	125
1632	4.38	24.29	401	0.21	6.60	-77.1	14.3	100
1637	4.38	24.58	410	0.21	6.61	-80.5	11.5	100
1642	4.38	24.79	397	0.18	6.62	-80.6	11.6	100
1647	4.38	24.78	396	0.19	6.62	-80.9	11.8	100
1652	4.38	24.76	395	0.18	6.62	-79.9	12.0	100
1657								
1702			Ready	to sample				

Comments:

Sample Time: 1722 DUP ( ) MS ( ) MSD ( )

Water Quality/Appearance: clear w/ brown flakes

Sample Analysis: see note DUP ( ) MS ( ) MSD ( )

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

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

Personnel: R Stuart / J. Del Valle

Equipment Used: VSJ 650 MDS
dedicated bladder pump, tubing, cond

Date: September 14, 2016.

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 17.50
Top of Screen (ft from TOC): 7.50
Bottom of Screen (ft from TOC): 17.50
Pump Intake Level (ft from TOC): 12.17
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.33 / 1551
Measured DTB (ft from TOC)/Time: 17.5 /
Headspace Reading (ppm):
Time @ Start Purging: 1602
Time @ Stop Purging: 1623
Time @ Stop Sampling: 1642
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)
1602	5.35		START					
1603	5.35	32.51	552	3.06	7.11	-48.8	20.0	150
1608	5.35	32.61	526	1.24	6.85	-75.5	12.6	100
1613	5.35	32.61	519	0.74	6.86	-80.6	4.7	100
1618	5.35	32.59	519	0.64	6.88	-85.4	1.3	100
1623	5.35	32.56	519	0.54	6.89	-89.2	0.6	100
			Ready to sample					

Comments:

Sample Time: 1642 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: VOC, SVOC, LMA, NPN, EPN DUP ✓ MS ✓ MSD ✓

Additional Comments: The pump was removed from the well since it did not pumped water out. it will be opened to verify any obstruction. This happened at 1555. Pump fixed at 1602.

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-13

Site Name, Location: BMS

Personnel: N/Rivera / R. Stuart

Equipment Used: YSI 556 MPS

Date: September 16, 2016.

dedicated bladder, tubing, pump, cord

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: 4.34 / 1115

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

Headspace Reading (ppm):

Time @ Start Purging: 1121

Time @ Stop Purging: 1152

Time @ Stop Sampling: 1209

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)
				Start				
1122	4.40	25.53	376	2.22	7.03	114.6	11.48	450 ↓
1127	4.40	25.53	335	0.47	6.16	75.4	8.21	175
1132	4.42	25.61	332	PS ~~0.60~~ 0.30	6.60	19.4	5.74	175
1137	4.42	25.50	329	0.25	6.64	6.0	2.27	175
1142	4.42	25.51	327	0.28	6.67	0.2	2.31	175
1147	4.42	25.47	327	0.38	6.68	-3.1	2.46	175
1152								
			Ready	to sample				

Comments:

Sample Time: 1209 DUP / MS / MSD /

Water Quality/Appearance: clear with red flakes

Sample Analysis: DUP / MS MSD /

Additional Comments: VOC, SVOC, LMA, VPH, 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

Personnel: N. Rivera / R. Stuart

Equipment Used: YSI 556 MPS

Date: September 16, 2016

dedicated pump, tubing, hosing, cord

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): ~11
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.22 / 1307
Measured DTB (ft from TOC)/Time: (16.7) / ____
Headspace Reading (ppm): ____
Time @ Start Purging: 1308
Time @ Stop Purging: 1331
Time @ Stop Sampling: 1357
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)
1308			Start					
1311	4.43	28.32	848	0.49	6.75	14.3	1.76	275 ↓
1316	4.39	27.77	866	0.36	6.91	-45.1	1.43	150
1321	4.39	28.10	857	0.36	6.94	-58.5	1.22	150
1326	4.39	28.13	851	0.33	6.95	-60.1	1.19	125
1331	4.37	28.09	849	0.29	6.95	-60.8	1.20	150
			Ready to sample					

Comments:

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

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

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

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

Personnel: N. Rivera / R. Stuart

Equipment Used: VSI 556 MPS bladder pump, tubing, bladder, cord

Date: September 16, 2016.

