MW-1 ?

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-1B SAMPLE NO. MW-1B

WELL/SITE DESCRIPTION in small valley - in woods / no 4x4 access

SAMPLING PERSONNEL Rettelvensin

DATE 4/19/19 TIME 710- WEATHER 59, clear

WELL DEPTH 98 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 36.3 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 78-98 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 98 ft PUMP START TIME 720 min (40 min)

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 800 min

SAMPLING METHOD gas-low flow RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/19	725		6.31	108.8	15.3	196.3	354	8.11	36.3	.5
	730		6.16	110	16	200.9	64.3	8.02	36.4	.5
	735		6.15	110.2	16.4	203.1	30.4	7.97	36.5	.5
	740		6.14	110.0	16.4	205.1	14.3	7.91	36.5	.5
	745		6.14	109.6	16.4	207.7	8.2	7.88	36.5	.5
	750		6.13	109.6	16.5	209.6	6.6	7.91	3.65	.5
	755		6.13	109.6	16.5	210.4	6.8	7.86	3.65	.5

COMMENTS No access to well with vehicle.
0.0 methane
Sample time = 7:55

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-2A SAMPLE NO. MW-2A

WELL/SITE DESCRIPTION top of hill - 30 ft off access road / nested with MW-2B

SAMPLING PERSONNEL Peter Kasik

DATE 4/15/19 TIME 1230 WEATHER 50° p.cloudy - windy

WELL DEPTH 78 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 45.9 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 55-75 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 65 ft PUMP START TIME 1245 min (70 min)

PUMP RATE .4 (gpm) (LPM) PUMP END TIME 1355 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/15/19	1250		6.96	73.3	13.7	101.1	22.1	7.67	45.9	.4
	1255		5.83	64.7	13.9	140.6	35.0	7.35	45.9	.4
	1300		5.56	63.4	14.6	155.5	52.4	6.84	45.9	.4
	1305		5.49	64.5	18.1	163.0	67.7	6.20	45.9	.4
	1310		5.41	66.2	18.9	166.9	70.1	5.72	45.9	.4
	1315		5.36	65.4	17.3	180.6	63.3	5.95	45.9	.4
	1320		5.43	69.5	22.4	144.5	26.2	6.03	45.9	.4
	1325		5.32	65.6	18.2	161.6	13.6	7.19	45.9	.4
	1330		5.33	64.6	17.7	172.9	13.3	7.94	45.9	.4
	1335		5.4	63.3	16.5	188.8	12.7	8.01	45.9	.4
	1340		5.46	64.5	15.4	177.7	13.9	8.37	45.9	.4
	1345		5.37	65.5	15.8	183.3	12.9	8.20	45.9	.4
	1350		5.37	65.5	15.6	182.2	9.8	8.15	45.9	.4

1326 — ⚠ issue with pump

COMMENTS Methane = 13.3% - purged for 12 min to 0.0%
cond = SPC
Sample time = 1350

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-2B SAMPLE NO. MW-2B

WELL/SITE DESCRIPTION top of hill off access road nested with MW-2A

SAMPLING PERSONNEL Pete Meaney

DATE 4 / 15 / 19 TIME 1415–1600 WEATHER 50, p.cloudy – windy

WELL DEPTH 110 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 44.8 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 88-108 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 98 ft PUMP START TIME ~~1415~~ ~~1430~~ min 1420 20 mins 1500

PUMP RATE .4 ~~.8~~ LPM (gpm) (LPM) PUMP END TIME 1535 min 1440 –

SAMPLING METHOD Grab / low flow RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

4/15/19 Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
	~~1415~~						~~11.4~~	~~7.96~~	~~44.8~~	~~.5~~ .4
	1425		5.44	58.2	13.9	189.3	11.5	10.30	44.8	.4
	1430		5.32	58.0	14.3	208.2	14.3	9.59	44.8	.4
	1435		5.33	57.9	15.1	215.1	38.7	8.93	44.8	.4
	1440		5.33	57.2	15.4	221.0	42.2	8.63		.4
	1445	recalibrated at 1445 – due to								
	~~1445~~	usual	NTU	readings						cancel
resume purge / start over	1505		5.22	56.8	15.2	223.1	5.1	10.07	44.8	.4
	1510		5.26	56.3	14.9	224.9	8.0	9.79	44.8	.4
	1515		5.23	55.8	15.5	231.9	4.1	9.85	44.8	.4
	1520		5.22	55.6	15.6	237.9	1.4	9.40	44.8	.4
	1525		5.22	55.5	15.7	241.9	5.1	9.30	44.8	.4
	1530		5.22	55.5	15.7	243	2.9	9.37	44.8	.4

COMMENTS Methane at 1.6% – purged to 0.0

SpC = cond

Sample time = 1530

H2 = 146.1 to start

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-3A SAMPLE NO. MW-5A

WELL/SITE DESCRIPTION Wetland Area – next to MW3B

SAMPLING PERSONNEL

DATE 4 / 11 / 19 TIME 1130 – 1255 WEATHER 60's clear

WELL DEPTH 25 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 9. ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 1140 min (50 min)

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 1230 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/11/19	1145		6.61	89.5	12.7	122.4	90.9	8.06	9.0	.5
	1150		6.20	82.7	13.1	136.0	72.3	8.40	9.0	.5
	1155		6.02	72.2	13.4	149.4	44.9	8.56	9.0	.5
	1200		6.00	71.9	13.5	155	31.3	8.52	9.0	.5
	1205		5.99	72.5	13.5	161.6	20.7	8.50	9.0	.5
	1210		5.97	71.5	13.6	166.3	15.3	8.54	9.0	.5
	12:15		5.94	68.2	13.6	170.1	10.8	8.60	9.0	.5
	12:20		5.95	70.5	13.6	173.9	9.5	8.59	9.0	.5
	12:25		5.96	72.0	13.6	175.9	9.4	8.57	9.0	.5

COMMENTS 0.0 % methane
Cond = SPC
Sample time = 12:25

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-3B SAMPLE NO. MW-3B

WELL/SITE DESCRIPTION * Wetland area next to MW-3A

SAMPLING PERSONNEL Reference

DATE 4/11/19 TIME 9:55 - 1130 WEATHER 60's clear

WELL DEPTH 96 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 5.02 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 76-96 (ft bgs) 81

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 81 ft PUMP START TIME 1037 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 1125 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/11/19	10:40		7.92	102.8	12.1	62.4	4.5	9.47	5.02	.4
	1045		7.67	105.9	12.2	70.3	4.1	9.08	5.02	.4
	1050		7.48	236.2	11.6	91.4	14.18	3.83	5.02	.4
	1055		7.36	265.5	11.6	80.6	15.1	2.09	5.02	.4
	1100		7.38	214.8	12.5	60.9	18.2	1.52	5.02	.4
	1105		7.19	210	13	64.4	14.1	2.99	5.02	.4
	1110		6.95	200	12.8	77.6	12.7	3.54	5.02	.4
	1115		6.89	199	12.6	82.6	12.9	3.61	5.02	.4
	1120		6.87	197.5	12.7	84.2	12.8	3.65	5.02	.4

COMMENTS 0.0% methane Conductivity - SPC

Sample Time = ~~1120~~ 11:20

* access very wet - must walk in equipment

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-4 SAMPLE NO. MW-4

WELL/SITE DESCRIPTION wooded area by stream

SAMPLING PERSONNEL P. Yenesik / Jessy Drummond

DATE 4 / 8 / 19 TIME 1430 – 1520 WEATHER 81 - clear

WELL DEPTH 25 ft bgs

WATER DEPTH 6.40 ft TOC

WATER COL. HEIGHT ft

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15' ft

PUMP RATE 0.25 ~~(gpm)~~ (LPM)

SAMPLING METHOD gravity

TOTAL VOL. REMOVED (gal) (L)

CASING HEIGHT 2 ft

WELL DIAMETER 2 in

SCREEN INTERVAL 5-25 (ft bgs) (15)

PUMP START TIME 1443 min

PUMP END TIME 1515 min

RECOVERY TIME N/A min

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ Lpm
4.8	1443	.25 L	6.27	718 SpC 575 C	14.6	115.9	53	0.46	6.66	0.25
	1448		5.87	717	14.9	134.7	24.6	0.38	6.67	0.25
	1453		5.81	721	15.1	146.5	13.3	0.33	6.69	0.25
	1458		5.78	719	15.1	152.2	10.9	0.30	6.70	0.25
	1503		5.77	718	15.0	156.2	8.3	0.29	6.70	0.25
	1508		5.77	718	15.1	158.3	6.3	0.28	6.69	0.25
	1513		5.76	718	15.0	160.3	5.4	0.26	6.69	0.25

COMMENTS 0.0 methane recorded with GEM
Conductivity by SpC vs C
Sample time 1515

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-6 SAMPLE NO. MW-6

WELL/SITE DESCRIPTION near entrance off Gode,

SAMPLING PERSONNEL Pete Peneas

DATE 4/12/19 TIME 1315 WEATHER 60°F/rain

WELL DEPTH 25 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 13.8 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 1330 min

PUMP RATE .5 (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD grab RECOVERY TIME na min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/12/19	1340		5.94	2668	15.0	112.5	148.9	0.39	13.5	.5
	1345		5.92	2458	16.3	103.5	74.1	0.36	13.9	.5
	1350		5.94	2448	16.8	94.3	25.7	0.28	14.00	.5
	1355		5.91	2596	17.0	90.5	15.8	0.21	14.00	.5
	1400		5.89	2673	17.1	88.4	11.1	0.15	14.0	.5
	1405		5.88	2740	17.2	87.8	8.9	0.12	14.0	.5
	1410		5.87	2782	17.2	87.4	7.1	0.10	14.0	.5
	1415		5.86	2817	17.4	87.1	6.6	0.09	14.0	.5
	1420		5.86	2830	17.3	86.8	5.5	0.08	14.0	.5

COMMENTS methane = 0.0
Sample time = 14:20
SPC = cond.

