

**LOW FLOW SAMPLING
DATA SHEETS**

Site: PPG Jersey City Client / Site: Dredner Robin
 Date: 2/9/2011 Field Personnel: D. Miller
 Weather: Sunny, 20° F Job #: 22930

Monitoring Well #: 107-TMW-K034 Well Depth: 24.50 ft Screened/Open Interval: 5.0 ft
 Well Permit #: NA Well Diameter: 1 inches

PID/FID Readings (ppm): Background: NA Pump Intake Depth: 22.0 ft below TOC
 Beneath Outer Cap: NA Depth to Water Before Pump Installation: 11.00 ft below TOC
 Beneath Inner Cap: NA Purge Method Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (µs/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1155	x		7.18	NA	12.4	NA	355	NA	1.25	NA	226.9	NA	642	NA	100	11.05
1200	x		7.16	-0.02	12.8	0.4	372	17	0.91	-0.34	223.1	-3.8	105.3	-536.7	100	11.05
1205	x		7.15	-0.01	13.0	0.2	370	-2	0.82	-0.09	220.4	-2.7	60.2	-45.1	100	11.05
1210	x		7.14	-0.01	13.3	0.3	378	8	0.79	-0.03	218.5	-1.9	75.5	15.3	140	11.05
1215	x		7.14	0.00	13.4	0.1	382	4	0.70	-0.09	217.1	-1.4	62.9	-12.6	140	11.05
1220	x		7.13	-0.01	13.5	0.1	377	-5	0.66	-0.04	215.8	-1.3	50.8	-12.1	140	11.05
1225	x		7.14	0.01	13.6	0.1	384	7	0.64	-0.02	214.9	-0.9	54.3	3.5	140	11.05
1230	x		7.14	0.00	13.7	0.1	379	-5	0.65	0.01	214.3	-0.6	50.1	-4.2	140	11.05
1235		x	7.14	0.00	13.7	0.0	371	-8	0.64	-0.01	213.8	-0.5	47.6	-2.5	140	11.05
1240		x	7.14	0.00	13.6	-0.1	364	-7	0.63	-0.01	213.1	-0.7	45.9	-1.7	140	11.05

Comments: Purge began at 1150. Sample time is 1231.

ORP readings are reported relative to the Standard Hydrogen Electrode. Primary Review: DM 2/10/11 Secondary Review: KH 2/15/11

INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

**LOW FLOW SAMPLING
DATA SHEETS**

Site: PPG Jersey City Client / Site: Dresdner Robin
 Date: 2/9/2011 Field Personnel: D. Miller
 Weather: Sunny, 20° F Job #: 22930

Monitoring Well #: 107-TMV-M046 Well Depth: 20.71 ft Screened/Open Interval: 5.0 ft
 Well Permit #: NA Well Diameter: 1 inches

PID/FID Readings (ppm): Background: NA Pump Intake Depth: 18.0 ft below TOC
 Beneath Outer Cap: NA Depth to Water Before Pump Installation: 8.86 ft below TOC
 Beneath Inner Cap: NA Purge Method Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (us/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1315	x		7.11	NA	11.8	NA	426	NA	0.89	NA	165.3	NA	1197	NA	200	9.51
1320	x		7.13	0.02	11.5	-0.3	465	39	0.63	-0.26	156.8	-8.5	844	-353	100	9.69
1325	x		7.15	0.02	10.9	-0.6	464	-1	0.59	-0.04	151.6	-5.2	731	-113	100	9.84
1330	x		7.16	0.01	10.3	-0.6	453	-11	0.60	0.01	147.6	-4.0	983	252	100	9.91
1335	x		7.16	0.00	10.1	-0.2	448	-5	0.58	-0.02	145.0	-2.6	1157	174	100	9.93
1340	x		7.17	0.01	10.1	0.0	436	-12	0.27	-0.31	136.6	-8.4	3462	2305	100	9.93
1345	x		7.17	0.00	9.9	-0.2	427	-9	0.26	-0.01	131.1	-5.5	3802	340	100	9.93
1350	x		7.18	0.01	9.8	-0.1	432	5	0.27	0.01	128.5	-2.6	3587	-215	100	9.93
1355		x	7.18	0.00	9.8	0.0	439	7	0.28	0.01	125.9	-2.6	3709	122	100	9.93
1400		x	7.18	0.00	9.6	-0.2	433	-6	0.30	0.02	123.6	-2.3	3664	-45	100	9.93
1405		x	7.19	0.01	9.8	0.2	429	-4	0.29	-0.01	122.3	-1.3	3681	17	100	9.93

Comments: Purge began at 1310. Sample time is 1351.