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:	9.15 / 1437
Measured DTB (ft from TOC)/Time:	(16.8) /
Headspace Reading (ppm):	
Time @ Start Purging:	1458
Time @ Stop Purging:	1550
Time @ Stop Sampling:	1614
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)
1458								
1500	9.41	26.00	578	1.15	6.47	14.0	11.7	
1505	9.39	25.99	658	0.84	5.68	2.0	7.88	250
1510	9.38	25.71	800	0.74	6.00	-21.7	6.47	100
1515	9.42	25.65	846	0.77	6.14	-32.7	6.09	150
1520	9.52	25.61	812	0.36	6.17	-33.6	4.20	175
1525	9.50	25.30	773	1.36	6.22	-31.7	2.62	200
1530	9.47	25.40	766	1.14	6.23	-32.4	4.63	200
1535	9.46	25.79	763	1.05	6.25	-27.7	4.03	200
1540	9.51	25.82	756	0.65	6.24	-34.6	2.87	125
1545	9.46	25.81	755	0.36	6.25	-40.8	2.85	125
1550	9.54	25.89	753	0.35	6.25	-44.2	2.73	125
			Ready to sample					

Comments:

Sample Time: 1614 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: _____ DUP ✓ MS ✓ MSD ✓

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

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-20 D

Site Name, Location: BMS

Personnel: N. Rivera / R. Stuart

Equipment Used: pump + tubing dedicated

Date: Sept 21, 2016

Monitoring Well Information:

Diameter/Material: 2" / PVC / SS

Depth to Bottom (ft from TOC): ~~21.79~~ 22.09

Top of Screen (ft from TOC): 11.79

Bottom of Screen (ft from TOC): 21.79

Pump Intake Level (ft from TOC): 16.70

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.09 / 1157

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

Headspace Reading (ppm):

Time @ Start Purging: 1218

Time @ Stop Purging: 1250

Time @ Stop Sampling: 1317

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)
1215	5.07	After						
1218			Start					
1220	5.15	31.03	567	1.54	6.53	22.5	3.45	200
1225	5.13	30.36	540	0.39	5.99	-23.6	4.51	200
1230	5.13	30.31	545	0.25	6.28	-49.3	15.6	250
1235	5.13	30.13	572	0.19	6.39	-58.9	11.7	200
1240	5.16	30.04	580	0.16	6.47	-65.3	9.80	200
1245	5.15	29.94	585	0.16	6.49	-67.7	7.19	200
1250	5.15	30.06	589	0.15	6.52	-70.6	4.48	200
			Ready to sample					

Comments:

Sample Time: 1317 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: DUP ✓ MS ✓ MSD ✓

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

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-20S

Site Name, Location: BMS

Personnel: N. Rivera/R. Stuart, D. Lindstrand

Equipment Used: pump, tubing dedicated

Date: Sept 21, 2016

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): -10
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.20 / 1209
Measured DTB (ft from TOC)/Time: 16.10 /
Headspace Reading (ppm):
Time @ Start Purging: 1343
Time @ Stop Purging: 1405
Time @ Stop Sampling: 1430
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)
1311	5.20	After						
1322			Start					
1325			Purging	paused				
1342	5.18	After	R Pump installed again					
1343			Start					
1345	5.21	30.00	502	0.99	6.59	64.8	27.2	400
1350	5.26	29.91	513	0.23	6.39	58.3	16.5	
1355	5.28	29.86	515	0.19	6.44	46.5	9.62	100
1400	5.24	29.85	514	0.20	6.46	40.9	5.22	100
1405	5.26	29.85	513	0.18	6.46	38.2	3.39	100
			Ready to sample					

Comments:

Sample Time: 1430 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: turbided

Sample Analysis: DUP ✓ MS ✓ MSD ✓

VOC, SVOC, LMW, VPH, EPH, PAS

Additional Comments: At 1325 we paused the pumping due to the up and down of groundwater inside the chamber. Resume pumping at 1343

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 **Personnel:** N. Rivera / R. Stuart

Equipment Used: dedicated pump, bladder, tubbing, cond. **Date:** 9/22/2016.