SIGNATURE

M

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-7 SAMPLE NO. MW-7

WELL/SITE DESCRIPTION Utility easement, inside fence, not nested, gate access

SAMPLING PERSONNEL

DATE 4 / 16 / 19 TIME 1035 - WEATHER 50's p.cloudy

WELL DEPTH 53 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 38.9 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 33-53 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 43 ft PUMP START TIME 1055 min

PUMP RATE .4 (gpm) (LPM) PUMP END TIME 1145 min (50 minutes)

SAMPLING METHOD GRA RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/16/19	1100		6.31	1065	16.1	-78.8	44.1	0.57	39.1	.4
	1105		6.02	1092	17.4	-81.8	31.3	0.23	39.1	.4
	1110		6.00	1092	19.2	-85	54.8	0.18	39.1	.4
	1115		5.99	1092	19.3	-85.9	64.3	0.14	39.1	.4
	1120		5.98	1095	19.3	-86.5	33.3	0.12	39.1	.4
	1125		5.99	1090	20.0	-72.9	7.8	0.38	39.1	.4
	1130		5.96	1112	19.6	-80.7	10.4	0.23	39.1	.4
	1135		5.96	1118	19.9	-80.3	10.1	0.21	39.1	.4
	1140		5.96	1109	19.7	-80.8	9.8	0.23	39.1	.4

COMMENTS methane at 0.02% - purged to 0.0
cond = SPC
Sample time = 1140

SIGNATURE

134 Hz-

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-8 SAMPLE NO. MW-8

WELL/SITE DESCRIPTION Near Utility easement, nested with OB 3-OB3M

SAMPLING PERSONNEL Pete Yonsik

DATE 4/16/18 TIME 720-840 WEATHER 50's clear

WELL DEPTH 30 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 16.5 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 10-30 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 20 ft PUMP START TIME 7~~80~~45 min (45 min)

PUMP RATE .5LPM (gpm) (LPM) PUMP END TIME 830 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/16	750		6.59	1856	7.9	199.0	22.1	1.22	16.7	.5
	755		6.83	1827	9.3	144	1.2	~~0.8~~ 0.2	16.7	.5
	800		6.85	1815	9.5	91.1	1.1	0.11	16.7	.5
	805		6.86	1814	9.5	71.8	1.3	0.09	16.7	.5
	810		6.86	1815	9.5	54.2	1.7	0.07	16.7	.5
	815		6.86	1813	10.1	42.9	2.2	0.07	16.7	.5
	820		6.86	1814	10.4	41.0	2.7	0.08	16.7	.5
	825		6.88	1814	10.8	39.2	3.1	0.08	16.7	.5

COMMENTS methane = 0.006
Cond = SPC
Sample time = 8:25

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-9 SAMPLE NO. MW-9

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL Pete Monell

DATE 4 / 16 / 19 TIME 1405 - WEATHER 60's - Sunny

WELL DEPTH ~~25~~ 32.12 ft bgs CASING HEIGHT ~~2~~ Plus 4 ft

WATER DEPTH 14.25 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 14-23 min (57 min)

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 1520 min

SAMPLING METHOD RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM	
4/16/19	1425		5.40	167.6	15.9	158.7	352.2	6.06	14.25	.5	LPM
	1430		5.28	159.1	17.4	172.3	144	5.55	14.25	.5	
	1435		5.27	163.3	17.4	182.2	67.8	5.47	14.25	.5	
	1440		5.27	169.1	~~15.4~~ 15.5	186	71.5	5.49	14.25	.5	LPM
	1445		5.26	159	18.9	191.6	135	5.45		.5	
	1450		5.25	158.9	18.6	195.4	25.2	5.51		.5	
	1455		5.26	161.4	17.8	201.4	21.7	5.60		.5	
	1500		5.24	154	19.1	201.3	8.4	5.51		.5	
	1505		5.26	161.0	18.2	203.4	12.2	5.43		.5	
	1510		5.26	159.3	19.8	201.8	8.3	5.36		.5	
	1515										

COMMENTS Methane = 0.0

Cond = SPC

Sample time - 1510

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-10 SAMPLE NO. MW-10
WELL/SITE DESCRIPTION near SWM Pond behind residences
SAMPLING PERSONNEL Pete Yenge

DATE 4/19/19 TIME 830 – WEATHER 59 p. cloudy

WELL DEPTH 25 ft bgs CASING HEIGHT ~~2~~ flush ft
WATER DEPTH 2.6 ft WELL DIAMETER 2 in
WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)
EQUIVALENT VOLUME OF STANDING WATER (gal) (L)
PUMP DEPTH 15 ft PUMP START TIME 850 min
PUMP RATE .4 (gpm) (LPM) PUMP END TIME min
SAMPLING METHOD grab - low flow RECOVERY TIME min
TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/19/	855		5.87	175.7	11.3	182.0	554.	0.49	4.05	.4
	900		5.86	176	12.0	164.7	185	0.37	4.35	.4
	905		5.87	176.2	12.7	157.0	80.1	0.31	4.35	.4
	910		5.87	176.6	12.9	154.2	56.2	0.29	4.35	.4
	915		5.87	177.0	13.0	151.5	46.	0.56	4.35	.4
	920		5.87	177.4	13.1	149.3	37.5	0.31	4.35	.4
	925		5.87	177.8	13.1	147.9	40.3	0.33	4.35	.4
	930		5.87	178.0	13.1	145.9	33.8	0.34	4.35	.4
	935		5.87	178.2	13.2	144.7	35.6	0.36	4.35	.4
	940		5.87	179.0	13.3	143.9	23.9	0.36	4.35	.4
	945		5.87	176.0	13.2	142.8	27.5	0.40	4.35	.4
	950		5.87	176.0	12.9	140.8	24.0	0.53	4.35	.4
	955		5.87	176.5	12.9	139.6	31.3	0.51	4.35	.4

COMMENTS Gem CH_4 = 0.0 %
SPC = cond
Sample time 10:15

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-10 SAMPLE NO. MW-10

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM (Lpm)
4/18/19	1000		5.87	179.8	13.2	139.3	17.1	0.45	4.35	0.4
	1005		5.87	180.2	13.3	139.0	14.6	0.46	4.35	0.4
	1010		5.87	180.8	13.3	138.6	12.2	0.46	4.35	0.4
	1015		5.87	108.8	13.3	138.5	9.8	0.46	4.35	0.4
	1020									

COMMENTS Sample time 10:15

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-11A SAMPLE NO. MW-11A

WELL/SITE DESCRIPTION in residential area, near Swm pond.

SAMPLING PERSONNEL Pete Giancili

DATE 4/17/19 TIME 1245 - 1330 WEATHER 60s - Sunny

WELL DEPTH 30 ft bgs CASING HEIGHT ~~[illegible]~~ flush ft

WATER DEPTH 14.27 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 10-30 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 20 ft PUMP START TIME 1245 min

PUMP RATE .4 (gpm) (LPM) PUMP END TIME 1320 min

SAMPLING METHOD grab - low flow RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/17	1250		6.43	261	13.1	218	43.1	6.02	14.27	.4
	1255		6.27	257.7	13.2	160.2	17.3	3.99	14.75	
	1300		6.26	259	13.3	155.9	10.6	3.77	14.75	
	1305		6.26	257.2	13.4	154.6	6.2	3.68	14.75	
	1310		6.27	257.2	13.4	155.2	6.4	3.66	14.75	
	1315		6.27	257.1	13.4	155.7	5.9	3.63	14.75	

COMMENTS D.O Methane

Sampled at 1315

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-11B SAMPLE NO. MW-11B
WELL/SITE DESCRIPTION Residential Area, next to MW11A
SAMPLING PERSONNEL Pete Yansic

DATE 4/17/19 TIME 1030-1250 WEATHER 60's - Sunny

WELL DEPTH 93 ft bgs CASING HEIGHT flush ft
WATER DEPTH 11.3 ft WELL DIAMETER 2 in
WATER COL. HEIGHT ft SCREEN INTERVAL 73-93 (ft bgs)
EQUIVALENT VOLUME OF STANDING WATER (gal) (L)
PUMP DEPTH 83 ft PUMP START TIME 1050 min
PUMP RATE .3 (gpm) (LPM) PUMP END TIME 1250 min (2hors)
SAMPLING METHOD grab low flow RECOVERY TIME — min
TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/17	1050		5.94	84.5	12.9	153.2	241	8.71	11.5	.3
	1055		5.75	83.6	13.5	168.1	251	8.64	11.8	
	1100		5.72	83.7	14.1	168.5	308	8.58	12.1	
	1105		5.70	85.7	14.9	170.7	258.8	8.50	12.3	
	1110		5.69	85.9	15.1	173.8	247	8.43	12.3	
	1115		5.68	86.2	15.3	178.4	174	8.41	12.3	
	1120		5.67	86.9	15.3	183.8	139.2	8.36	12.35	
	1125		5.66	88.4	15.4	188.5	134.0	8.35	12.36	
	1130		5.66	88.8	15.8	191.1	147.0	8.34	12.37	
	1135		5.65	90.4	15.3	198.2	138.6	8.26	12.4	
	1140		5.65	92.9	15.4	199.8	83.3	8.40	12.8	
	1145		5.64	89.6	14.7	203.3	75.8	8.32	13.1	
	1150		5.63	94.8	15.0	202.9	66.8	8.27	13.5	

COMMENTS See attached for purge info
0.0% methane
Sampl time = 12:45

SIGNATURE

(Continued)

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-11B SAMPLE NO. MW-11B

WELL/SITE DESCRIPTION Residential Area, next to MW1CA

SAMPLING PERSONNEL Pete Yanosik

DATE 4/17/19 TIME 1030-1250 WEATHER 60's - Sunny

WELL DEPTH 93 ft bgs CASING HEIGHT flush ft

WATER DEPTH 11.3 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 73-93 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 83 ft PUMP START TIME 1050 min

PUMP RATE .3 (gpm) (LPM) PUMP END TIME 1250 min (2hrs)

SAMPLING METHOD grab-low flow RECOVERY TIME — min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/17	1155		5.64	95.8	15.2	210.1	70	8.27	13.5	.3
	1200		5.63	99	15.2	212.2	33.6	8.24	13.4	
	1205		5.63	98.8	15.2	214.2	78.7	8.24	13.2	
	1210		5.63	99.5	15.2	215.9	34.2	8.24	13.2	
	1215		5.63	96.8	15.2	217.1	40.8	8.27	13.2	
	1220		5.63	97.6	15.11	219.8	37.7	8.34	13.2	
	1225		5.63	99.4	15.2	221.6	22.1	8.32	13.2	
	1230		5.63	99.1	15.2	222.6	25.4	8.31	13.2	
	1235		5.63	89.3	14.3	224.3	37.5	8.55	13.2	
	1240		5.63	89.4	14.2	224.5	43	8.58	13.2	
	1245		5.63	89.4	14.3	224.7	38.5	8.58	13.2	

