

Appendix C

Well Decommissioning Records



PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER SUPPLY & GEOSCIENCE
NEW JERSEY GEOLOGICAL AND WATER SURVEY ELEMENT
BUREAU OF WATER ALLOCATION & WELL PERMITTING
401 E. STATE ST - P.O. BOX 420
MAIL CODE 401-04Q
TRENTON, NEW JERSEY 08625-0420
TEL. # 609-984-6831
FAX # 609-633-1231
EMAIL: wellpermitting@dep.nj.gov

SHAWN M. LATOURETTE
Commissioner

AECOM
Attn: Laura Kinsey
1255 Broad St.,
Clifton, NJ 07013

June 28, 2023

**Re: Lost/Destroyed Wells
Request for Alternate Well Decommissioning Reports -
Phase 3B South, Garfield Avenue Group Sites
800 Garfield Ave
Municipality: Jersey City, County: Hudson
Block: 21510, Lot: 39
PI Number: G000008749
Well Permit Number(s): E201710694-95, E201712014, E201410050-51, E201712013,
2600082877, E201317206**

Dear Ms. Kinsey,

On April 25, 2023, The Bureau of Water Allocation and Well Permitting (Bureau) received your request to have the referenced well(s) listed as destroyed and to have alternative well decommissioning reports filed in lieu of properly decommissioning the well(s). Based on the information AECOM provided, the Well Permitting Section concurs that the well(s) has been destroyed and can no longer be properly decommissioned in accordance with the Well Construction and Maintenance; Sealing of Abandoned Wells Rule, N.J.A.C. 7:9D Subchapter 3. No further action is required for the referenced well(s).

If you have any questions, please contact Jeremy Wick by phone at (609) 984-6831 or via the Well Permitting Section email address, wellpermitting@dep.nj.gov.

Regards,

Terry Pilawski
Supervisor, Well Permitting Section
Bureau of Water Allocation and Well Permitting

January 2020
BWAWP

Memorandum

To	New Jersey Department of Environmental Protection, Bureau of Water Allocation & Well Permitting
CC	Ian Curtis, NJDEP Jody Overmyer, PPG Rich Feinberg, PPG Joseph Lagrotteria, K&L Gates Dorothy Laguzza, K&L Gates Sandy Paulsen, AECOM Shannon Gleason, AECOM
Subject	Request for Alternate Well Decommissioning Reports - Phase 3B South, Garfield Avenue Group Sites
From	Aimee Ruiter, Project Manager Laura Kinsey, Project Geologist
Date	April 24, 2023

On behalf of PPG, AECOM is requesting alternate well decommissioning reports for eight wells located at Phase 3B South (including the Former Ten West Property, the Former Fishbein Property, and Site 133 West) of the Garfield Avenue (GA) Group Sites in Jersey City, New Jersey. This letter provides the well information, the circumstances leading to the loss of or damage to the wells, and a description of the actions taken to locate the wells in accordance with the New Jersey Department of Environmental Protection (NJDEP) Bureau of Water Allocation & Well Permitting (BWAWP) *Guidance for Damaged, Destroyed, or Lost Wells*, dated June 2017.

Remediation of Chromate Chemical Production Waste (CCPW)-impacted soil was conducted in Phase 3B South from April 2021 through November 2022, including remedial excavation, placement of clean backfill, and surface restoration. Approximately 33,000 tons of hazardous and non-hazardous material were excavated and disposed of off-site.

During remedial excavation and backfilling activities, the eight wells were not observed during excavation confirming that they were removed or damaged beyond repair. Therefore, they cannot be decommissioned in accordance with the *Well Construction & Maintenance; Sealing of Abandoned Wells, N.J.A.C. 7:9D*. **Table 1** provides the well information for each removed or damaged well. **Figure 1** shows the location of each well and the associated well construction records are included in **Attachment 1**.

Table 1 – Well Information

Well ID	Location	Address	Well Permit #	Depth of Well (ft bgs)	Approximate Bottom of Well Elevation (ft NAVD88)	Top of Casing Elevation (ft NAVD88)	Approximate Restoration Surface Elevation from CAD Restoration Surface (ft NAVD88)
10W-MW101S	Ten West	800 Garfield Avenue	E201710694	17	-1.5	15.5	16.6
10W-MW102S	Ten West	800 Garfield Avenue	E201710695	17	-1.5	15.5	16.5
10W-MW105I	Ten West	800 Garfield Avenue	E201712014	40	-28.8	11.2	11.1
132-P3A-MW3	Fishbein	816 Garfield Avenue	E201410050	18	-4.1	13.9	14.7
132-P3A-MW4	Fishbein	816 Garfield Avenue	E201410051	20	-4.5	13.5	14.2
132-P3A-MW105I	Ten West	800 Garfield Avenue	E201712013	42	-27.6	14.4	14.4
133-MW1C	Site 133 West	15 Halladay Street	26-00082-877	77	-65.1	11.9	11.7
133-MW3A	Site 133 West	15 Halladay Street	E201317206	15	-1.9	13.1	12.6

Notes:

The wells are located in Hudson County, Jersey City, New Jersey.

