



# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-1

Sampler: Ryan Wahl

Pump Depth (BTOC): 25'

Purging Method: Low Flow / Micro Purge 2" Monsoon Pump (12V)

Gauging date: 1-24-12 Initial Depth to Water: 2.29 Total Depth: 30.08

Sampling date/time: 1-29-12 1415

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1340	350	2.45	6.79	.800	260	1.77	11.3	-25	
1345	↓	2.41	6.52	.791	236	0.95	11.2	-24	
1350	↓	2.74	6.47	.794	240	0.89	11.1	-22	
1355	↓	2.65	6.35	.792	272	0.82	10.7	-12	
1400	↓	2.65	6.32	.793	266	.80	10.6	-9	
1405	↓	2.65	6.29	.793	262	.79	10.4	-6	

BTOC = Below Top of Casing

Comments: Sampl. Sequence #s 305, 405, 505, 605  
Screened 10-30'

Form Completed By: \_\_\_\_\_



# Low-Flow Groundwater Sampling Log (Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263  
 Well Number and Location: MW-3  
 Sampler: Ryan Wahl  
 Pump Depth (BTOC): 25'  
 Purging Method: Low Flow / Micro Purge 2" monsoon pump (12V)  
 Gauging date: 1-25-12 Initial Depth to Water: 10.59 Total Depth: 30.40  
 Sampling date/time: 1-25-12

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
9:25	400	11.06	6.36	.962	425	4.03	12.7	125	
9:30		11.91	6.92	1.02	463	3.70	12.6	117	
9:35		12.31	6.97	1.04	458	3.68	12	110	
9:40		12.6	6.96	1.00	471	3.47	12.5	111	
9:45		12.61	6.94	1.01	480	3.55	12.6	109	
9:50		12.61	6.95	1.04	481	3.54	11.6	108	stable

BTOC = Below Top of Casing

Comments: Well screened 10-30'

seq # 309 409 509 609

Form Completed By: RYAN WAHL



# Low-Flow Groundwater Sampling Log (Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263  
 Well Number and Location: MW- 4  
 Sampler: Ryan Wahl  
 Pump Depth (BTOC): 26  
 Purging Method: Low Flow / Micro Purge 2" monsoon pump (12V)  
 Gauging date: 1-25-12 Initial Depth to Water: 11.80 Total Depth: 30  
 Sampling date/time: 1-25-12 2:45

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1216	400	11.95	6.92	.843	35.2	1.18	13.8	-57	
1219		12.7	7.04	.874	40.6	.99	13.9	-51	
1220		12.5	7.07	.887	34.4	.98	13.9	-42	
1225		12.54	7.08	.898	32.5	.95	13.7	-38	
1230		12.71	7.07	.904	31.1	.90	13.8	-30	
1235		12.71	7.09	.910	29.1	.87	13.8	-29	stable

BTOC = Below Top of Casing

Comments: Screened 15-30'  
sequence # 313, ~~413, 513, 613~~ 413, 513, 613

Form Completed By: Zack





# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-6

Sampler: Ryan Wahl

Pump Depth (BTOC): Hand Bailed

Purging Method: ~~Low Flow / Micro Purge~~ Hand Bailed

Gauging date: 1-25-12 Initial Depth to Water: 3.82 Total Depth: 12'

Sampling date/time: 1-25-12 1330

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
		<u>12' - 3.82</u>	<u>x</u>	<u>.653</u>	<u>=</u>	<u>5.3 gallons</u>			<u>= 1 well volume</u>
				<u>5.3</u>	<u>x 3</u>	<u>=</u>			<u>16 gallons (3 well volumes)</u>
						<u>1300</u>			
						<u>1320</u>			
									<u>(dry @ 14 gallons)</u>

BTOC = Below Top of Casing

Comments: Product detected 3.67, DTW @ 3.82, PADEP requested we hand bail this well see well 314, 419, 514

Form Completed By: \_\_\_\_\_

*\* Recovers slowest out of all wells, expect to wait 35-45 minutes after well is dry before well recovers enough to grab a sample*



# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-7

Sampler: Ryan Wahl

Pump Depth (BTOC): 110'

Purging Method: Low Flow / Micro Purge 2" monsoon pump (12V)

Gauging date: 1-25-12 Initial Depth to Water: 5.89' Total Depth: 12.10'

Sampling date/time: 1-25-12 1155

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1125	400	6.19	6.62	.838	102	6.23	10.2	-59	
1130	400	<del>6.19</del>	6.26	.787	37.7	1.27	10.2	-63	
11:35		6.55	6.23	.791	30	1.18	10	-64	
1140			6.21	.793	28.9	.96	9.7	-64	
1145		6.40	6.20	.802	31.1	.89	9.7	-65	
1150			6.19	.802	38	.86	9.3	-65	Stable

BTOC = Below Top of Casing

Comments: sample sequence at 311, 411, 511, 611

Note - DTW during purge collected every 10 min b/c well is under fracture in the

Form Completed By: screened to 1.5-12'



# Low-Flow Groundwater Sampling Log

## (Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-8

Sampler: Ryan Wahl

Pump Depth (BTOC): 26

Purging Method: Low Flow / Micro Purge 2" monsoon pump (12v)

Gauging date: 1-25-12 Initial Depth to Water: 11.85 Total Depth: 30.16

Sampling date/time: 1-25-12 11:00

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
10:25	400	11.85							
10:30		12.18	6.76	1.03	30.9	1.19	12.1	11	
10:35		13.15	6.77	1.04	37	1.11	12.2	-8	
10:40		13.5	6.79	1.06	44.1	1.09	12.3	-11	
10:45		13.5	6.8	1.05	42.7	1.03	12.5	-15	
10:50		14.5	6.83	1.05	38	1.01	12.4	-17	
10:55		14.5	6.87	1.04	37	.98	12.6	-18	stable