COMMENTS See attached for purge info
0.0% methane
Sampl time = 12:45

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

.13

WELL ID MW-12 SAMPLE NO. MW-12

WELL/SITE DESCRIPTION middle of cold-de-sac

SAMPLING PERSONNEL Peter Yencil

DATE 4/16/19 TIME 12:15 - ~~1305~~ 1405 WEATHER 60s - p. cloudy

WELL DEPTH ~~25~~ 23.5 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 8.21 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 1236 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1355 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~
4/16/19	1240		6.60	1011	14.6	59.4	142.2	7.09	8.23	.5 LPM
	1245		5.39	1068	15.4	101.0	131.9	6.24	8.23	.5
	1250		5.30	1069	15.7	119.6	82.7	6.36	8.23	.5
	~~1300~~ 1255		5.27	1074	15.9	130.9	75.4	6.37	8.23	.5
	1300		5.24	1083	16.2	138.7	63.2	6.36	8.23	.5
	1305		5.38	1037	15.8	141.2	62.	6.0	8.23	.5
	1310		5.23	1082	15.7	147.8	80.7	6.12	8.23	.5
	1315		5.22	1089	16.5	152.6	30.2	6.29	8.23	.5
	1320		5.33	1057	15.6	153.9	32.6	6.12	8.25	.5
	1325		5.17	1092	16.3	163.3	30.2	6.27	8.25	.5
	1330		5.24	1083	16.0	163.8	24.2	6.19	8.25	.5
	1335		5.31	1073	16.3	166.8	20.2	6.22	8.25	.5
	1340		5.33	1062	15.8	170.8	15.5	6.38	8.25	.5
	1345		5.51	1014	15.8	168.1		6.35	8.25	.5
	1350		5.20	1120	15.5	170.2	9.8	6.30	8.25	.5

COMMENTS Methane = 0.0.

Cond = SPC

Sample time = 13:50

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-13A SAMPLE NO. MW-13A

WELL/SITE DESCRIPTION Next to 13-B. Near stream meander in woods

SAMPLING PERSONNEL Pete Yencik

DATE 4 / 9 / 19 TIME 1640 WEATHER 70's - Clear

WELL DEPTH 25 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 7.0 ft WELL DIAMETER 2 in

WATER COL. HEIGHT 18 ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 1650 min (30 min)

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1740 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED _____ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9/19	1655		5.27	330.5	11.2	138.2	101.4	0.29	7.0	.5
	1700		5.16	355.7	12.8	150.3	10.8	0.10	7.0	
	1705		5.16	359.2	13.1	157.7	8.0	0.05	7.0	
	1710		5.17	366.2	13.1	158.7	18.0	0.4	7.0	
	1715		5.18	387	13.2	144.4	21	04	7.0	
	1720		5.18	389.3	13.1	139	21.7	0.03	7.0	
	1725		5.17	394.2	13.3	137.9	22.2	0.03	7.0	
	1730		5.17	396.5	13.2	138.2	22.5	0.03	7.0	
	1735		5.17	396	13.2	138.4	23.0	0.03	7.0	

COMMENTS 0.0% methane /
Cond = SPC
Sample time = 1735

SIGNATURE

Field Dup

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-13B SAMPLE NO. MW-15D * Field Duplicate 1 (OB-30)

WELL/SITE DESCRIPTION Next to Stream / wooded area, Next to 13-B

SAMPLING PERSONNEL Pete Yeresik

DATE 4 / 9 / 2019 TIME 1530 - 1640 WEATHER 73 - clear

WELL DEPTH 95 ft bgs CASING HEIGHT 2 ft

WATER DEPTH 4.82 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 75-95 (ft bgs) (8)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 85 ft PUMP START TIME 1540 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1630 min (50 min)

SAMPLING METHOD Grab RECOVERY TIME min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9/19	1540		5.98	952	13.1	122.5	9.5	0.30	4.82	.5
	1545		5.95	952	13.1	124.9	6.3	0.21	4.86	
	1550		5.95	950	13.3	126.2	3.2	0.15	4.9	
	1555		5.96	947	13.4	126.1	2.3	0.08	4.9	
	1600		5.96	948	13.4	126.1	2.3	0.06	4.9	
	16:05		5.96	947	13.5	126.1	2.3	0.05	4.9	
	16:10		5.96	949	13.4	126.2	2.3	0.04	4.9	
	16:15		5.96	949	13.4	126.5	2.3	0.03	4.9	
	16:20		5.96	949	13.5	127	2.2	0.03	4.9	
	16:25		5.96	949	13.5	127.1	2.3	0.03	4.9	

COMMENTS methane = 0.0 %

* Field duplicate #1 listed on C.O.C as OB-30 * (no sample time on COC.)

*Conductivity = 9PC µS/cm / sample time is 16:25 *

SIGNATURE Pete Yeresik

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-14A SAMPLE NO. MW-14A

WELL/SITE DESCRIPTION edge of odd de sack with MW143 in front of empty lo

SAMPLING PERSONNEL Pete Yencsik

DATE 4/18/19 TIME 1225 WEATHER 21, sunny

WELL DEPTH 40 ft bgs CASING HEIGHT flush ft

WATER DEPTH 13.4 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 30-40 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 35 ft PUMP START TIME 1230 min

PUMP RATE .4 (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD grab - low flow RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/18	1235		5.39	792	15.8	170.6	1220	7.6	13.4	.4
	1240		5.32	786	16.7	185.8	760	7.5	13.4	.4
	1245		5.31	799	17.0	195.7	523	7.53	13.4	.4
	1250		5.31	801	17.2	201.6	389	7.53	13.4	.4
	1255		5.31	795	17.3	205.6	326	7.51	13.4	.4
	1300		5.31	792	17.3	207.5	260	7.50	13.4	.4
	1305		5.32	783	17.4	211.0	130	7.45	13.4	.4
	1310		5.32	785	17.4	213.1	99	7.43	13.4	.4
	1315		5.33	763	17.4	215.4	109.	7.37	13.4	.4
	1320		5.33	753	17.4	216.5	38.8	7.33	13.4	.4
	1325		5.34	737	17.4	218.6	38.6	7.30	13.4	.4
	1330		5.34	741	17.4	220	50.9	7.29	13.4	.4
	1335		5.34	736	17.4	222.3	25.8	7.27	13.4	.4

COMMENTS 0.0 methane
cond = SPC
Sample time = 1400

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-14A SAMPLE NO. MW-14A

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM (LPM)
4/18/19	1340		5.35	725	17.4	223.3	15.8	7.24	13.4	0.4
	1345		5.34	729	17.4	224.9	14.8	7.24	13.4	0.4
	1350		5.34	735	17.4	226.1	15.1	7.25	13.4	0.4
	1355		5.35	727	17.3	227.4	11.0	7.22	13.4	0.4
	1400		5.35	731	17.3	228.1	8.2	7.22	13.4	0.4

COMMENTS Maps of locations are slightly off. Well in Cal-de-sac, in front of empty lot
Sample time - 1400

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-14B SAMPLE NO. MW-14B

WELL/SITE DESCRIPTION in cul-de-sac at end of road / infront of open lot

SAMPLING PERSONNEL Pete Yenesh

DATE 4/18/19 TIME 1130-1225 WEATHER 60s, sunny

WELL DEPTH 98 ft bgs CASING HEIGHT flush ft

WATER DEPTH 15.1 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 88-98 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 92 ft PUMP START TIME 1155 min

PUMP RATE .5 (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD Grab - low flow RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/18	1155		6.81	222.3	15.6	65.1	25.1	5.60	15.15	.5
	1200		5.87	214.9	14.9	115.4	7.4	5.14	15.15	.5
	1205		5.83	214.1	14.9	128.4	25.5	5.13	15.15	.5
	1210		5.82	214.0	15.0	135.6	10.8	5.12	5.15	.5
	1215		5.81	213.6	15.0	142.6	7.4	5.11	5.15	.5
	1220		5.81	213.9	15.0	147.8	6.2	5.11	5.15	.5

COMMENTS Methane = 0.0 %
cond = SPC
Sample time = 1220

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-15 SAMPLE NO. MW-15

WELL/SITE DESCRIPTION in road/ infront of 15428 - residence

SAMPLING PERSONNEL Peter Yanosik

DATE 4/18/19 TIME 1425 → WEATHER 70's clear

WELL DEPTH 40 ft bgs CASING HEIGHT ~~na~~ flush ft

WATER DEPTH 9.2 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 30-40 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 35 ft PUMP START TIME 1440 min

PUMP RATE .5 (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD grab / low flow RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~
4/18	1445		5.59	214.2	15.7	204.0	1432.1	4.82	9.5	.5 LPM
	1450		5.55	214.1	15.9	210.2	1196.	4.86	9.5	.5
	1455		5.55	214.2	16.3	214.6	789	4.74	9.5	.5
	1500		5.55	213.9	16.3	217.6	600.6	4.72	9.5	.5
	1505		5.54	213.8	16.4	220.2	463	4.71	9.5	.5
	1510		5.54	213.7	16.4	221.7	373.3	4.70	9.5	.5
	1515		5.54	213.9	16.4	222.7	317.9	4.69	9.5	.5
	1520		5.53	214.0	16.5	223.6	267	4.69	9.5	.5
	1525		5.53	214.1	16.5	225.4	254.0	4.72	9.5	.5
	1530		5.53	214.3	16.5	226.4	239.8	4.72	9.5	.5
	1535		5.53	215	16.7	225.9	189.1	4.72	9.5	.5
	1540		5.53	214.1	16.7	226.6	181.5	4.72	9.5	.5
	1545		5.53	214.4	16.7	227.2	254.4	4.72	9.5	.5

COMMENTS 0.0 ppm throughout
Cond = SPC
Sample time = 1640
Located in Road
Infront of
house # 15428

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-15 SAMPLE NO. MW-15

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM (Lpm)
4/18/19	1550		5.53	214.2	16.7	227.8	190	4.71	9.5	0.5
	1555		5.53	214.4	16.6	228.5	172	4.72	9.5	0.5
	1600		5.53	214.3	16.7	229.3	141	4.72	9.5	0.5
	1605		5.53	214.2	16.7	230.0	125.4	4.72	9.5	0.5
	1610		5.53	214.0	16.7	230.7	124.6	4.79	9.5	0.5
	1615		5.53	214.0	16.6	231.1	141.0	4.79	9.5	0.5
	1620		5.53	214.0	16.6	231.8	130.2	4.70	9.5	0.5
	1625		5.53	214.1	16.6	232.3	97.9	4.70	9.5	0.5
	1630		5.53	214.1	16.6	232.6	132.0	4.70	9.5	0.5
	1635		5.53	213.8	16.6	233.2	309	4.70	9.5	0.5
	1640		5.52	215.4	16.6	233.5	203	4.68	9.5	0.5

COMMENTS Sample time 1640

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

TAG # MO-16-0242

WELL ID MW-16A SAMPLE NO. MW-16A

WELL/SITE DESCRIPTION on hill by access road, inside fence.