The responsible party associated with the listed wells is PPG, One PPG Place, Pittsburgh, PA, 15219, 412-434-2708.

bgs - below ground surface

CAD - computer-aided design

ft - feet

NAVD88 - North American Vertical Datum of 1988

AECOM inspected excavation bottoms and did not observe wells during field activities from April 2021 through November 2022. Following the bottom-of-excavation inspections, the locations of the wells would have been buried and potentially filled with dense-graded aggregate (DGA) during backfilling activities. Photos taken during excavation activities document that these wells were removed or damaged during remedial excavation. A photolog from the field effort documenting post-excavation conditions is included in **Attachment 2**. Observations related to the well locations, based on the review of photos taken during excavation, include the following:

- Monitoring well 10W-MW101S: No evidence of the well was observed in the post-excavation photos (see Photos 1 and 2).
- Monitoring well 10W-MW102S: No evidence of the well was observed in the post-excavation photos (see Photos 3 and 4).
- Monitoring well 10W-MW105I: No evidence of the well was observed in the post-excavation photos (see Photos 5 and 6).
- Monitoring well 132-P3A-MW3: The polyvinyl chloride (PVC) casing was observed in the post-excavation photos indicating that the well was in-place but was damaged beyond repair (see Photos 7 and 8). The

well was further damaged during backfilling activities; it is not visible in the post-restoration photos (see Photos 9 and 10).

- Monitoring well 132-P3A-MW4: No evidence of the well was observed in the post-excavation photos; the well was completely removed during excavation based on elevations (see Photos 11 and 12 and **Table 1**).
- Monitoring well 132-P3A-MW105I: No evidence of the well is observed in the post-excavation photos (see Photos 13 and 14).
- Monitoring well 133-MW1C: No evidence of the well was observed in the post-excavation photos (see Photos 15 and 16).
- Monitoring well 133-MW3A: No evidence of the well was observed in the post-excavation photos; the well was completely removed during excavation based on elevations (see Photos 17 and 18 and **Table 1**).

Based on the information included in this memorandum, AECOM, on behalf of PPG, is requesting alternate well decommissioning reports for the eight wells described herein located at the GA Group Sites in Jersey City, New Jersey.

Please contact us if additional information is required.

Aimee Ruiter
Project Manager
aimee.ruiter@aecom.com
978-580-7616

Laura Kinsey
Project Geologist
laura.kinsey@aecom.com
201-572-7139

Attachments:

Figure 1	Site Plan
Attachment 1	Well Construction Records
Attachment 2	Photolog

ATTACHMENT 1

Well Construction Records

MONITORING WELL RECORD

PROPERTY OWNER: MID- NEWARK

Company/Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd St, Suite 216 New York, New York 10001

WELL LOCATION: Ten West

Address: 800 Garfield Ave /10W-MW101S confined by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610641 Northing (Y): 682588
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: January 17, 2018

DATE WELL COMPLETED: January 18, 2018

WELL USE: MONITORING

Other Use(s): _____

Local ID: 10W-MW101S

WELL CONSTRUCTION

Total Depth Drilled (ft.): 17 Finished Well Depth (ft.): 17 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	17	6		
Casing	0	12	2	PVC	sch 40
Screen	12	17	2	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	11	6	2		150	9
Gravel Pack	11	17	6	2	# 1 sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: Yes

Static Water Level: 8.5 ft. below land surface

Water Level Measure Tool: tape

Well Development Period: 1 hrs.

Method of Development: pump and surge

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: Geoprobe 7822

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 6: black OT - Other fill

6 - 16: brown GM - Silty gravels, gravel-sand-silt mixtures

16 - 17: black PT - Peat, muck, and other highly organic soils

ADDITIONAL INFORMATION:

Driller of Record: Keith Butcher,
JOURNEYMAN LICENSE # 203616

Company: SGS NORTH AMERICA INC.

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: NICHOLAS A FALLUCCA, MASTER LICENSE # 749523

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: T. GADAY

Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd St, Suite 216

City: New York State: New York Zip Code: 10001

PROPOSED WELL LOCATION

Facility Name: Ten West

Address: 800 Garfield Ave /10W-MW101S confimed by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610641 Northing (Y): 682588

Local ID: 10W-MW101S

Coordinate System: NJ State Plane (NAD83) - USFEET

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: OI

Depth (ft.): 20

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments: _____

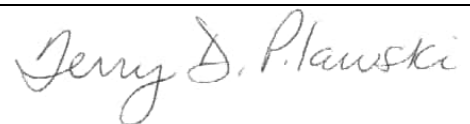
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: September 19, 2017

Expiration Date: September 19, 2018

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT
New Well

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ten West

List all AKAs: Ten West Apparel

Street Address: 800 Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG

2. Well Location (Street Address) 800 Garfield Ave, Jersey City ,NJ

3. Well Location (Municipal Block and Lot) Block# 21510 Lot # 39

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):... E201710694
2. Site Well Number as shown on application or plans): 10W-MW101S
3. Well Completion Date: 1/18/18
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):
5. Total Depth of Well to the nearest ½ foot: 17'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 12'
7. Screen Length (or length of open hole) in feet: 5'
8. Screen or Slot Size: 0.010"
9. Screen or Slot Material: PVC
10. Casing Material (PVC, steel, or other – specify): PVC
11. Casing Diameter (inches): 2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): 8.80
13. Yield (gallons per minute): 1.0
14. Development Technique (specify): Pump and Surge
15. Length of Time well is developed/pumped or bailed (hours and minutes): 2.5 hours



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Site 114
List all AKAs: Garfield Avenue Group Chrome Sites (PPG)
Street Address: Garfield Avenue and Carteret Avenue
Municipality: City of Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07305
Program Interest (PI) Number(s): G000008738 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