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): ~17
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 6.93 / 1516
Measured DTB (ft from TOC)/Time: 16.4 /
Headspace Reading (ppm):
Time @ Start Purging: 1522
Time @ Stop Purging: 1626
Time @ Stop Sampling: 1655
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)
1522	6.93			Start				
1528	6.94	32.32	636	0.66	7.47	137.9	—	—
~~1533~~ PS								
~~1538~~ PS								
1531	6.91	32.29	695	0.42	6.93	155.1	23.4	100
1536	6.90	32.16	712	0.27	7.06	133.1	11.4	150
1541	6.91	31.99	704	0.18	7.02	116.4	6.48	200
1546	6.90	31.87	693	0.15	7.00	96.6	5.82	225
1551	6.88	31.78	680	0.14	6.95	77.6	7.16	225
1556	6.88	31.75	669	0.13	6.92	61.2	10.38	200
1601	6.88	31.78	657	0.13	6.88	42.3	12.12	200
1606	6.88	31.78	651	0.14	6.86	28.5	11.9	200
1611	6.88	31.74	646	0.13	6.85	18.9	8.80	200
1616	6.88	31.82	640	0.15	6.84	11.7	7.47	200
1621	6.88	31.85	638	0.14	6.82	8.8	6.89	150
1626	6.88	31.86	635	0.14	6.81	6.6	6.32	150
			Ready to sample					

Comments:
Sample Time: 1655 DUP / MS / MSD / Water Quality/Appearance: clear
Sample Analysis: VOC, SVOC, VPH, LMA, EPH DUP / MS / MSD /
Additional Comments: Pause at 1528, Resume at 1531

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

Personnel: R. Stuart / J. Del Valle

Equipment Used: pump and tubbing dedicated

Date: 9/22/16

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 20.36
Top of Screen (ft from TOC): 10.50
Bottom of Screen (ft from TOC): 20.05
Pump Intake Level (ft from TOC): 9.10
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 11.26 / 1115
Measured DTB (ft from TOC)/Time: 20.36 / ____
Headspace Reading (ppm): ____
Time @ Start Purging: 1129
Time @ Stop Purging: 1158
Time @ Stop Sampling: 1213
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)
1129	11.24	with pump and tubbing installed						
				Start				
1133	11.24	30.56	500	0.00	6.52	75.1	-12.5	100
1138	11.24	29.94	495	1.32	6.51	58.3	-14.1	100
1143	11.24	29.47	495	1.10	6.50	47.5	-16.4	100
1148	11.24	28.68	494	0.88	6.47	42.9	-16.4	100
1153	11.24	28.27	493	0.75	6.46	41.2	-17.2	100
1158	11.24	27.98	491	0.70	6.45	41.0	-18.3	100
			Ready to sample					

Comments:

Sample Time: 1213 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, SVOC, 1-MA, EPH, VPH

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

Personnel: R. Stuart / J. Del Valle

Equipment Used: tubbing, cond, pump dedicated

Date: 9/23/2016.

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 14.30
Top of Screen (ft from TOC): 4.0
Bottom of Screen (ft from TOC): 14.0
Pump Intake Level (ft from TOC): 9.7
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.60 / 1338
Measured DTB (ft from TOC)/Time: 14.30 / ____
Headspace Reading (ppm): ____
Time @ Start Purging: 1344
Time @ Stop Purging: 1416
Time @ Stop Sampling: 1435
Purge Volume (gallons): 3.0

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1344	4.58	31.71	1,291	0.54	6.15	-49.0	136.7	300 ↓
1349	4.59	31.82	1,355	0.45	6.15	-52.5	81.7	150
1354	4.60	31.60	1,338	0.37	6.18	-56.8	27.9	250 ↓
1359	4.60	31.53	1,319	0.35	6.19	-58.6	43.1	200 ↓
1404	4.58	31.56	1,307	0.33	6.20	-58.6	-7.5	50 ↑
1409	4.60	31.46	1,300	0.32	6.21	-58.6	-2.7	300 ↓
1414	4.60	31.62	1,286	0.32	6.23	-60.8	-1.8	150
			Ready to sample					

Comments:

Sample Time: 1435 DUP ____ MS ____ MSD ____ Water Quality/Appearance: slightly turbidad.

Sample Analysis: ____ DUP ____ MS ____ MSD ____

VOC, LMA, SVOC, EPH, VPH

Additional Comments: Sheen was observed while purging.