BTOC = Below Top of Casing

Comments: screened 15-30'  
sample sequenced 310, 410, 510, 610

Form Completed By: RW Zack



# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-9

Sampler: Ryan Wahl

Pump Depth (BTOC): 26'

Purging Method: Low Flow / Micro Purge 2" monsoon pump (12v)

Gauging date: 1-24-12 Initial Depth to Water: 12.72 Total Depth: 30.90

Sampling date/time: 1-24-12 1510

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1440	3.50	12.99	6.97	.795	296	1.88	12.2	-7	
1445		14.30	7.40	.839	316	1.59	12.9	-11	
1450		14.70	7.47	.828	309	1.55	12.9	-11	
1455		14.81	7.50	.832	303	1.56	12.6	-10	
1500		14.81	7.55	.835	299	1.57	12.0	-7	
1505		14.81	7.55	.837	303	1.60	11.8	-7	Stable

BTOC = Below Top of Casing

Comments: Sample MW-9 was Duplicated (0900P)  
Screen 10-30'

Form Completed By: RWV

\*DEPs Chris Wade did not want a blind DUP

MW-9 # 306 406 506 606  
 0900P # 307 407 507 607





# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW- 10

Sampler: Ryan Wahl

Pump Depth (BTOC): 6.5

Purging Method: Low Flow / Micro Purge 2" Monsoon Pump (12V)

Gauging date: 1-24-11 Initial Depth to Water: 1.43 Total Depth: 7.50

Sampling date/time: 1-24-11 12:50

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1220	350	1.55	6.84	.835	143	10.58	10.3	72	
1225	↓	1.75	6.94	.816	112	8.49	10.3	76	
1230	↓	1.85	6.97	.814	97.0	8.06	9.9	79	
1235	↓	1.90	6.97	.816	57.1	7.68	10.4	78	
1240	↓	1.90	6.97	.819	60.3	7.62	10.6	78	
1245	↓	1.90	6.97	.822	59.1	7.60	10.6	79	stable

BTOC = Below Top of Casing

Comments: Sample Sequence #'s 304, 404, 504, 604  
Screened 1.5-8'

Form Completed By: RVW

Sequence # 301  
VOC



401  
1,4 Dioxane  
601 metals

501  
SVOC

# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-12

Sampler: Ryan Wahl

Pump Depth (BTOC): 9.00'

Purging Method: Low Flow / Micro Purge 2" Monsoon Pump (12V)

Gauging date: 1-24-2011 Initial Depth to Water: 3.00 Total Depth: 10.50

Sampling date/time: 1-24-2011 945

## FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
920	350	3.0	5.60	.455	299	4.96	9.9	194	
925	↓	3.25	5.77	.439	261	1.33	10.5	177	
930		3.30	5.91	.437	290	1.37	10.3	164	
935		3.30	5.94	.437	300	1.35	10.1	160	
940		3.30	5.95	.438	305	1.36	9.9	158	stable

BTOC = Below Top of Casing

Comments: Screened 6-11'

Sample Sequence #s 301, 401, 501, 601

Form Completed By: RW

VOC, SVOC, 1,4 Dioxane



# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW-13

Sampler: Ryan Wahl

Pump Depth (BTOC): 20'

Purging Method: Low Flow / Micro Purge 2" monsoon pump (12v)

Gauging date: 1-29-12 Initial Depth to Water: 7.08 Total Depth: 25.11

Sampling date/time: 1-24-12 1155

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1120	350	7.20	6.69	1.886	630	5.80	14	-22	
1125		7.36	6.48	1.861	20.7	8.29	14.1	6	
1130		7.48	6.29	1.878	14.8	4.55	13.3	36	
1135		7.65	6.24	1.875	17.8	4.92	13.0	56	
1140		7.78	6.27	1.869	18.6	4.37	12.9	69	
1145		7.78	6.26	1.862	14.8	4.23	13.7	76	
1150		7.78	6.21	1.877	18.0	4.27	13.3	78	stable

BTOC = Below Top of Casing

Comments: Screened 5-25  
sample Seq. # 303, 403, 503, 603

Form Completed By: RWV



# Low-Flow Groundwater Sampling Log

(Field Sheet)

Project Name and Number: HOFF VC SITE - Perkiomenville PA, GTAC5-1-263

Well Number and Location: MW- 41

Sampler: Ryan Wahl

Pump Depth (BTOC): 12.5

Purging Method: Low Flow / Micro Purge 2" monsoon pump (12v)

Gauging date: 1-24-12 Initial Depth to Water: 8.19 Total Depth: 14.50

Sampling date/time: 1-24-12 1057

### FIELD MEASUREMENTS

Time	Rate (mL/min)	Water Level (BTOC)	pH (Standard Units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	OrP (mV)	Notes
1030	350	<del>12.50</del>	6.35	1.18	410	2.76	12.1	-3	DTW 8.50
1035		8.59	6.39	1.16	389	1.60	12.6	-23	
1040		8.70	6.40	1.16	384	1.48	12.6	-31	
1045		8.90	6.42	1.16	400	1.37	12.4	-38	
1050		8.90	6.43	1.16	415	1.34	12.2	-40	
1055		8.90	6.43	1.16	439	1.38	11.9	-42	

BTOC = Below Top of Casing Seal 301, 401, 501, 601

Comments: screened 6-15'

Form Completed By: \_\_\_\_\_