- Name of Well Owner PPG Industries
- Well Location (Street Address) 70 Caven Point Avenue, Jersey City, NJ
- Well Location (Municipal Block and Lot) Block # Lot #

SECTION C. WELL LOCATION SPECIFICS

- Well Permit Number (This number must be permanently affixed to the well casing):
- Site Well Number (As shown on application or plans): 10W-MW101S
- Geographic Coordinate NAD 83 to nearest 1/100 of a second:
Latitude: North 40°42'23.95" Longitude: West 74°04'21.67"
- New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
North 682617.1 East 610587.4
- Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 15.15
Elevation of Top of Outer Casing: 15.55 Elevation of Ground: 15.5
Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other
- Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark: Reference stations NJI2, NJNT, NYBP, NYBR and NYVH.
- Significant observations and notes:
On site control points used: BSM-359 (Spike in Caven Point Avenue, Elev= 10.83') and BSM-358 (Spike and Tag on ramp in 10West Property, Elev= 13.22')

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:

Date: 2/7/2018

Surveyor's Name: John D. Beattie

License Number: 24GS04331900

Firm Name: Borbas Surveying & Mapping, LLC

Certificate of Authorization #: 24GA28056200

Mailing Address: 402 Main Street

City/Town: Boonton

State: New Jersey

Zip Code: 07005

Phone Number: 973-316-8743

Ext:

Fax: 973-402-6627

SEAL

MONITORING WELL RECORD

PROPERTY OWNER: MID- NEWARK

Company/Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd St, Suite 216 New York, New York 10001

WELL LOCATION: Ten West

Address: 800 Garfield Ave /10W-MW102S confirmed by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610533 Northing (Y): 682458
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: January 18, 2018

DATE WELL COMPLETED: January 19, 2018

WELL USE: MONITORING

Other Use(s): _____

Local ID: 10W-MW102S

WELL CONSTRUCTION

Total Depth Drilled (ft.): 17 Finished Well Depth (ft.): 17 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	17	6		
Casing	0	12	2	PVC	sch 40
Screen	12	17	2	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	11	6	2		140	8
Gravel Pack	11	17	6	2	# 1 sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: Yes

Static Water Level: 9 ft. below land surface

Water Level Measure Tool: tape

Well Development Period: 1 hrs.

Method of Development: pump and surge

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: Geoprobe 7822

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 5: black OT - Other fill

5 - 16: brown GM - Silty gravels, gravel-sand-silt mixtures

16 - 17: black PT - Peat, muck, and other highly organic soils

ADDITIONAL INFORMATION:

Driller of Record: Keith Butcher,
JOURNEYMAN LICENSE # 203616

Company: SGS NORTH AMERICA INC.

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: NICHOLAS A FALLUCCA, MASTER LICENSE # 749523

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: T. GADAY

Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd St, Suite 216

City: New York State: New York Zip Code: 10001

PROPOSED WELL LOCATION

Facility Name: Ten West

Address: 800 Garfield Ave /10W-MW102S conformed by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610568 Northing (Y): 682447

Local ID: 10W-MW102S

Coordinate System: NJ State Plane (NAD83) - USFEET

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: OI

Depth (ft.): 20

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments: _____

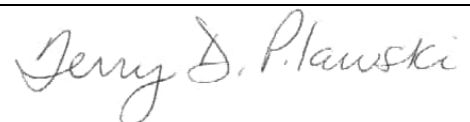
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: September 19, 2017

Expiration Date: September 19, 2018

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT
New Well

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ten West

List all AKAs: Ten West Apparel

Street Address: 800 Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): _____ Case Tracking Number(s): _____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG

2. Well Location (Street Address) 800 Garfield Ave, Jersey City ,NJ

3. Well Location (Municipal Block and Lot) Block# 21510 Lot # 39

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):... E201710695
2. Site Well Number as shown on application or plans): 10W-MW102S
3. Well Completion Date: 1/19/18
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): _____
5. Total Depth of Well to the nearest ½ foot: 17'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 12'
7. Screen Length (or length of open hole) in feet: 5'
8. Screen or Slot Size: 0.010"
9. Screen or Slot Material: PVC
10. Casing Material (PVC, steel, or other – specify): PVC
11. Casing Diameter (inches): 2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): 8.12
13. Yield (gallons per minute): 1.0
14. Development Technique (specify): Pump and Surge
15. Length of Time well is developed/pumped or bailed (hours and minutes): 2.5 hours



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Site 114
List all AKAs: Garfield Avenue Group Chrome Sites (PPG)
Street Address: Garfield Avenue and Carteret Avenue
Municipality: City of Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07305
Program Interest (PI) Number(s): G000008738 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

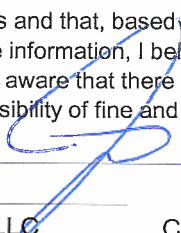
1. Name of Well Owner PPG Industries
2. Well Location (Street Address) 70 Caven Point Avenue, Jersey City, NJ
3. Well Location (Municipal Block and Lot) Block # Lot #