SAMPLING PERSONNEL Pete Yenesch

DATE 4 / 9 / 2019 TIME 1210-1400 WEATHER 70's clear.

WELL DEPTH ~~25~~ 65 ft bgs

WATER DEPTH 41.56 ft

WATER COL. HEIGHT ____ ft

EQUIVALENT VOLUME OF STANDING WATER ____ (gal) (L)

PUMP DEPTH ~~30~~ 55 ft

PUMP RATE .5 LPM (gpm) (LPM)

SAMPLING METHOD grab

TOTAL VOL. REMOVED ____ (gal) (L)

CASING HEIGHT 3 ft

WELL DIAMETER 2 in

SCREEN INTERVAL ~~5-25~~ (ft bgs)

PUMP START TIME 1237 min

PUMP END TIME 1354 min

RECOVERY TIME ____ min

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9/19	12:45		6.07	706	18.8	17.7	170.2	.33	42.0	.5
	1250		6.10	722	19.3	9.5	153	.28	42.25	
	1255		6.12	731	20.2	-2.2	73.8	.21	42.35	
	1300		6.13	733	20.3	-4.9	58.7	.18	42.56	
	1305		6.14	739	20.4	-8.6	44.4	.16	42.56	
	1310		6.15	748	20.6	-12.6	39.9	.14	42.56	
	1315		6.16	752	20.8	-15.4	40.6	.13	42.56	
	1320		6.16	749	20.8	-17.3	52.6	.14	42.56	
	1325		6.17	753	20.7	-19.8	56.9	.13	42.56	
	1330		6.16	751	20.9	-19.9	64.6	.13	42.56	
	1335		6.17	754	20.5	-20.0	35.2	.13	42.56	
	1345		6.15	742	21.5	-19.7	37.5	.13	42.56	
	1350		6.16	746	21.3	-20.8	36.4	.13	42.56	

COMMENTS Well Construction shows 25' depth - actual depth is 65'. Methane at 0.0%. Conductivity = SPC µS/cm

Sample time = 13:50

SIGNATURE

MW-13A-MW-13B

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-16B SAMPLE NO. MW-16B

WELL/SITE DESCRIPTION on hill by utility easement, next to MW-16A

SAMPLING PERSONNEL Pete Yancsik

DATE 4 / 9 / 2019 TIME 1405 - 1510 WEATHER 73- partly cloudy

WELL DEPTH 100 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 41.8 ft WELL DIAMETER 2 in

WATER COL. HEIGHT 58.2 ft SCREEN INTERVAL 80-100 (ft bgs) (90)

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP DEPTH 90 ft PUMP START TIME 1410 min (50 min)

PUMP RATE .5 L (gpm) (LPM) PUMP END TIME 1500 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED _____ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9	1415		6.11	1118	17.8	78.6	72.9	1.23	41.8	.5
	1420		5.91	1204	17.7	84.5	18.5	0.35	41.8	
	1425		5.9	1194	18.7	85.3	10.4	0.24	41.8	
	1430		5.93	1201	19.0	85.7	7.9	0.17	41.8	
	1435		5.94	1204	19.2	85.5	6.1	0.13	41.8	
	1440		5.94	1201	19.3	84.9	4.9	0.11	41.8	
	1445		5.94	1194	19.4	84.1	4.3	0.09	41.8	
	1450		5.94	1194	19.4	83.4	3.8	0.09	41.8	
	1455		5.94	1174	19.4	83.2	3.7	0.09	41.8	

COMMENTS methane = 0.0%
Conductivity = SPC µS/cm²
Sample time = 14:55

SIGNATURE [signature]

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-19A SAMPLE NO. MW-19A
WELL/SITE DESCRIPTION outside stormwater pond, near gate
SAMPLING PERSONNEL Pete Yencik

DATE 4/12/19 TIME 1050-1210 WEATHER 65, partly cloudy

WELL DEPTH 30 ft bgs CASING HEIGHT 3 ft
WATER DEPTH 4.25 ft WELL DIAMETER 2 in
WATER COL. HEIGHT ft SCREEN INTERVAL 10-20 (ft bgs)
EQUIVALENT VOLUME OF STANDING WATER (gal) (L)
PUMP DEPTH ~~[illegible]~~ 20 ft PUMP START TIME 1055 min
PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1215 min
SAMPLING METHOD grab RECOVERY TIME NA min
TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/12	1100		5.94	1185	13.6	137.5	238.1	0.47	4.25	.5
	1105		5.76	1176	13.8	140.8	385	0.30	4.25	.5
	1110		5.73	1167	13.8	148.7	280.0	0.24*	4.25	.5
	1115		5.72	1178	14.1	155.6	136.0	0.22*	4.25	.5
	1120		5.72	1179	14.1	160.5	107.0	0.18*	4.25	.5
	1125		5.72	1185	14.2	164.9	68.3	0.15	4.25	.5
	1130		5.71	1187	14.2	167.9	71.8	0.14	4.25	.5
	1135		5.71	1188	14.2	171.3	65.2	0.13	4.25	.5
	1140		5.71	1189	14.2	173.6	43.8	0.12	4.25	.5
	1145		5.71	1190	14.2	177.3	23.9	0.11	4.25	.5
	1150		5.71	1189	14.3	177.9	19.6	0.12	4.25	.5
	1155		5.71	1190	14.4	178.6	11.5	0.12	4.25	.5
	1200		5.71	1191	14.4	180.9	13.1	0.11	4.25	.5

COMMENTS 0.0% methane
Cond = SpC
sample time = 1210

SIGNATURE

	V	pH	Cond	temp	ORP	turb	DO	Depth	Pump Rate
1205		5.71	1192	14.4	181.0	10.2	0.11	4.25	.5
1210		5.71	1192	14.4	181.1	9.7	0.11	4.25	
1215									
1220									

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-19B SAMPLE NO. MW-19B

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL

DATE 4/12/19 TIME 1210-1315 WEATHER 60's partly cloudy

WELL DEPTH ~~100~~ 80 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 3.42 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ~~[illegible]~~ N/A ft SCREEN INTERVAL 80-100 (ft bgs) ?

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 77 ft PUMP START TIME 1220 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 1302 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/12/19	1222		5.96	923	14.0	179.0	253.1	0.77	3.6	.4
	1228		5.92	915	13.7	165.9	85.3	0.21	3.6	.4
	1232		5.96	899	13.8	159.0	67.1	0.15	3.6	.4
	1238		5.97	898	13.7	157.2	45.3	0.14	3.6	.4
	1242		5.95	904	13.7	156.2	26.7	0.17	3.6	.4
	1248		5.95	906	13.9	156.1	15	0.08	3.6	.4
	1252		5.95	906	13.9	156.3	9.1	0.06	3.6	.4
	1258		5.95	906	14.0	156.4	8.1	0.06	3.6	.4

COMMENTS methane = 0.0%

★ Actual depth measured is 80' — set pump at 77 feet 1215 1258 Sample time

SIGNATURE

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WELL PURGING AND SAMPLING RECORD

WELL ID MW-21A SAMPLE NO. MW-21A

WELL/SITE DESCRIPTION ~~dis~~ base of sideslope, nested wit MW21B. 60' from stream

SAMPLING PERSONNEL Pete Yencesh

DATE 4 / 18 / 19 TIME 715–825 WEATHER ~~60's~~ 55 - cloudy

WELL DEPTH 25 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 5.35 ft WELL DIAMETER 2" in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 18 ft PUMP START TIME 730 min (45 min)

PUMP RATE .4 (gpm) (LPM) PUMP END TIME 815 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/18	735		6.32	1416	11.1	14.6	233.8	0.50	5.65	.4
	740		6.30	1412	11.3	3.9	64.8	0.26	5.72	.4
	745		6.30	1421	11.5	3.0	29.6	0.23	5.75	.4
	750		6.30	1422	11.8	1.8	18.1	0.20	5.75	.4
	755		6.30	1421	11.9	1.0	14.0	0.18	5.75	.4
	800		6.29	1420	12.0	1.2	11.5	0.16	5.75	.4
	805		6.29	1417	12.1	1.7	9.0	0.15	5.75	.4
	810		6.29	1417	12.1	1.7	8.7	0.15	5.75	.4

COMMENTS Methane = 0.0 %
Cond is SPC -
Sample time = 810

SIGNATURE

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WELL PURGING AND SAMPLING RECORD

WELL ID MW-21B SAMPLE NO. MW-21B

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL Pete Yenerel

DATE 4/18/19 TIME 825 WEATHER 54 ~~[illegible]~~ partly cloudy

WELL DEPTH 100 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 4.6 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 80-100 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 72 ft PUMP START TIME 830 min (120min)

PUMP RATE .3 LPM (gpm) (LPM) PUMP END TIME 1033 min

SAMPLING METHOD RECOVERY TIME min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/18	833		6.69	1478	13.0	-83.6	311.2	0.56	4.6	.3
	838		6.69	1489	12.7	-97	366	0.24	6.9	.3
	843		6.70	1491	12.7	-101.2	309	0.19	7.4	.3
	848		6.70	1489	12.5	-104.4	470	0.15	8.3	.3
	853		6.71	1488	12.6	-107.3	195.2	0.10	9.3	.3
	858		6.71	1487	12.6	-108.5	231	0.09	9.8	.3
	903		6.70	1481	12.7	-108.6	403.4	0.08	10.9	.3
	908		6.69	1475	12.7	-107.3	281	0.10	11.8	.3
	913		6.67	1461	12.8	-105.4	626	0.11	13.0	.3
	918		6.65	1459	13.7	-104.2	357.0	0.08	16.0	.3
	923		6.63	1452	13.6	-102.8	123.6	0.09	17.1	.3
	928		6.62	1443	13.4	-100.9	77.3	0.11	17.9	.3
	933		6.60	1432	13.4	-98.2	69.5	0.13	18.7	.3

COMMENTS 0.0% methane
cond = SPC.
Sample time
water column drops
must keep up
H2 as well drops to maintain even flow.