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 - FTF **Personnel:** N. Rivera / R. Stuart

Equipment Used: dedicated bladder, tubing, cord **Date:** August 23, 2016

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 14.31
Top of Screen (ft from TOC): 4.01
Bottom of Screen (ft from TOC): 14.01
Pump Intake Level (ft from TOC): ~10
Desired Pumping Rate (Lpm):

Well Purging Information:

Measured DTW (ft from TOC)/Time: 1.99 / 1222
Measured DTB (ft from TOC)/Time: (14.31) /
Headspace Reading (ppm):
Time @ Start Purging: 1229
Time @ Stop Purging: 1313
Time @ Stop Sampling: 1352
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)
1229	1.99	After	installing	pump /	hosing	- START		
1233	2.04	32.67	546	0.68	6.62	-38.3	2801 AU	300+
1238	2.03	32.14	542	0.37	6.40	-71.7	1307 AU	250+
1243	2.03	32.21	545	0.27	6.59	-92.3	741 AU	150
1248	2.03	32.59	557	0.20	6.69	-102.1	-60	150
1253	2.04	32.80	563	0.19	6.71	-104.1	35	150
1258	2.03	32.58	563	0.17	6.72	-103.7	28.9	150
1303	2.03	32.38	561	0.17	6.72	-104.2	15.6	150
1308	2.03	32.28	558	0.17	6.72	-105.2	15.2	150
1313	2.03	32.23	557	0.15	6.72	-104.8	14.7	150
			Ready	to sample				

Comments:
Sample Time: 1352 DUP / MS / MSD / Water Quality/Appearance: Slightly cloudy
Sample Analysis: DUP / MS / MSD /

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

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

Personnel: R. Stuart / J. Del Valle

Equipment Used: tubbing, bladder + cord dedicated

Date: 9/23/16

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 20.36
Top of Screen (ft from TOC): 10.6
Bottom of Screen (ft from TOC): 20.6
Pump Intake Level (ft from TOC): 13.29
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 7.31 / 1134
Measured DTB (ft from TOC)/Time: 20.36 / ____
Headspace Reading (ppm): ____
Time @ Start Purging: 1140
Time @ Stop Purging: 1217
Time @ Stop Sampling: 1238
Purge Volume (gallons): 4.0

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1139	7.29		with pump and tubbing installed					
1140			start					
1147	7.34	29.07	1,029	2.17	6.39	83.6	51.7	250
1152	7.34	28.40	1,028	0.77	6.29	45.3	30.4	250
1157	7.34	28.13	1,024	0.63	6.34	32.3	3.6	250
1202	7.33	28.13	1,012	0.53	6.40	24.3	-9.4	300
1207	7.34	28.10	999	0.50	6.42	20.1	-16.4	300
1212	7.37	28.08	991	0.48	6.44	18.2	-17.7	300
1217	7.37	28.08	986	0.48	6.45	16.9	-18.2	
			Ready to sample					

Comments:

Sample Time: 1238 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear

Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

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

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-23

Site Name, Location: BMS. RA- Humacao

Personnel: N. Rivera

Equipment Used: dedicated bladder, tubing, cord decontaminated pump

Date: Sept 22, 2016

Monitoring Well Information:

Diameter/Material: 2 / PVC

Depth to Bottom (ft from TOC): 13.57

Top of Screen (ft from TOC): 3.27

Bottom of Screen (ft from TOC): 13.27

Pump Intake Level (ft from TOC): ~9

Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.76 / 1129

Measured DTB (ft from TOC)/Time: 13.57 / ____

Headspace Reading (ppm): ____

Time @ Start Purging: 1135

Time @ Stop Purging: 1227

Time @ Stop Sampling: 1328

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)
1131 ~~4.73~~	4.73							
1135	START							
1142	4.81	31.97	531	1.31	6.93	174.8	82.4	100
1147	4.88	31.13	477	0.35	6.51	184.9	24.8	300 ↓
1152	4.86	30.99	461	0.25	6.69	158.6	8.49	200
1157	4.86	31.12	464	0.24	6.80	136.2	8.51	200
1202	4.86	31.21	465	0.22	6.82	116.9	7.52	200
1207	4.86	31.34	466	0.21	6.83	89.3	5.71	175
1212	4.86	31.49	469	0.23	6.85	85.1	5.56	175
1227	4.86	31.5	471	0.24	6.85	80.7	5.31	175
			READY	to sample				