**LOW FLOW SAMPLING
DATA SHEETS**

Site: PPG Jersey City Client / Site: Dresdner Robin
 Date: 2/8/2011 Field Personnel: S. Schulze
 Weather: Sunny, 20° F Job #: 22930

Monitoring Well #: 107-TMW-1042 Well Depth: 22.60 ft Screened/Open Interval: 5.0 ft
 Well Permit #: NA Well Diameter: 1 inches

PID/FID Readings (ppm): Background: NA Pump Intake Depth: 20.0 ft below TOC
 Beneath Outer Cap: NA Depth to Water Before Pump Installation: 12.58 ft below TOC
 Beneath Inner Cap: NA Purge Method Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (us/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
1244	X		6.88	NA	12.2	NA	831	NA	0.47	NA	-94.8	NA	3252	NA	200	12.58
1249	X		6.84	-0.04	12.2	0.0	830	-1	0.39	-0.08	-112.6	-17.8	2024	-1228	200	12.58
1254	X		6.82	-0.02	12.2	0.0	825	-5	0.34	-0.05	-153.0	-40.4	1304	-720	200	12.58
1259	X		6.80	-0.02	11.8	-0.4	810	-15	0.34	0.00	-143.8	9.2	877	-427	200	12.58
1304	X		6.79	-0.01	12.2	0.4	811	1	0.36	0.02	-133.6	10.2	670	-207	200	12.58
1309	X		6.78	-0.01	12.1	-0.1	809	-2	0.38	0.02	-121.7	11.9	81.6	-588.4	200	12.58
1314	X		6.78	0.00	12.2	0.1	813	4	0.42	0.04	-107.5	14.2	85.2	3.6	200	12.58
1319	X		6.78	0.00	12.3	0.1	816	3	0.44	0.02	-101.9	5.6	78.7	-6.5	200	12.58
1324	X		6.78	0.00	12.8	0.5	815	-1	0.45	0.01	-87.8	14.1	61.4	-17.3	200	12.58
1329	X		6.81	0.03	12.7	-0.1	810	-5	0.47	0.02	-69.4	18.4	56.2	-5.2	200	12.58
1334	X		6.82	0.01	12.9	0.2	814	4	0.49	0.02	-64.8	4.6	57.9	1.7	200	12.58
1339	X		6.83	0.01	12.9	0.0	810	-4	0.50	0.01	-61.3	3.5	53.8	-4.1	200	12.58
1344	X		6.84	0.01	12.8	-0.1	809	-1	0.51	0.01	-57.2	4.1	55.8	2.0	200	12.58
1349		X	6.85	0.01	12.8	0.0	806	-3	0.53	0.02	-55.5	1.7	51.3	-4.5	200	12.58
1354		X	6.85	0.00	12.9	0.1	801	-5	0.54	0.01	-51.6	3.9	50.9	-0.4	200	12.58
1359		X	6.86	0.01	13.1	0.2	800	-1	0.56	0.02	-49.9	1.7	50.7	-0.2	200	12.58

Comments: Pump on @ 1234 Sample time : 1345 DUP-020911 collected @ 1350
 ORP readings are reported relative to the Standard Hydrogen Electrode. Primary Review: SS 02/10/11 Secondary Review: LM 02/15/11

*INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

LOW FLOW SAMPLING
DATA SHEETS

Site: PPG Jersey City Client / Site: Dresdner Robin
 Date: 2/24/2011 Field Personnel: K. Harrelson
 Weather: Cool, 40° F Job #: 23410

Monitoring Well #: 107-TMW-D019 Well Depth: 14.59 ft Screened/Open Interval: 5.0 ft
 Well Permit #: NA Well Diameter: 1 inches

FID/FID Readings (ppm):
 Background: NA Pump Intake Depth: 12.1 ft below TOC
 Beneath Outer Cap: NA Depth to Water Before Pump Installation: 9.31 ft below TOC
 Beneath Inner Cap: NA Purge Method Peristaltic Pump