SIGNATURE

EA Engineering, Science, and Technology, Inc.

already pursed on different log

WELL PURGING AND SAMPLING RECORD

WELL ID ~~OB07~~ MW-21B (continued SAMPLE NO. MW-21B (continued

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL

DATE 4 / 18 / 19 TIME WEATHER

WELL DEPTH 81 ft bgs CASING HEIGHT 3 ft

WATER DEPTH ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 31-81 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH ft PUMP START TIME min

PUMP RATE (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD RECOVERY TIME min

TOTAL VOL. REMOVED (gal) (L)

MW 21B (continued)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
	938		6.58	1419	13.5	-95	64.1	0.15	19.5	.3
	943		6.56	1399	13.6	-92.3	83.8	0.14	20.8	.3
	948		6.54	1384	13.8	-89.8	53.5	0.16	21.6	.3
	953		6.52	1367	13.7	-87.2	33.3	0.14	23.1	.3
	958		6.51	1358	13.7	-85.3	28.2	0.15	23.9	.3
	1003		6.50	1352	13.8	-84.0	27.5	0.16	24.5	.3
	1008		6.50	1347	13.7	-83.0	27.0	0.17	25.35	.3
	1013		6.49	1340	13.9	-82.0	25.2	0.17	26.2	.3
	1018		6.49	1335	14.0	-81.3	24.8	0.17	26.95	.3
	1023		6.49	1332	14	-80.6	22.2	0.18	27.9	.3
	1028		6.49	1329	14.1	-79.9	24.4	0.19	28.5	.3
	1033		6.49	1324	14.2	-79.4	25.1	0.19		.3

COMMENTS

Sample time - 1033

SIGNATURE

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WELL PURGING AND SAMPLING RECORD

WELL ID MW-22A SAMPLE NO. MW-22A

WELL/SITE DESCRIPTION nested with 22-B wooded across stream from industrial area

SAMPLING PERSONNEL Pete Yenesk

DATE 4 / 10 / 19 TIME 1145 – 1300 WEATHER 63° - clear

WELL DEPTH 25 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 5.21 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 5-25 (ft bgs) (15)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 15 ft PUMP START TIME 12:05 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 1300 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/10/19	12:10		7.30	1362	13.0	-39.5	50.5	0.58	5.34	.4
	12:15		6.64	1365	13.6	-38.2	8.0	0.23	5.35	.4
	12:20		6.57	1344	13.5	-33.7	8.4	0.14	5.35	.4
	12:25		6.53	1329	13.6	-30.7	6.8	0.11	5.38	.4
	12:30		6.50	1315	13.5	-28.1	6.7	0.08	5.4	.4
	12:35		6.49	1306	13.5	-25.8	6.6	0.05	5.4	.4
	12:40		6.48	1302	13.6	-24.4	6.6	0.03	5.4	.4
	1245		6.47	1296	13.5	-22.4	6.3	0.03	5.4	.4
	1250		6.47	1291	13.5	-21.3	6.5	0.02	5.4	.4
	1255		6.46	1291	13.5	-20.9	6.5	0.02	5.4	.4

COMMENTS Methane = 0.0 %
Cond is SPC ~~vs Con~~
Sample time = 12:55

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-22B SAMPLE NO. MW-22B

WELL/SITE DESCRIPTION near stream + MW-22-A - by industrial area

SAMPLING PERSONNEL Pete Yencsik

DATE 4/10/19 TIME 1300 WEATHER 64° clear

WELL DEPTH 100 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 5.04 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ~~0~~ ft SCREEN INTERVAL 80-100 (ft bgs) (20)

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP RATE .3 LPM (gpm) (LPM) PUMP START TIME 1315 min

PUMP DEPTH 90 ft PUMP ~~START~~ END TIME 1400 min

SAMPLING METHOD Grab RECOVERY TIME NA min

TOTAL VOL. REMOVED _____ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/10/19	1315		7.14	1167	14.1	-56.8	10	0.46	5.00	.3
	1320		6.99	1167	14.4	-57.8	8.1	0.33	5.00	.3
	1325		6.93	1171	15.2	-59.4	7.1	0.30	5.	.3
	1330		6.93	1174	15.3	-59.6	7.3	0.27	5	.3
	~~1335~~		~~6.92~~	~~1176~~	~~15.5~~	~~-60.3~~	~~7.5~~	~~0.27~~		PAY
	1335		6.91	1177	15.5	-60.5	6.8	0.28	5	.3
	1340		6.91	1175	15.0	-59.8	6.4	0.33	5	.3
	1345		6.90	1167	15.3	-57.4	6.0	0.36	5	.3
	1350		6.90	1162	15.4	-57.1	6.0	0.37	5	.3

COMMENTS Methane = 0.0%
Cond is SPC.
Sample time = 1350

SIGNATURE [signature]

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-23A SAMPLE NO. MW-23A
WELL/SITE DESCRIPTION on road next to MW-23B
SAMPLING PERSONNEL Pepe Yencul

DATE 4/15/19 TIME 725-955 WEATHER 50's - cloudy - windy - post a.m. storms

WELL DEPTH ~~30~~ 46.45 ft bgs CASING HEIGHT flush ft
WATER DEPTH 23.62 ft WELL DIAMETER 2 in
WATER COL. HEIGHT ft SCREEN INTERVAL 10-30 (ft bgs) ?
EQUIVALENT VOLUME OF STANDING WATER (gal) (L)
PUMP DEPTH 40 ft PUMP START TIME 750 min
PUMP RATE .4 (gpm) (LPM) PUMP END TIME 953 min
SAMPLING METHOD grab RECOVERY TIME N/A min
TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/15/19	755		5.48	425	14.4	128.4	783	2.22	24	.4
	800		5.38	429.6	15.7	142.5	440	2.29		.4
	805		5.35	426.5	16.1	160.4	331	2.05		.4
	810		5.33	432.4	16.2	173.7	315	1.99		.4
	815		5.32	431.9	16.2	179.5	256	1.99		.4
	820		5.32	429	16.5	183.4	241.6	1.84		.4
	825		5.31	429.5	16.3	192.1	156	1.91		.4
	830		5.32	425.9	16.4	196.6	214	1.67		.4
	835		5.31	426.2	16.6	202.1	159.8	1.71		.4
	840		5.30	427.5	16.2	211.2	155.5	1.80		.4
	845		5.27	433.4	15.9	220.5	160.1	1.93		.4
	850		5.27	432.2	15.9	227.8	154.1	1.79		.4
	855		5.27	432.0	15.9	232.9	123.1	1.79		.4

COMMENTS Methane = 0.0% / well depth is 46.45 - screen is ?
1 bolt on lid needs replaced
Cond is SPC - Sample time = 9:50

SIGNATURE

over

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-23A SAMPLE NO. MW-23A

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM (lpm)
4/15/19	900		5.29	434.5	15.9	238.9	142.8	1.79		0.4
	905		5.26	432.2	15.9	246.7	127.1	1.79		0.4
	910		5.27	427.9	16.0	252.1	126.5	1.74		0.4
	915		5.27	428	16.1	257.0	124.6	1.72		0.4
	920		5.27	430.8	16.0	259.9	115.1	1.74		0.4
	925		5.27	435.8	16.1	266.4	173.3	1.73		0.4
	930		5.28	431.8	16.2	268.9	110.2	1.68		0.4
	935		5.27	434.4	16.0	274.1	119.4	1.78		0.4
	940		5.27	434.5	16.1	278.4	126.2	1.80		0.4
	945		5.27	434.6	16.1	280	153.5	1.80		0.4
	950		5.27	434.3	16.1	280.1	140.7	1.79		0.4

COMMENTS Sample time 09:50

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-23B SAMPLE NO. MW-23-B

WELL/SITE DESCRIPTION Next to MW23-A – on road – near culvert crossing

SAMPLING PERSONNEL Pete Yencid

DATE 4 / 15 / 19 TIME 955 - WEATHER 50 · cloudy - windy

WELL DEPTH ~~110~~ 89.4 ft bgs CASING HEIGHT flush ft

WATER DEPTH 23.25 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL ~~90-110~~ (ft bgs) (85) 10' off bottom

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 80 ft PUMP START TIME 1000 min

PUMP RATE .3 LPM (gpm) (LPM) PUMP END TIME 1055 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/15/19	10:00		6.43	546	13.7	85.3	60.8	0.81		.3
	10:05		6.55	546	13.5	3.0	29.5	0.24		.3
	10:10		6.63	546	13.9	-12.9	21.4	0.23		.3
	10:15		6.67	544	14.0	-19.8	16.5	0.23		.3
	10:20		6.69	543	14.2	-23.2	14.4	0.20		.3
	10:25		6.70	543	14.5	-25.7	12.7	0.18		.3
	10:30		6.70	543	14.6	-25.9	12.1	0.17		.3
	10:35		6.69	542	14.6	-26.2	11.6	0.16		.3
	10:40		6.68	542	14.7	-26.3	11.1	0.14		.3
	10:45		6.67	542	14.8	-25.9	10.8	0.14		.3
	10:50		6.66	541	14.7	-25.5	9.9	0.13		.3

COMMENTS methane = - 0.0%

cond = SPC

Sample time = 10:50

SIGNATURE

Field Dup

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID MW-24A SAMPLE NO. MW24A

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL Kate Yeroop

DATE 4 / 11 / 19 TIME ~~1500~~ 1500 WEATHER 60's partly cloudy

WELL DEPTH ~~30~~ 48 ft bgs CASING HEIGHT 5 ft

WATER DEPTH 27 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL (10-30) (ft bgs) ~~(20)~~ 40

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH (40) ft PUMP START TIME 1515 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 1605 min (50 min)

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/11/19	1521	~~1.20~~	6.00	1571	15.5	8.4	104.7	0.46	27	.4
	1525		5.93	1570	16.9	-2.4	35.6	0.23	27.2	.4
	1530		5.93	1576	17.6	-7.2	16.9	0.17	27.2	.4
	1535		5.92	1577	17.9	-13.7	8.4	0.11	27.2	.4
	1540		5.92	1576	18.0	-17.4	6.6	0.09	27.2	.4
	1545		5.92	1576	18.1	-20.8	5.0	0.08	27.2	.4
	1550		5.92	1576	18.2	-23.5	4.5	0.07	27.2	.4
	1555		5.92	1576	18.2	-25.8	3.8	0.07	27.2	.4
	1600		5.92	1575	18.3	-27.2	4.0	0.07	27.2	

COMMENTS Methane = 0.0 %

Cond = SPC

Sample time = 1600

* Depth is 48 - not 30'