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):
2. Site Well Number (As shown on application or plans): 10W-MW102S
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
Latitude: North 40°42'22.34" Longitude: West 74°04'22.60"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
North 682453.4 East 610516.5
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 15.11
Elevation of Top of Outer Casing: 15.46 Elevation of Ground: 15.5
Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark: Reference stations NJI2, NJNT, NYBP, NYBR and NYVH.
7. Significant observations and notes:
On site control points used: BSM-359 (Spike in Caven Point Avenue, Elev= 10.83') and BSM-358 (Spike and Tag on ramp in 10West Property, Elev= 13.22')

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:  Date: 2/7/2018
Surveyor's Name: John D. Beattie License Number: 24GS04331900
Firm Name: Borbas Surveying & Mapping, LLC Certificate of Authorization #: 24GA28056200
Mailing Address: 402 Main Street
City/Town: Boonton State: New Jersey Zip Code: 07005
Phone Number: 973-316-8743 Ext: Fax: 973-402-6627

SEAL



Client: PPG

Project Number: 60550261

Site Location: Jersey City, New Jersey

Well Location: Ten West Apparel

Method: Hollow Stem Augers

Coords: X: 610626.9, Y: 682304.3

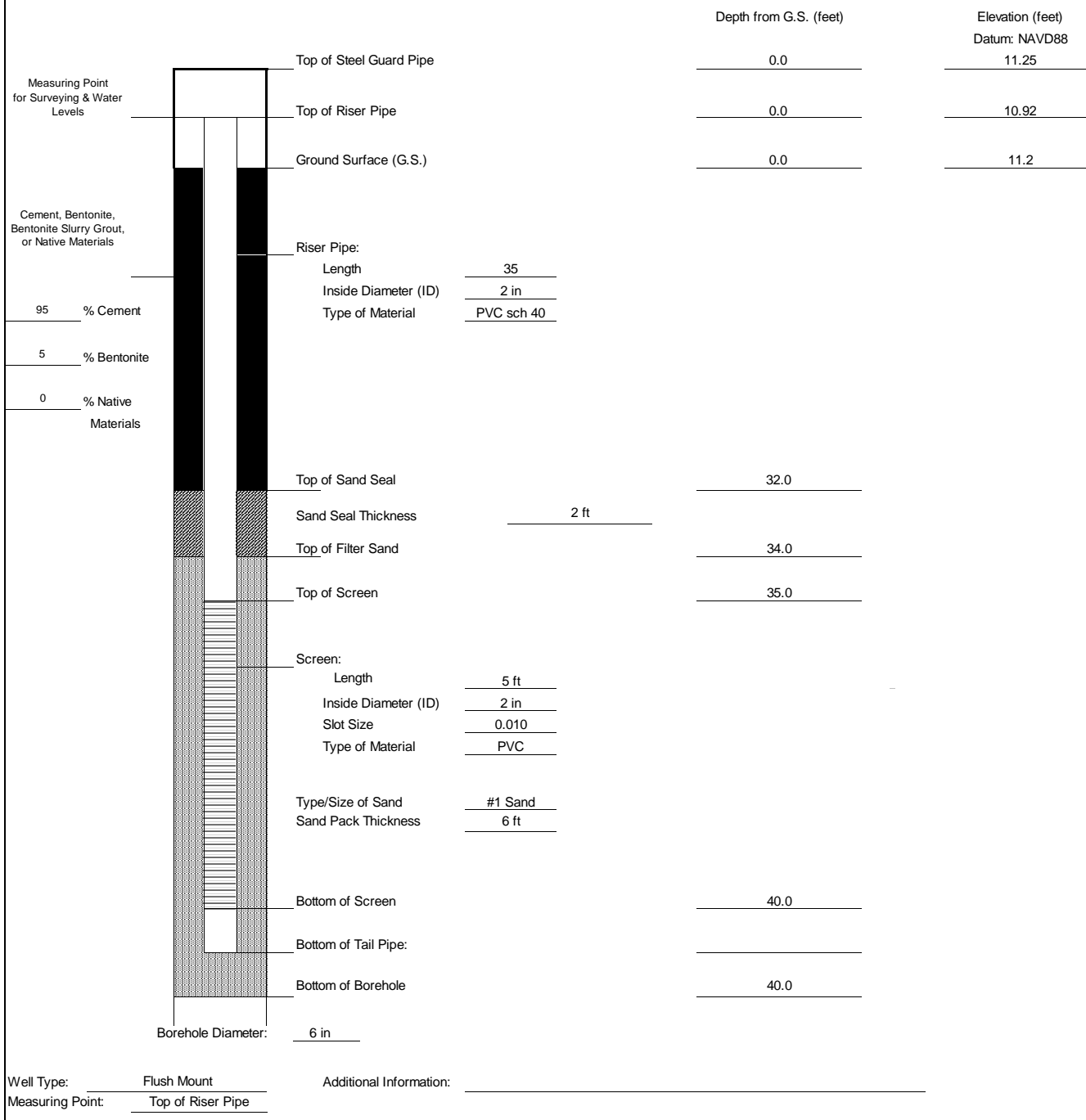
WELL ID: 10W-MW105I

Date Installed: 1/10/2018

Inspector: Jim Christopher

Contractor: SGS

MONITORING WELL CONSTRUCTION DETAIL



MONITORING WELL RECORD

PROPERTY OWNER: T. GADAY

Company/Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd Street, Suite 216 New York, New York 10001

WELL LOCATION: Ten West

Address: 800 Garfield Ave / 10W-MW105 I confirmed by client / 6136

County: Hudson

Municipality: Jersey City

Lot: 39

Block: 21510

Easting (X): 610608 Northing (Y): 682323
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: January 3, 2018

DATE WELL COMPLETED: January 10, 2018

WELL USE: MONITORING

Other Use(s): _____

Local ID: 10W-MW105 I

WELL CONSTRUCTION

Total Depth Drilled (ft.): 40

Finished Well Depth (ft.): 40

Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	13	14		
Borehole	13	40	6		
Casing	0	35	2	PVC	40
Casing	0	13	6	Steel	40
Screen	35	40	2	pvc	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	32	6	2	27	491	41
Grout	0	13	14	6	55	997	84
Gravel Pack	32	34	6	2	#00		
Gravel Pack	34	35	6	2	#1		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: No

Static Water Level: 3 ft. below land surface

Water Level Measure Tool: m scope

Well Development Period: 4 hrs.