Comments:

Sample Time: 1328 DUP ___ MS ___ MSD ___

Water Quality/Appearance: clear w/ red flakes

Sample Analysis: ___ DUP ___ MS ___ MSD ___

VOC, SVOC, VPH, PEST

Additional Comments: Water has brown puffy flakes

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 RS

Site Name, Location: BM 5

Personnel: R. Stuart / J. Del Valle

Equipment Used: ~~Pump~~ MP / tubing / dedicated bladder / cord.

Date: 9/22/2016

Monitoring Well Information:

Diameter/Material: 2" / PVC
Depth to Bottom (ft from TOC): 14.76
Top of Screen (ft from TOC): 4.36
Bottom of Screen (ft from TOC): 14.36
Pump Intake Level (ft from TOC): ~10
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 4.81 / 1300
Measured DTB (ft from TOC)/Time: 14.76 / ____
Headspace Reading (ppm): ____
Time @ Start Purging: 1303
Time @ Stop Purging: 1346
Time @ Stop Sampling: 1417
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)
1303	4.80	with pump and tubing installed						
1306	4.84	30.47	422	3.37	6.69	83.2	22.1	400 ↓
1311	4.84	29.98	429	0.77	6.35	89.7	23.2	250 ↓
1316	4.82	30.33	429	0.70	6.41	99.9	20.1	100
1321	4.86	29.91	429	0.69	6.41	111.0	8.0	250
1326	4.86	29.79	427	0.59	6.38	123.1	-5.8	250
1331	4.86	30.09	428	0.58	6.41	127.9	-13.5	75
1336	4.85	30.19	428	0.66	6.42	130.1	-18.6	200
1341	4.85	30.03	428	0.59	6.41	136.9	-17.8	150
1346	4.85	30.08	429	0.58	6.41	139.3	-18.6	150
			Ready to sample					

Comments:
Sample Time: 1417 DUP ✓ MS ✓ MSD ✓ Water Quality/Appearance: clear w/ flakes
Sample Analysis: ____ DUP ✓ MS ✓ MSD ✓

Additional Comments: VOC, LMA, SVOC, EPA, VPH, 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-21

Site Name, Location: BMS - Bldg 5

Personnel: N. Rivera / R. Stuart

Equipment Used: dedicated bladder, tubing, cord

Date: Sept 23, 2016

Monitoring Well Information:

Diameter/Material: 2 / PVC
Depth to Bottom (ft from TOC): 18.28
Top of Screen (ft from TOC): 9.98
Bottom of Screen (ft from TOC): 19.98
Pump Intake Level (ft from TOC): ~15
Desired Pumping Rate (Lpm): 0.1-0.4

Well Purging Information:

Measured DTW (ft from TOC)/Time: 5.81 / 1508
Measured DTB (ft from TOC)/Time: 18.28 /
Headspace Reading (ppm):
Time @ Start Purging: 15.31
Time @ Stop Purging: 16.05
Time @ Stop Sampling: 16.34
Purge Volume (gallons):

Time	DTW (ft TOC)	Temp (C)	S.Cond (µS/cm)	DO (mg/l)	pH	ORP (mV)	Turbidity (NTU)	Flow (mL/min)
1521	5.79	After						
1531	START							
1540	5.85	30.95	532	2.81	6.65	53.5	14.1	175
1545	5.86	30.27	528	0.63	5.80	91.6	11.8	175
1550	5.86	30.07	528	0.44	6.14	61.4	8.69	175
1555	5.86	30.02	527	0.41	6.29	47.4	6.92	175
1600	5.86	29.89	526	0.42	6.34	41.1	5.68	175
1605	5.86	29.89	526	0.37	6.36	37.9	4.34	175
1610								
			Ready to sample					

Comments:
Sample Time: 1634 DUP ✓ MS 1658 MSD 1717 Water Quality/Appearance: clear
Sample Analysis: DUP MS MSD

Additional Comments: VOC, EPH, LMA, VPH, SVOC
BLADDER EB 092316 @ All/w preservatives

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.**