~~Field Duplicate (3) (03-40)~~

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB01 SAMPLE NO. OB01

WELL/SITE DESCRIPTION near entrance / in gated pad area

SAMPLING PERSONNEL Pete Yenesel

DATE 4/17/18 TIME 1450 - 1540 WEATHER sunny - 60's

WELL DEPTH 75 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 12.91 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 35-75 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 55 ft PUMP START TIME 1455 min

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 1525 min (30 min)

SAMPLING METHOD grab / low flow RECOVERY TIME N/A min

TOTAL VOL. REMOVED NA (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/17	1500		5.71	2346	16.2	203.9	9.0	0.39	12.91	.5
	1505		5.68	2352	16.4	203.8	4.0	0.31		
	1510		5.68	2354	16.5	203.1	3.0	0.30		
	1515		5.68	2355	16.6	202.8	2.0	0.28		
	1520		5.68	2356	16.6	202.6	3.0	0.26		
	1525		5.68	2357	16.7	202.1	3.0	0.24		

COMMENTS 0.0% methane.
cond is SPC.
Sample time is 1525

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB02 SAMPLE NO. OB-02

WELL/SITE DESCRIPTION Near utility easement / gate entrance

SAMPLING PERSONNEL Pete Tensor

DATE 4/17/19 TIME 850- WEATHER 56- Sunny

WELL DEPTH 121 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 13 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 71-121 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 96 ft PUMP START TIME 855 min (30 min)

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 925 min

SAMPLING METHOD grab - low flow RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/17	900		6.37	685	13.6	161.8	7.8	3.6	13.0	.5
	905		6.02	655	13.6	164.5	10.9	0.94	13.1	.5
	910		5.99	886	13.8	167	7.4	0.33	13.2	.5
	915		5.99	888	13.8	167.6	7.4	0.30	13.2	.5
	920		5.99	889	13.9	167.6	6.4	0.29	13.2	.5

COMMENTS O.D methane
spec cond
Sample time - 9:20

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB02A SAMPLE NO. OB02A

WELL/SITE DESCRIPTION off utility easement / near access gate

SAMPLING PERSONNEL Pete Menzione

DATE 4/17/19 TIME 820-850 WEATHER 56 - Sunny

WELL DEPTH 77 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 13 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 37-77 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 57 ft PUMP START TIME 830 min (30 min)

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 900 min

SAMPLING METHOD Grab / low flow RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/17	835		5.5	89.2	13.8	161.8	8.7	1.09	13.0	.5
	840		5.50	88.8	13.9	164.5	8.5	1.13	13.0	.5
	845		5.5	87.8	14.0	167	9.2	1.08	13.1	.5
	850		5.5	87.2	14.4	167.6	9.9	1.09	13.15	.5

COMMENTS Methane = 0.0 %

Cond - = SPC

Sample time 8:50

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB03 SAMPLE NO. OB-03

WELL/SITE DESCRIPTION off of utility easement right of way nested with MW8 + OD-03A

SAMPLING PERSONNEL Pete Yenesich

DATE 4/16/19 TIME 840-930 WEATHER 50's - clear

WELL DEPTH 154 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 17.25 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 104-154 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 129 ft PUMP START TIME 847 min (38 min)

PUMP RATE .4 (gpm) (LPM) PUMP END TIME 925 min

SAMPLING METHOD grab RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/16	840		6.45	1333	14.0	7.0	4.8	.51	17.	.4
	850								~~17.27~~	~~.4~~
	855		6.11	1325	12.3	16.1	5.8	0.28	17.27	.4
	900		6.07	1325	12.7	13.9	5.2	0.27	17.27	.4
	905		6.05	1326	13.1	12.1	5.0	0.25	17.27	.4
	910		6.04	1326	13.4	11.7	5.1	0.21	17.27	.4
	915		6.02	1325	13.6	12.2	5.6	0.20	17.27	.4
	920		6.01	1326	13.7	12.8	4.0	0.19	17.27	.4

COMMENTS methane = 0.0 %
Cond = spc
Sample time = 9:20

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB03A SAMPLE NO. OB03A
WELL/SITE DESCRIPTION inside fence near utility easement
SAMPLING PERSONNEL Pete Yenesk

DATE 4 / 16 / 19 TIME 930 - 1030 WEATHER 50's clear

WELL DEPTH 97 ft bgs CASING HEIGHT 3 ft
WATER DEPTH 17.25 ft WELL DIAMETER 2 in
WATER COL. HEIGHT ~~[illegible]~~ ft SCREEN INTERVAL 50-97 (ft bgs) (73.5)
EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)
PUMP DEPTH 73.5 ft PUMP START TIME 930 min (45 min)
PUMP RATE 1.4 (gpm) (LPM) PUMP END TIME 1015 min
SAMPLING METHOD Grab RECOVERY TIME N/A min
TOTAL VOL. REMOVED _____ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/16	9:35		6.77	1894	15.5	-27.1	130.2	0.25	17.28	.4
	9:40		6.78	1867	16.0	-55.6	27.5	0.09	17.28	.4
	9:45		6.74	1826	16.1	-58.6	233.5	0.06	17.28	.4
	9:50		6.62	1739	16.2	-51.9	50.2	0.05	17.28	.4
	955		6.47	1642	16.4	-41	10.5	0.03	17.28	.4
	1000		6.40	1607	16.4	-36.8	9.1	0.03	17.28	.4
	1005		6.36	1588	16.5	-34.2	10.9	0.02	17.28	.4
	1010		6.34	1574	16.5	-32.9	8.1	0.02	17.28	

COMMENTS Methane = 00.1 % - purged Condu = SPC
* red particulate visible in initial purge Sample time = 1010
* cap was not on well.

SIGNATURE [signature]

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB04 SAMPLE NO. OB-04

WELL/SITE DESCRIPTION near stream @ end of access road

SAMPLING PERSONNEL Pete Menesio

DATE 4 / 9 / 2019 TIME 600-930 WEATHER clear - 59°

WELL DEPTH 136 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 3.2 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 86-136 (ft bgs) (111)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH (111) ft PUMP START TIME 833 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 925 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9/19	840	.5 LPM	6.99	2476	15.2	126.8	2.8	.61	3.16	
	845		5.94	2476	15.2	133.4	2.1	.18	3.16	
	850		5.91	2477	15.2	133.1	1.9	.14	3.18	
	855		5.91	2477	15.3	134	1.9	.10	3.18	
	900		5.90	2476	15.3	135.8	1.8	.08	3.18	
	905		5.90	2475	15.3	136.8	2.0	.07	3.18	
	910		5.89	2474	15.3	137.8	2.0	.07	3.18	
	915		5.89	2474	15.3	137.9	2	.07	3.18	

COMMENTS Gem reading = 0.0
Conductivity is SPC µS/cm[c]
Sample time = 915

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB04A SAMPLE NO. OB04A

WELL/SITE DESCRIPTION Next to OB04 - by Stream

SAMPLING PERSONNEL Pete Yencsik

DATE 4 / 9 / 19 TIME 935-1040 WEATHER 60 - clear / humid

WELL DEPTH 83 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 4.02 ft WELL DIAMETER 2 in

WATER COL. HEIGHT 88.98 ft SCREEN INTERVAL 33-83 (ft bgs) (58)

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP DEPTH 58 ft PUMP START TIME 938 min (57 min)

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 10:35 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED _____ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/9/19	945		6.25	2542	15.7	154.1	4.5	0.76	4.18	.4
	950		5.83	2547	15.6	152.4	2.4	0.13	4.18	
	955		5.81	2542	15.5	146.8	2.7	0.10	4.18	
	1000		5.81	2542	15.5	141.5	2.8	0.07	4.18	
	1005		5.81	2542	15.7	138.8	2.5	0.06	4.18	
	1010		5.80	2541	15.7	139.1	2.2	0.04	4.18	
	10:15		5.80	2539	15.7	139.4	2.2	0.03	4.18	
	10:20		5.80	2541	15.8	140.7	2.1	0.02	4.18	
	10:25		5.80	2542	15.8	141.7	2.0	0.02	4.18	
	10:30		5.80	2541	15.8	141.6	2.0	0.02	4.18	

COMMENTS Clear readings = 0.0
Conductivity is SPC mS/cm
Sample time = 10:30

SIGNATURE [signature]

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB06 SAMPLE NO. OB-06

WELL/SITE DESCRIPTION Wooded area - near tributary

SAMPLING PERSONNEL PY + JD

DATE 4 / 8 / 19 TIME 1235 WEATHER 70's clear

WELL DEPTH 67 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 5.20 ft TOC WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 26-66 (ft bgs) 46

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 46 ft PUMP START TIME ~~1235~~ 1235 min

PUMP RATE .25 (gpm) (LPM) PUMP END TIME 1340 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED 7.5 (gal) (L)

Date	Time	Volume Removed Unit: ~~Gal~~ L	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/8	1240	.25 L	6.17	2103	13.6	157.1	35	.79	6.57	.25
	1245	.25 L	6.01	2102	13.6	142.5	36	.29	6.57	.25
	1250	.25 L	6.00	2102	15.7	134.2	35.4	.22	6.57	.25
	1255	.25L	5.99	2101	13.8	126.0	36.5	0.23	6.56	.25
	1300	.25L	6.00	2099	14.0	119.5	46.5	0.37	6.60	.25
	1305	.25L	6.01	2099	14.1	120.9	44.7	0.62	6.60	.25
	1310	0.25L	6.02	2101	14.0	124.5	39.6	0.79	6.59	.25
	1315	0.25L	6.02	2099	14.1	128.7	31.8	0.90	6.59	.25
	1320	0.25L	6.02	2102	14.0	131.6	30.9	0.79	6.58	.25
	1325	0.25L	6.01	2099	14.0	132.8	29.9	0.77	6.58	.25

COMMENTS Methane = 0.0%

Conductivity as SPC vs C

2101 = 1651

uS/cm uS/cm

Sample Time 1325

SIGNATURE J.D.