Method of Development: pump & surge

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: Mobil Drill B-60

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 5: black OT - Other fill

5 - 16: brown GM - Silty gravels, gravel-sand-silt mixtures

16 - 17: black PT - Peat, muck, and other highly organic soils

17 - 23: red SM - Silty sands, sand-silt mixtures

23 - 40: brown red GM - Silty gravels, gravel-sand-silt mixtures

ADDITIONAL INFORMATION: Well record entered on behalf of Larry Lynch.

Driller of Record: Wesley M Eichfeld,
MASTER LICENSE # 592848

Company: SGS NORTH AMERICA INC.

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: NICHOLAS A FALLUCCA, MASTER LICENSE # 749523

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: T. GADAY

Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd Street, Suite 216

City: New York State: New York Zip Code: 10001

PROPOSED WELL LOCATION

Facility Name: Ten West

Address: 800 Garfield Ave / 10W-MW105 I confined by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610608 Northing (Y): 682323

Local ID: 10W-MW105 I

Coordinate System: NJ State Plane (NAD83) - USFEET

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: Owner Investigation

Depth (ft.): 50

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Sonic

Attachments: _____

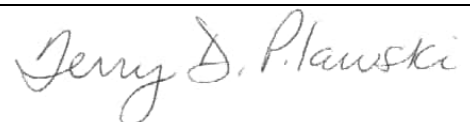
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: October 19, 2017

Expiration Date: October 19, 2018

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT
New Well

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ten West

List all AKAs: Ten West Apparel

Street Address: 800 Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG

2. Well Location (Street Address) 800 Garfield Ave, Jersey City, NJ

3. Well Location (Municipal Block and Lot) Block# 21510 Lot # 39

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):... E201712014
2. Site Well Number as shown on application or plans): 10W-MW105I
3. Well Completion Date: 1/10/18
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): 40'
5. Total Depth of Well to the nearest 1/2 foot: 35'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 5'
7. Screen Length (or length of open hole) in feet: 0.010"
8. Screen or Slot Size: PVC
9. Screen or Slot Material: PVC
10. Casing Material (PVC, steel, or other – specify): 2"
11. Casing Diameter (inches): 4.82
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): 2.0
13. Yield (gallons per minute): Pump and Surge
14. Development Technique (specify): 2 hours
15. Length of Time well is developed/pumped or bailed (hours and minutes):



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Site 114
List all AKAs: Garfield Avenue Group Chrome Sites (PPG)
Street Address: Garfield Avenue and Carteret Avenue
Municipality: City of Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07305
Program Interest (PI) Number(s): G000008738 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

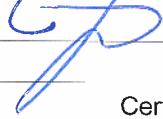
- Name of Well Owner PPG Industries
- Well Location (Street Address) 70 Caven Point Avenue, Jersey City, NJ
- Well Location (Municipal Block and Lot) Block # Lot #

SECTION C. WELL LOCATION SPECIFICS

- Well Permit Number (This number must be permanently affixed to the well casing):
- Site Well Number (As shown on application or plans): 10W-MW105I
- Geographic Coordinate NAD 83 to nearest 1/100 of a second:
Latitude: North 40°42'20.86" Longitude: West 74°04'21.18"
- New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
North 682304.3 East 610626.9
- Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 10.92
Elevation of Top of Outer Casing: 11.25 Elevation of Ground: 11.2
Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other
- Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark: Reference stations NJI2, NJNT, NYBP, NYBR and NYVH.
- Significant observations and notes:
On site control points used: BSM-359 (Spike in Caven Point Avenue , Elev= 10.83') and BSM-358 (Spike and Tag on ramp in 10West Property, Elev= 13.22')

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:  Date: 2/7/2018
Surveyor's Name: John D. Beattie License Number: 24GS04331900
Firm Name: Borbas Surveying & Mapping, LLC Certificate of Authorization #: 24GA28056200
Mailing Address: 402 Main Street
City/Town: Boonton State: New Jersey Zip Code: 07005
Phone Number: 973-316-8743 Ext: Fax: 973-402-6627

SEAL

MONITORING WELL RECORD

PROPERTY OWNER: N/A JERSEY CITY REDEVELOPMENT AGENCY

Company/Organization: Jersey City Redevelopment Agency

Address: 66 York St. Jersey City, New Jersey 07302

WELL LOCATION: Site 132

Address: 824 Garfield Ave address verified by Wes Eichfeld

County: Hudson Municipality: Jersey City Lot: 2 Block: 21510

Easting (X): 610667 Northing (Y): 682733
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 6, 2014

DATE WELL COMPLETED: August 6, 2014

WELL USE: MONITORING

Other Use(s): _____

Local ID: 132-P3A-MW3

WELL CONSTRUCTION

Total Depth Drilled (ft.): 18 Finished Well Depth (ft.): 18 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18	8		
Casing	0	8	2	PVC	sch 40
Screen	8	18	2	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	6	8	2	10	188	16
Gravel Pack	6	18	8	2	#1 sand		

Grouting Method: Gravity method

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: No

Static Water Level: 10 ft. below land surface

Water Level Measure Tool: m-scope

Well Development Period: 1 hrs.