TIME	Purging	Sampling	pH (pH units)		Temperature (°C)		Specific Conductivity (us/cm)		Dissolved Oxygen (mg/L)		Redox Potential (mV)		Turbidity (NTU)		Pumping Rate (ml/min)	Depth to Water (ft below TOC)
			Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change		
0940	x		7.02	NA	12.1	NA	656	NA	1.51	NA	167.6	NA	OR	NA	120	11.10
0945	x		7.08	0.06	13.2	1.1	600	-56	0.41	-1.10	-10.4	-178.0	OR	NA	120	11.10
0950	x		7.15	0.07	14.0	0.8	585	-15	1.23	0.82	1.8	12.2	OR	NA	120	10.08
0955	x		7.15	0.00	14.0	0.0	593	8	0.92	-0.31	-2.4	-4.2	17960	NA	120	9.96
1000	x		7.11	-0.04	14.0	0.0	589	-4	0.69	-0.23	-18.3	-15.9	9150	-8810	200	9.89
1005	x		7.08	-0.03	14.0	0.0	580	-9	0.65	-0.04	-33.8	-15.5	14360	5210	200	9.88
1010	x		7.08	0.00	14.0	0.0	578	-2	0.79	0.14	-44.3	-10.5	6780	-7580	200	9.81
1015	x		7.08	0.00	14.0	0.0	574	-4	0.88	0.09	-56.5	-12.2	6784	4	200	9.78
1020	x		7.06	-0.02	14.0	0.0	572	-2	0.83	-0.05	-69.1	-12.6	5284	-1500	200	9.77
1025	x		7.03	-0.03	13.8	-0.2	569	-3	0.76	-0.07	-80.8	-11.7	6760	1476	200	9.77
1030	x		7.04	0.01	13.9	0.1	567	-2	0.69	-0.07	-92.7	-11.9	5216	-1544	200	9.74
1035	x		7.04	0.00	13.9	0.0	566	-1	0.52	-0.17	-115.7	-23.0	5284	68	200	9.74
1040	x		7.02	-0.02	14.0	0.1	565	-1	0.47	-0.05	-126.5	-10.8	4900	-384	200	9.74
1045	x		7.13	0.11	13.9	-0.1	565	0	0.54	0.07	-141.4	-14.9	5952	1052	200	9.75
1050	x		7.17	0.04	14.0	0.1	564	-1	0.50	-0.04	-150.3	-8.9	4756	-1196	200	9.73
1055	x		7.18	0.01	14.3	0.3	562	-2	0.51	0.01	-160.9	-10.6	3704	-1052	200	9.71
1100	x		7.18	0.00	14.3	0.0	561	-1	0.45	-0.06	-173.7	-12.8	3552	-152	200	9.70
1105	x		7.14	-0.04	14.2	-0.1	561	0	0.47	0.02	-188.0	-14.3	3888	336	200	9.70
1110	x		7.11	-0.03	14.1	-0.1	560	-1	0.50	0.03	-195.2	-7.2	4552	664	200	9.71
1115		x	7.14	0.03	14.0	-0.1	559	-1	0.42	-0.08	-204.0	-8.8	2311	-2241	200	9.67

Comments: Purge Began 0935 Sample Time 1114 OR = Over Range.
 Water is brown & muddy. Sample regardless of stabilization per client.

ORP readings are reported relative to the Standard Hydrogen Electrode. Primary Review: TP 3/7/10 Secondary Review: KBH 3/8/10
 *INDICATOR PARAMETERS HAVE STABILIZED WHEN 3 CONSECUTIVE READINGS ARE WITHIN: ± 0.1 for pH; ± 3% for Specific Conductivity and Temperature; ± 10 mV for Redox Potential; and ± 10% for Dissolved Oxygen and Turbidity

DATE: 2/9/2011 CLIENT: Dresdner Robin SITE: PPG Jersey City
 WEATHER: Sunny, 20° F ARRIVAL: 0830 DEPARTURE: 1430 JOB #: 22930
 ANALYST / FIELD SAMPLER: D. Miller FIELD SAMPLER: S. Schulze

FIELD INSTRUMENT AND CALIBRATION DATA

METER ID'S

	METER	PROBE
DO	<u>M-007</u>	<u>MP-118</u>
pH	<u>M-039</u>	<u>MP-124</u>
COND.	<u>M-005</u>	<u>MP-072</u>
ORP	<u>M-041</u>	<u>MP-111</u>
TURBIDITY	<u>M-048</u>	

Turbidity

Set to : 4000
 Lot & Exp. A0278 3/10/11
 Read : True Value 10.0
 Result 9.9

DISSOLVED OXYGEN

Water Temp (°C) 10.6
 Barometric Press (mm Hg) 768
 O2 Saturation % 100

Lot & Exp. C03300 3/10/11
 *Result must be within 10% of True Value.