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB07A SAMPLE NO. OB07A

WELL/SITE DESCRIPTION wooded area / new wetlands

SAMPLING PERSONNEL Pete Yencik / Jesse Drummond

DATE 4 / 8 / 18 TIME 1015 - 11:10 WEATHER 60- Sunny

WELL DEPTH 76 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 3.41 ft TOC WELL DIAMETER 2 in

WATER COL. HEIGHT 75.59 ft SCREEN INTERVAL 26-76 (ft bgs) (51)

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP DEPTH 51 ft PUMP START TIME 10:36 min

PUMP RATE ~~0.50~~ 0.25 ~~(gpm)~~ (LPM) PUMP END TIME 11:07 min

SAMPLING METHOD GRAB RECOVERY TIME N/A min

TOTAL VOL. REMOVED 7.75 ~~(gal)~~ (L)

Date	Time	Volume Removed Unit: ~~Gal~~ L	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM	
4/8	1046	0.75	6.32	571	14.2	157.2	2.3	2.20	3.41	~~0.25~~ 0.25 lpm	
	~~1049~~	~~0.75~~	~~5.78~~	~~594~~	~~16.5~~	~~167.1~~	~~2.2~~	~~2.10~~	NO FLOW		
	1055	0.75	5.70	5.77	12.8	173.3	3.2	1.88	3.44	0.25	
	1058	0.75	5.69	538	13.0	175.1	3.5	1.76	3.49	0.25	941:40 42:02
	1101	0.75	5.69	535	12.8	177.9	2.3	1.73	3.52	0.25	
	1104	0.75	5.69	538	12.8	179.6	2.3	1.70	3.53	0.25	942:19 .45
	1107	0.75	5.69	542	12.8	180.4	2.3	1.67	3.54	0.25	
											43:07 56

COMMENTS methane = 0%
Conductivity Measured as C vs SPC
SAMPLE TIME 11:10

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB08 SAMPLE NO. OB-08

WELL/SITE DESCRIPTION Reference / end of access road, next to OB-08A, upslope from stream

SAMPLING PERSONNEL

DATE 4 / 11 / 19 TIME 740-855 WEATHER 50's clear

WELL DEPTH 109 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 4.75 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 59-109 (ft bgs) (84)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 84 ft PUMP START TIME 810 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 850 min (40 min)

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/11/19	815		6.80	649	13.4	66.5	1.2	0.31	4.75	.5
	820		6.52	659	13.4	77.4	1.1	0.22	5.10	.5
	825		6.46	654	13.6	77.9	1.1	0.16	5.15	.5
	830		6.45	653	13.6	74.5	1.1	0.12	5.20	.5
	8:35		6.45	654	13.7	71.4	1.2	0.10	5.20	.5
	8:40		6.46	657	13.7	69.7	1.1	0.09	5.20	.5
	8:45		6.46	662	13.7	68.4	1.1	0.09	5.20	.5

COMMENTS Methane = 0.0

Cond = SPC

Sample time 8:45

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB08A SAMPLE NO. OB-08A

WELL/SITE DESCRIPTION end of access road, near stream, next to OB-08

SAMPLING PERSONNEL Pete Yenko

DATE 4 / 11 / 19 TIME 855-955 WEATHER 50's - clear

WELL DEPTH 145 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 5.4 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 95-154 ~~145~~ (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH ~~[illegible]~~ 81 ft PUMP START TIME 9:05 min

PUMP RATE .5 (gpm) (LPM) PUMP END TIME 9:50 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm°	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/11/19	9:06		6.84	608	13.3	15.4	128.9	~~[illegible]~~ 0.33	5.45	.5 LPM
	9:11		6.36	607	12.9	12.7	156.9	~~[illegible]~~ 0.27	5.45	.5
	9:16		6.32	607	13.1	7.1	116	0.23	5.45	.5
	9:21		6.30	607	13.4	4.2	44.7	0.17	5.45	.5
	9:26		6.30	608	13.5	4.3	23.3	0.15	5.45	.5
	9:31		6.30	609	13.6	4.4	15.1	0.11	5.45	.5
	9:36		6.30	610	13.6	5.2	10.0	0.10	5.45	.5
	9:41		6.30	609	13.6	5.8	6.8	0.09	5.45	.5
	9:46		6.29	609	13.7	5.9	6.8	0.09	5.45	.5

COMMENTS Methane = 0.0%

* well depth of 83.5 was recorded - not 145 - raised pump to 81

Sample time = 9:46

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB10 SAMPLE NO. OB-10

WELL/SITE DESCRIPTION wooded area by stream

SAMPLING PERSONNEL R. Yeresik / Jess Drummond / [illegible]

DATE 4 / 8 / 19 TIME 1520- WEATHER 81 - Clear

WELL DEPTH 67 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 6.49 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 27-67 (ft bgs) (47)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 47' ft PUMP START TIME 1525 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1605 min (40 min)

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: ~~Gal~~ L	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/8	1530	.5 L	6.08	1169	14.6	75.6	2.3	.19	6.68	.5
	1535	.5L	5.94	1171	14.7	68.8	2.3	0.11	6.64	.5
	1540	.5L	5.95	1172	14.6	62.8	2.3	.08	6.64	.5
	1545	.5L	5.95	1174	14.7	58.4	2.3	.05	6.64	.5
	1550	.5L	5.95	1177	14.7	55	2.2	.03	6.65	.5
	1555	.5L	5.95	1179	14.7	52.4	2.3	.02	6.65	.5
	1600	.5L	5.95	1183	14.7	51.3	2.2	.02	6.65	.5

COMMENTS 0.0 methane recorded by Gem.
Conductivity is SPC µS/cm
Sample time 1600

SIGNATURE [signature]

Field Dup → OB-50

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB11 SAMPLE NO. OB-11 & OB-50 (field duplicate #2)

WELL/SITE DESCRIPTION nested with OB-11A & OB-25, near stream,

SAMPLING PERSONNEL Peterlenesik

DATE 4 / 10 / 19 TIME 915 - 1030 WEATHER 50's - clear

WELL DEPTH 90 ft CASING HEIGHT 3 ft

WATER DEPTH 8.41 ft WELL DIAMETER 2 in

WATER COL. HEIGHT 81.59 ft SCREEN INTERVAL 40-90 (ft bgs) (65)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 65 ft PUMP START TIME 930 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 10:27 min

SAMPLING METHOD grab RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM ~~GPM~~ LPM
4/10/19	935		7.85	2040	14.7	125.1	12.9	2.96	8.45	.5
	940		5.64	2182	15.4	162.2	3.1	0.33	8.59	.5
	945		5.63	2181	15.3	161.6	2.7	0.26	8.59	.5
	950		5.63	2183	15.5	160	2.4	0.23	8.59	.5
	955		5.63	2187	15.5	159.7	2.1	0.19	8.59	.5
	1000		5.63	2190	15.6	158.4	2.1	0.16	8.59	.5
	10:05		5.63	2192	15.6	158.3	2.0	0.14	8.59	.5
	10:10		5.63	2194	15.7	159.1	1.8	0.12	8.59	.5
	10:15		5.63	2198	15.8	159.2	1.9	0.11	8.59	.5
	10:20		5.63	2199	15.8	159.4	1.8	0.10	8.59	.5

COMMENTS methane = 0 % cond in SPC µS/cm

field duplicate (2) - Named OB-50

Sample time = 10:20

SIGNATURE

MW21B
MW21A — named as 11A, 11, OB25? cond sensor?

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB11A SAMPLE NO. OB-11-A

WELL/SITE DESCRIPTION Nested with OB-11 + OB-025, near stream / wooded area

SAMPLING PERSONNEL Pete Yencsi

DATE 4 / 10 / 19 TIME 810-915 WEATHER 50's clear

WELL DEPTH 64 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 8.35 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 24-64 (ft bgs) (44)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 44 ft PUMP START TIME 8:25 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 9:06 min

SAMPLING METHOD GRAB RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/10/19	835		5.83	2206	14.3	101.8	1.6	0.29	8.85	.40
	840		5.84	2189	15.1	96.2	1.6	0.24	8.91	.4
	845		5.85	2200	15.3	91.4	1.5	0.19	8.91	.4
	850		5.85	2200	15.4	86.5	1.6	0.15	8.91	.4
	855		5.85	2200	15.5	85.0	1.6	0.13	8.91	.4
	900		5.86	2199	15.6	83.6	1.7	0.12	8.91	.4
	905		5.86	2200	15.6	83.2	1.7	0.11	8.91	.4

COMMENTS Methane 0.0 % (well diameter is not 2" - it is
Sample ID - OB-11A time = 9:05
Cond in S/cm[c]

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB12 SAMPLE NO. OB-12

WELL/SITE DESCRIPTION Inwooded area - 50-60' from OB-15

SAMPLING PERSONNEL RJM/Ymak

DATE 4 / 10 / 19 TIME ~~[illegible]~~ 1445 WEATHER 70's/60's / clear

WELL DEPTH 26 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 15.2 ft WELL DIAMETER 2 in

WATER COL. HEIGHT ft SCREEN INTERVAL 16-26 (ft bgs)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 22' ft PUMP START TIME 1500 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME 1550 min

SAMPLING METHOD grab RECOVERY TIME NA min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/10	1505		7.17	635	13.3	14	6.9	0.75	15.4	.5
	1510		6.02	632	14.8	33.8	4.8	0.26	15.5	.5
	1515		5.90	631	15.0	44.7	4.6	0.22	15.6	.5
	1520		5.76	629	15.5	61.7	3.7	0.20	15.6	.5
	1525		5.66	627	15.8	78.1	2.9	0.16	15.6	.5
	1530		5.64	627	16.1	86.3	2.7	0.13	15.6	.5
	1535		5.61	627	16.2	94.7	2.4	0.11	15.6	.5
	1540		5.59	626	16.2	100.8	2.2	0.10	15.6	.5
	1545		5.59	627	16.3	102.7	2.2	0.09	15.6	.5

COMMENTS Methane = 0.0%
Cond = SPC
Sample time - 1545

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB015 SAMPLE NO. OB-15

WELL/SITE DESCRIPTION off access road, near bottom 90° turn, next to methane well

SAMPLING PERSONNEL Pete Mencsik

DATE 4 / 10 / 19 TIME 1530 WEATHER upper 60's clear

WELL DEPTH 28 ft bgs CASING HEIGHT 3 ft

WATER DEPTH ft WELL DIAMETER 2 in — 3.5

WATER COL. HEIGHT 17.65 ft SCREEN INTERVAL 18-28 (ft bgs) (27)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 23' ft PUMP START TIME 1605 min

PUMP RATE .5 LPM (gpm) (LPM) PUMP END TIME min

SAMPLING METHOD RECOVERY TIME min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
4/10	1610		6.21	366.5	15	80.1	6.2	1.52	17.6'	.5
	1615		5.45	366.5	16.3	103.6	4.7	0.72	18.2	.5
	1620		5.44	366.7	17.0	110.4	4.5	0.88	18.4	.5
	1625		5.44	367	17.1	113.5	4.5	0.81	18.43	.5
	1630		5.43	366.7	17	115.7	4.4	.79	18.5	.5