Method of Development: whale pump

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: 7822DT Probe

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 18: Brown GM - Silty gravels, gravel-sand-silt mixtures

ADDITIONAL INFORMATION:

Driller of Record: Paul Lentz,
MONITORING LICENSE # 545066

Company: SGS NORTH AMERICA INC.

WELL PERMIT

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: WESLEY M EICHFELD, MASTER LICENSE # 592848

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: N/A JERSEY CITY REDEVELOPMENT AGENCY

Organization: Jersey City Redevelopment Agency

Address: 66 York St.

City: Jersey City State: New Jersey Zip Code: 07302

PROPOSED WELL LOCATION

Facility Name: Site 132

Address: 824 Garfield Ave address verified by Wes Eichfeld

County: Hudson Municipality: Jersey City Lot: 2 Block: 21510

Easting (X): 610687 Northing (Y): 682745
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: 132-P3A-MW3

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: _____

Depth (ft.): 20

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N


Drilling Method: Hollow Stem Augers

Attachments: _____

SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: July 31, 2014
Expiration Date: July 31, 2015

Approved by the authority of:
Bob Martin
Commissioner


Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: HCC Site 132

List all AKAs: Hudson County Chromate 132; HCC Site 132; Town & Country Warehouse

Street Address: Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000008749 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner

2. Well Location (Street Address)

3. Well Location (Municipal Block and Lot) Block# 2 Lot # 21510

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):... E20140050
2. Site Well Number as shown on application or plans): 132-P3A-MW3
3. Well Completion Date: 8-6-2014
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): 0.60
5. Total Depth of Well to the nearest ½ foot: 18.0
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 8.0
7. Screen Length (or length of open hole) in feet: 10.0
8. Screen or Slot Size: 0.010
9. Screen or Slot Material: PVC
10. Casing Material (PVC, steel, or other – specify): PVC
11. Casing Diameter (inches): 2.0
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): Not Available
13. Yield (gallons per minute): Not Available
14. Development Technique (specify): Pump/Surge Block
15. Length of Time well is developed/pumped or bailed (hours and minutes): Not Available



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Industries (Site 114)

List all AKAs:

Street Address: Garfield Avenue and Carteret Avenue

Municipality: City of Jersey City

(Township, Borough or City)

County: Hudson

Zip Code: 07305

Program Interest (PI) Number(s):

Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG Industries

2. Well Location (Street Address)

3. Well Location (Municipal Block and Lot) Block #

Lot #

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):

2. Site Well Number (As shown on application or plans): 132-P3A-MW3

3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:

Latitude: North 40°42'25.10"

Longitude: West 74°04'20.62"

4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:

North 682734.0

East 610668.2

5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 13.01

Elevation of Top of Outer Casing: 13.85

Elevation of Ground: 13.9

Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other

6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).

The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark reference stations: NJI2, NJNT, NYBP, NYBR and NYVH.

7. Significant observations and notes:

On site control points used: Spike and Tag set in the top of curb at the intersection of east side of Carteret Avenue and south side of Halladay Street, Elev= 10.77' and Spike and Tag set in pavement at the south west side of the Caven Point Avenue/Halladay Street intersection.

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:

Date: 9/26/2014

Surveyor's Name: John D. Beattie

License Number: 24GS04331900

Firm Name: Borbas Surveying & Mapping, LLC

Certificate of Authorization #: 24GA28056200

Mailing Address: 402 Main Street

City/Town: Boonton

State: New Jersey

Zip Code: 07005

Phone Number: 973-316-8743

Ext:

Fax: 973-402-6627

SEAL



30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

WELL ID 132-P3A-MW3

PAGE 1 OF 1

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	NJDEP Well Permit Number: #E201410050
Project Number: 60240739	Driller: P.Lentz	Coordinates (NJSPNAD83) x: 610667.8
Drilling Date: 8/6/2014 9:00:00 AM	Drilling Method: HSA	Coordinates (NJSPNAD83) y: 682733.5
Well Completion Date: 8/6/2014 11:00:00 AM	Elevation: 13.82	Total Well Depth: 18 ft
Geologist: SS	Project Manager: Scott Mikaelian	Depth to Water: ft
Physical Location: 3A Mounding Well	Date Gauged:	

(Note bgs = below ground surface)

PPG MONITORING WELL - 2012-09 RA PPG LOGS - A.GDT - 4/22/15 10:38 - C:\USERS\IRVINGM\DOCUMENTS\WY EQUIS WORK\PPG - JERSEY\GARFIELD AVENUE GROUP OF SITES\MOUNDING\WELLS.GPJ