* Calibration must be to 100% O2 Saturation

pH

Buffer 4.01 4.03 Temp (°C) 10.4
 Buffer 7.00 7.05 Temp (°C) 10.3
 Buffer 10.01 10.18 Temp (°C) 10.6
 Calibration performed at 840

Lot # and Expiration Date

A9273 09/2013
A9328 11/2011
A0333 11/2011

*pH meter should be calibrated using 3 buffers. pH Calibration readings should be ± 0.05 pH units from actual buffer value at temp. of calibration. After calibration read buffer 7.00 - it should read ± 0.05 from actual value at temp. of calibration.

ORP

pH buffer 7.00 w/quinhydrone 99.8 Temp (°C) 10.7 Lot / Exp Date A9328 11/2011

*The reading should be within ±15mV from the following values: +98 mV at 20°C, +90 mV at 25°C

pH buffer 4.00 w/quinhydrone 273.4 Temp (°C) 10.8 Lot / Exp Date A9273 09/2013

*The reading should be between +170mV at 20°C and +185mV at 25°C above the reading in the 7 buffer mixture

Quinhydrone Lot / Exp Date Q17226 3/2013

SPECIFIC CONDUCTANCE

Standard 1000 + 10 uS/cm NaCl
 Reading 1000
 Temp (°C) 10.6

Lot # and Expiration Date A0257 09/2015

*Reading must be 1000 uS/cm

NOTES: Primary Review: DM 2/10/11 Secondary Review: KH 2/15/11

DATE: 2/9/2011 CLIENT: Dresdner Robin SITE: PPG Jersey City
 WEATHER: Sunny, 20° F ARRIVAL: 0830 DEPARTURE: 1430 JOB #: 22930
 ANALYST / FIELD SAMPLER: Steve Schulze FIELD SAMPLER: D. Miller

FIELD INSTRUMENT AND CALIBRATION DATA

METER ID'S

	METER	PROBE
DO	<u>E-011</u>	<u>EP-040</u>
pH	<u>E-035</u>	<u>EP-043</u>
COND.	<u>E-006</u>	<u>EP-021</u>
ORP	<u>E-009</u>	<u>EP-041</u>
TURBIDITY	<u>E-058</u>	

Turbidity

Set to : 4000
 Lot & Exp. A0678 03/10/11
 Read : True Value 10.0
 Result 9.9

DISSOLVED OXYGEN

Water Temp (°C) 13.8
 Barometric Press (mm Hg) 768
 O2 Saturation % 100

* Calibration must be to 100% O2 Saturation

Lot & Exp. CO3300 03/10/11
 *Result must be within 10% of True Value.

pH

Buffer 4.01 4.00 Temp (°C) 13.7
 Buffer 7.00 7.03 Temp (°C) 13.9
 Buffer 10.01 10.12 Temp (°C) 13.6
 Calibration performed at 0835

Lot # and Expiration Date

A0061 02/14
A0057 02/12
A0083 03/11

*pH meter should be calibrated using 3 buffers. pH Calibration readings should be ± 0.05 pH units from actual buffer value at temp. of calibration. After calibration read buffer 7.00 - It should read ± 0.05 from actual value at temp. of calibration.

ORP

pH buffer 7.00 w/quinhydrone 88.1 Temp (°C) 13.8 Lot / Exp Date A0057 02/12

*The reading should be within ±15mV from the following values: +86 mV at 20°C, +90 mV at 25°C

pH buffer 4.00 w/quinhydrone 262.2 Temp (°C) 13.7 Lot / Exp Date A0081 02/14

*The reading should be between +170mV at 20°C and +185mV at 25°C above the reading in the 7 buffer mixture

Quinhydrone Lot / Exp Date Q17226 03/13

SPECIFIC CONDUCTANCE

Standard 1000 + 10 uS/cm NaCl
 Reading 1000
 Temp (°C) 13.9
 Lot # and Expiration Date A0257 09/15

*Reading must be 1000 uS/cm

NOTES: Primary Review: SS 02/10/11 Secondary Review: LM 02/15/11