COMMENTS methane = 0.0% well diameter is 3.5

Cond = SpC

Sample time = 1630

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB025 SAMPLE NO. OB025

WELL/SITE DESCRIPTION Nested with OB 11A & OB11 near stream

SAMPLING PERSONNEL Rele Yenside

DATE 4/10/19 TIME 630-1130 WEATHER 50's - clear

WELL DEPTH 15 ft bgs CASING HEIGHT 3 ft

WATER DEPTH 7.55 ft WELL DIAMETER ~~2~~ 3.5 in *

WATER COL. HEIGHT ft SCREEN INTERVAL 5-15 (ft bgs) (10)

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH (10) ft PUMP START TIME 1045 min

PUMP RATE .4 LPM (gpm) (LPM) PUMP END TIME 1113 min

SAMPLING METHOD grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/10/19	1045		7.44	1459	11.5	134.3	34.2	2.99	8.2	.4
	1055		6.57	1459	11.8	139.3	27.2	1.81	8.3	.4
	1055		6.38	1441	13.5	137.1	21.4	1.59	8.4	.4
	1100		6.36	1440	14.6	137.5	16.5	1.60	8.5	.4
	1105		6.35	1449	15.6	138.4	16.6	1.63	8.55	.4
	1110		6.36	1449	15.9	138.7	15.9	1.63	8.6	

COMMENTS methane = 0 %
Cond in SPC
Sample time = 11:10

* incorrect well diameter on records - Diameter is → 3.5 (inner)

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB102 SAMPLE NO. OB-102

WELL/SITE DESCRIPTION

SAMPLING PERSONNEL Rosenkranz

DATE 4 / 15 / 19 TIME 1110 – 1225 WEATHER 60s - windy / p.cloudy

WELL DEPTH 25 ft bgs CASING HEIGHT 3 ft 3.5 inner diameter

WATER DEPTH 9.31 ft WELL DIAMETER ~~2~~ in

WATER COL. HEIGHT ft SCREEN INTERVAL 15-25 (ft bgs) 20

EQUIVALENT VOLUME OF STANDING WATER (gal) (L)

PUMP DEPTH 20 ft PUMP START TIME 11:25 min (50 min)

PUMP RATE ~~20~~ .4 (gpm) (LPM) PUMP END TIME 12:15 min

SAMPLING METHOD Grab RECOVERY TIME N/A min

TOTAL VOL. REMOVED ~~N/A~~ (gal) (L)

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate ~~GPM~~ LPM
4/15/19	1130		6.85	3460	12.2	91.6	8.4	0.83	9.25	.4
	1135		6.66	3465	13.5	113.9	10.5	0.14	9.25	.4
	1140		6.66	3469	13.6	114.2	13.5	0.09	9.25	.4
	1145		6.67	3479	13.6	113	15.0	0.06	9.25	.4
	1150		6.68	3484	13.7	112.0	12.7	0.06	9.25	.4
	1155		6.68	3487	13.9	111.2	11.1	0.05	9.25	.4
	1200		6.68	3490	13.8	108.9	12.1	0.02	9.25	.4
	1205		6.68	3519	14.0	106.7	11.7	0.02	9.25	.4
	1210		6.68	3530	14	102.9	9.7	0.02	9.25	.4

COMMENTS 0.0 do methane / SPC = cond

* well diameter is 3.5 diameter

sample time = 1210

SIGNATURE

EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID OB105 SAMPLE NO. OB-105

WELL/SITE DESCRIPTION 50' from OB04+OB04A, outside stream channel, flushmount. under trees.

SAMPLING PERSONNEL Pete Yenesile

DATE 4 / 9 / 2019 TIME 1040 - 1155 WEATHER 60's, clear, humid

WELL DEPTH 13 ft bgs

WATER DEPTH 1.98 ft

WATER COL. HEIGHT 11.02 ft

EQUIVALENT VOLUME OF STANDING WATER _____ (gal) (L)

PUMP DEPTH 9 ft

PUMP RATE .5 LPM (gpm) (LPM)

SAMPLING METHOD grab

TOTAL VOL. REMOVED _____ (gal) (L)

CASING HEIGHT 3 ft

WELL DIAMETER 3.5 in inner diameter

SCREEN INTERVAL 5-13 (ft bgs) (9)

PUMP START TIME 10:56 min

PUMP END TIME 1145 min

RECOVERY TIME N/A min

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM
	1100		6.93	3200	13.7	-84.7	166.8	1.37	1.98	.5
	1105		6.92	3627	12.4	-103.7	47.8	0.06	2.3	
	1110		6.93	3628	13.0	-106.8	46.5	0.05	2.5	
	1115		6.94	3642	13.3	-110.4	20.2	0.02	2.8	
	1120		6.94	3633	13.2	-111.0	18.2	-0.0	2.75	
	1125		6.92	3620	13.2	-110.2	19.6	-0.01	2.75	
	1130		6.91	3610	13.4	-109.0	19.3	-0.02	2.75	
	1135		6.90	3599	13.3	-107.1	19.4	-0.02	2.75	
	1140		6.90	3590	13.3	-106.1	19.5	-0.02	2.75	

COMMENTS Methane = 0.0 %
Conductivity = SPC mS/cm
Sample time 11:40

well diameter is 3.5 inches in diameter, not 2.0 in.

SIGNATURE

EA Engineering, Science, and Technology, Inc.

SURFACE WATER SAMPLING RECORD

LOCATION ID ST-065 SAMPLE ID. ST-065

SITE DESCRIPTION Rock Creek

SAMPLING PERSONNEL PAY / Jess Dammann

DATE 4 / 8 / 19 TIME _____ WEATHER _____

SAMPLING METHOD grab

PURGE START TIME ~~930~~

PURGE END TIME ~~940~~

DEPTH OF SAMPLE COLLECTION (APPROX.) 1'

SAMPLE COLLECTION TIME ~~940~~

Date	Time	Volume Removed	pH	Cond.	Temp.	ORP	Turbidity.	DO
		Unit: Gal	--	µS/cm[c]	°C	mV	NTU	mg/L
~~0910~~ 4-8-19	~~0930~~		7.75	712	14.2	138.2	0.9	10.91
4-8	0933		7.72	712	14.3	137.2	0.9	10.42
4-8	0936		7.72	712	14.3	135.9	0.9	10.43

COMMENTS Conductivity measured as C vs SPC

SIGNATURE _____

EA Engineering, Science, and Technology, Inc.

SURFACE WATER SAMPLING RECORD

LOCATION ID ST-70 SAMPLE ID. ST-70

SITE DESCRIPTION Stream

SAMPLING PERSONNEL P. Yeneside / Jesse Drummond

DATE 4 / 8 / 19 TIME 1410 WEATHER 81°F 16SW 29.89" 43% PC

SAMPLING METHOD GRAB

PURGE START TIME

PURGE END TIME

DEPTH OF SAMPLE COLLECTION (APPROX.) 1'

SAMPLE COLLECTION TIME 14:25

Date	Time	Volume Removed	pH	Cond.	Temp.	ORP	Turbidity.	DO
		Unit: Gal	--	µS/cm[c]	°C	mV	NTU	mg/L
4-8	14:15		8.13	900 spc 781 c	18.1	108.8	4.1	13.26
	14:20		7.96	900 781	18.0	107.4	4.0	13.11
	14:25		7.90	901 782	18.1	105.4	3.3	12.99

COMMENTS Sample Time 14:25

SIGNATURE

EA Engineering, Science, and Technology, Inc.

SURFACE WATER SAMPLING RECORD

LOCATION ID Stream channel SAMPLE ID. ST-80

SITE DESCRIPTION

SAMPLING PERSONNEL Pete Yerisk / Jesse Dunnard

DATE 4 / 8 / 19 TIME 14:05 WEATHER 81 - clear

SAMPLING METHOD grab

PURGE START TIME

PURGE END TIME

DEPTH OF SAMPLE COLLECTION (APPROX.) 1'

SAMPLE COLLECTION TIME 1405

Date	Time	Volume Removed	pH	Cond.	Temp.	ORP	Turbidity.	DO
		Unit: Gal	--	µS/cm[c]	°C	mV	NTU	mg/L
	13:55		9.15	860 SPC 757 C	18.7	141.7	3.3	13.67
	14:00		9.17	860 756	18.7	138.2	4.3	13.74
	14:05		9.18	860 756	18.7	136.4	5.9	13.79

COMMENTS Sample Time 14:05

SIGNATURE

EA Engineering, Science, and Technology, Inc.

SURFACE WATER SAMPLING RECORD

LOCATION ID ST-105 SAMPLE ID. ST-105
SITE DESCRIPTION Stream Sample
SAMPLING PERSONNEL P. Yenesik / Jesse Drummond

DATE 4 / 8 / 19 TIME 1635 WEATHER 70's - overcast

SAMPLING METHOD grab
PURGE START TIME 1620
PURGE END TIME 1635
DEPTH OF SAMPLE COLLECTION (APPROX.) 1'
SAMPLE COLLECTION TIME 1635

Date	Time	Volume Removed	pH	Cond.	Temp.	ORP	Turbidity.	DO
		Unit: Gal	--	µS/cm[c]	°C	mV	NTU	mg/L
4/8/19	1620	N/A	7.15	755	20.0	146	146.3	10.35
4/8/19	1630	N/A	7.22	752	19.8	146.2	132	10.28
4/8/19	1635	N/A	7.25	752	19.9	145.5	130	10.08

COMMENTS Last sample for 4/8/19
Conductivity is SPC- µS/cm

SIGNATURE

EA Engineering, Science, and Technology, Inc.

SURFACE WATER SAMPLING RECORD

LOCATION ID ST120 SAMPLE ID. ST 120

SITE DESCRIPTION

SAMPLING PERSONNEL Pete Yenisch

DATE 4 / 8 / 2019 TIME 850 - 910. WEATHER 55° - Clear

SAMPLING METHOD Grab

PURGE START TIME 855

PURGE END TIME 905

DEPTH OF SAMPLE COLLECTION (APPROX.) 1'

SAMPLE COLLECTION TIME 910

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm[c]	Temp. °C	ORP mV	Turbidity. NTU	DO mg/L
	0900		6.93	685	13.8	122.6	2.1	9.97
	0905		6.98	684	13.8	105.8	2.0	10.01
	0906		7.04	684	13.8	98.5	2.0	10.05

COMMENTS sample taken upstream of bridge

SIGNATURE