DEPTH (ft bgs)	WATER LEVEL (ft)	SAMPLE NUMBER	RECOVERY (FT)	BLOW COUNTS	PID READING (PPM)	GA Class	USCS	LITHOLOGY	Surface Cover and Thickness:	WELL DIAGRAM
0					0.0	2	ASPHAL	ASPHALT.		
1		2	0.3		0.0	3	FILL	fine to coarse SAND, little fine to medium gravel, trace ash, (7.5YR 4/1) dark gray, loose, dry, no odor, no staining.		Flushmount Top Cap (J-Plug)
		3	0.5		0.0	3	FILL	ASH, (10YR 7/1) light gray, loose, dry, no odor, no staining.		
		4	2		0.0	3	FILL	fine SAND, little ash, trace coal, trace glass, (7.5YR 4/2) brown, loose, dry, no odor, no staining.		
2										
		1	0.7							
3										
		5	1.5		0.0	3	NR	NO RECOVERY.		Cement (bent-cement grout)
4										riser (PVC sch 40)
5										
					0.0	3	FILL	ASH, little coal, trace glass, (10YR 5/1) gray, loose, dry, no odor, no staining.		Annular seal (#00 Sand Seal)
6										
		6	2.5		0.0	3	NR	NO RECOVERY.		
7										
8										
9										
10										
					0.0	3	FILL	ASH, trace glass, trace coal, (10YR 4/1) dark gray, loose, wet, no odor, no staining.		
11										
12		8	2.5							Filter Pack (#1 Filter Pack)
		9			0.0	3	NR	NO RECOVERY.		Screen (PVC sch 40)
13										
14										
					0.0	3	FILL	ASH, trace coal, (10YR 4/1) dark gray, loose, wet, no odor, no staining.		
15		11	0.4		0.0	3	FILL	SILT, trace fill, trace organic fibers, (10YR 4/2) dark grayish brown, loose, moist, no odor, no staining.		
16		12	2		0.0	3	FILL	grayish brown, loose, moist, no odor, no staining.		
17		10	0.6							
		13	2		0.0	7	PT	PEAT, (80% organic fibers, 20% organic silt), (7.5YR 4/2) brown, very stiff, dry, moderate organic odor, no staining. Soils consistent with MM.		End Cap (PVC)
18										
19										
20										

Comments:

MONITORING WELL RECORD

PROPERTY OWNER: N/A JERSEY CITY REDEVELOPMENT AGENCY

Company/Organization: Jersey City Redevelopment Agency

Address: 66 York St. Jersey City, New Jersey 07302

WELL LOCATION: Site 132

Address: 824 Garfield Ave address verified by Wes Eichfeld

County: Hudson Municipality: Jersey City Lot: 2 Block: 21510

Easting (X): 610779 Northing (Y): 682676
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: August 5, 2014

DATE WELL COMPLETED: August 5, 2014

WELL USE: MONITORING

Other Use(s): _____

Local ID: 132-P3A-MW4

WELL CONSTRUCTION

Total Depth Drilled (ft.): 20 Finished Well Depth (ft.): 20 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	20	8		
Casing	0	10	2	PVC	sch 40
Screen	10	20	2	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	8	8	2	15	282	24
Gravel Pack	8	20	8	2	#1 sand		

Grouting Method: Gravity method

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: No

Static Water Level: 10 ft. below land surface

Water Level Measure Tool: m scope

Well Development Period: 1 hrs.

Method of Development: whale pump

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: 7822DT

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 20: brown GM - Silty gravels, gravel-sand-silt mixtures

ADDITIONAL INFORMATION:

Driller of Record: Paul Lentz,
MONITORING LICENSE # 545066

Company: SGS NORTH AMERICA INC.

WELL PERMIT

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: WESLEY M EICHFELD, MASTER LICENSE # 592848

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: N/A JERSEY CITY REDEVELOPMENT AGENCY

Organization: Jersey City Redevelopment Agency

Address: 66 York St.

City: Jersey City State: New Jersey Zip Code: 07302

PROPOSED WELL LOCATION

Facility Name: Site 132

Address: 824 Garfield Ave address verified by Wes Eichfeld

County: Hudson Municipality: Jersey City Lot: 2 Block: 21510

Easting (X): 610775 Northing (Y): 682708
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: 132-P3A-MW4

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: _____

Depth (ft.): 20

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments: _____

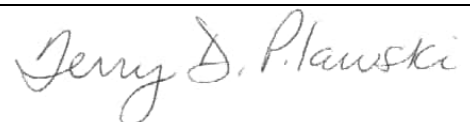
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: July 31, 2014

Expiration Date: July 31, 2015

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: HCC Site 132

List all AKAs: Hudson County Chromate 132; HCC Site 132; Town & Country Warehouse

Street Address: Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): G000008749 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner

2. Well Location (Street Address)

3. Well Location (Municipal Block and Lot) Block# 2 Lot # 21510

SECTION C. WELL LOCATION SPECIFICS

- | | |
|--|------------------|
| 1. Well Permit Number (This number must be permanently affixed to the well casing):.. | E201410051 |
| 2. Site Well Number as shown on application or plans): | 132-P3A-MW4 |
| 3. Well Completion Date: | 8-6-2014 |
| 4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): | 0.42 |
| 5. Total Depth of Well to the nearest ½ foot: | 20.0 |
| 6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... | 10.0 |
| 7. Screen Length (or length of open hole) in feet: | 10.0 |
| 8. Screen or Slot Size: | 0.010 |
| 9. Screen or Slot Material: | PVC |
| 10. Casing Material (PVC, steel, or other – specify): | PVC |
| 11. Casing Diameter (inches): | 2.0 |
| 12. Static Water Level from top of casing at the time of installation (nearest 0.01'): | Not Available |
| 13. Yield (gallons per minute): | Not Available |
| 14. Development Technique (specify): | Pump/Surge Block |
| 15. Length of Time well is developed/pumped or bailed (hours and minutes): | Not Available |



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Industries (Site 114)
List all AKAs:
Street Address: Garfield Avenue and Carteret Avenue
Municipality: City of Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07305
Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG Industries
2. Well Location (Street Address)
3. Well Location (Municipal Block and Lot) Block # Lot #

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):
2. Site Well Number (As shown on application or plans): 132-P3A-MW4
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
Latitude: North 40°42'24.53" Longitude: West 74°04'19.16"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
North 682676.9 East 610780.3
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 13.08
Elevation of Top of Outer Casing: 13.50 Elevation of Ground: 13.5
Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark reference stations: NJI2, NJNT, NYBP, NYBR and NYVH.
7. Significant observations and notes:
On site control points used: Spike and Tag set in the top of curb at the intersection of east side of Carteret Avenue and south side of Halladay Street, Elev= 10.77' and Spike and Tag set in pavement at the south west side of the Caven Point Avenue/Halladay Street intersection.

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:

Surveyor's Name: John D. Beattie License Number: 24GS04331900
Firm Name: Borbas Surveying & Mapping, LLC Certificate of Authorization #: 24GA28056200
Mailing Address: 402 Main Street
City/Town: Boonton State: New Jersey Zip Code: 07005
Phone Number: 973-316-8743 Ext: Fax: 973-402-6627

SEAL

Date: 9/26/2014



30 Knightsbridge Road, Piscataway, NJ 08854
732.564.3200 office telephone

WELL ID 132-P3A-MW4

PAGE 1 OF 2

Project Name: PPG Garfield Ave	Drilling Company: SGS North America	NJDEP Well Permit Number: #E201410051
Project Number: 60240739	Driller: P.Lentz	Coordinates (NJSPNAD83) x: 610779.6
Drilling Date: 8/5/2014 9:00:00 AM	Drilling Method: HSA	Coordinates (NJSPNAD83) y: 682676.5
Well Completion Date: 8/5/2014 10:55:00 AM	Elevation: 13.54	Total Well Depth: 20 ft
Geologist: RK	Project Manager: Scott Mikaelian	Depth to Water: ft
Physical Location: 3A Mounding Well	Date Gauged:	

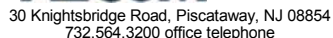
(Note bgs = below ground surface)

PPG MONITORING WELL - 2012-09 RA PPG LOGS - A.GDT - 4/22/15 10:38 - C:\USERS\IRVINGM\DOCUMENTS\WY EQUIS WORK\PPG - JERSEY\GARFIELD AVENUE GROUP OF SITES\MOUNDING\WELLS.GPJ

DEPTH (ft bgs)	WATER LEVEL (ft)	SAMPLE NUMBER	RECOVERY (FT)	BLOW COUNTS	PID READING (PPM)	GA Class	USCS	LITHOLOGY	Surface Cover and Thickness:	WELL DIAGRAM
0					0.0	2	ASPHAL	ASPHALT.		
1		2	0.3		0.0	3	FILL	fine to medium SAND, little silt, little fine angular gravel, trace ash, (7.5YR 4/3) brown, dense, dry, no odor, no staining.		Flushmount Top Cap (J-Plug)
2		3	2		0.0	4A	FILL	COPR, (5YR 3/4) dark reddish brown, loose, dry, no odor, no staining.		
3		1	0.7		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, dry, no odor, no staining.		
4		4	1		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, dry, no odor, no staining.		Cement (bent-cement grout)
5		5	1		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist, no odor, no staining.		riser (PVC sch 40)
6					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist, no odor, no staining.		
7		7	1		0.0	3	FILL	ASH, and cinders, some fine to medium sand, (7.5YR 3/1) very dark gray, loose, wet, no odor, no staining.		Annular seal (#00 Sand Seal)
8		6	2		0.0	5	FILL	GGM, little medium to coarse gravel, (5GY 5/2) grayish green, loose, wet.		
9		8	2		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, wet, no odor, no staining.		
10					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, wet, no odor, no staining.		
11					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, wet, no odor, no staining.		
12					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, wet, no odor, no staining.		
13		9	5		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		Filter Pack (#1 Filter Pack)
14					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		
15					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		Screen (PVC sch 40)
16					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		
17		10	4.5		0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		
18					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		
19					0.0	5	FILL	GGM, (5GY 5/2) grayish green, loose, moist to wet, no odor, no staining.		
20		11	0.5		0.0	3	FILL	fine SAND, and silt, (5YR 4/4) reddish		

Comments:

(Continued Next Page)



PAGE 2 OF 2

(Note bgs = below ground surface)

PPG MONITORING WELL - 2012-09 RA PPG LOGS A.GDT - 4/22/15 10:38 - C:\USERS\IRVING\MDC\DOCUMENTS\MY EQUUS WORK\PPG_JERSEY\GARFIELD AVENUE GROUP OF SITES\MOUNDINGWELLS.GPJ

Comments:



Client: PPG

Project Number: 60507168

Site Location: Jersey City, New Jersey

Well Location: Ten West Apparel

Method: Hollow Stem Augers

Coords: X: 610676.8, Y: 682695.3

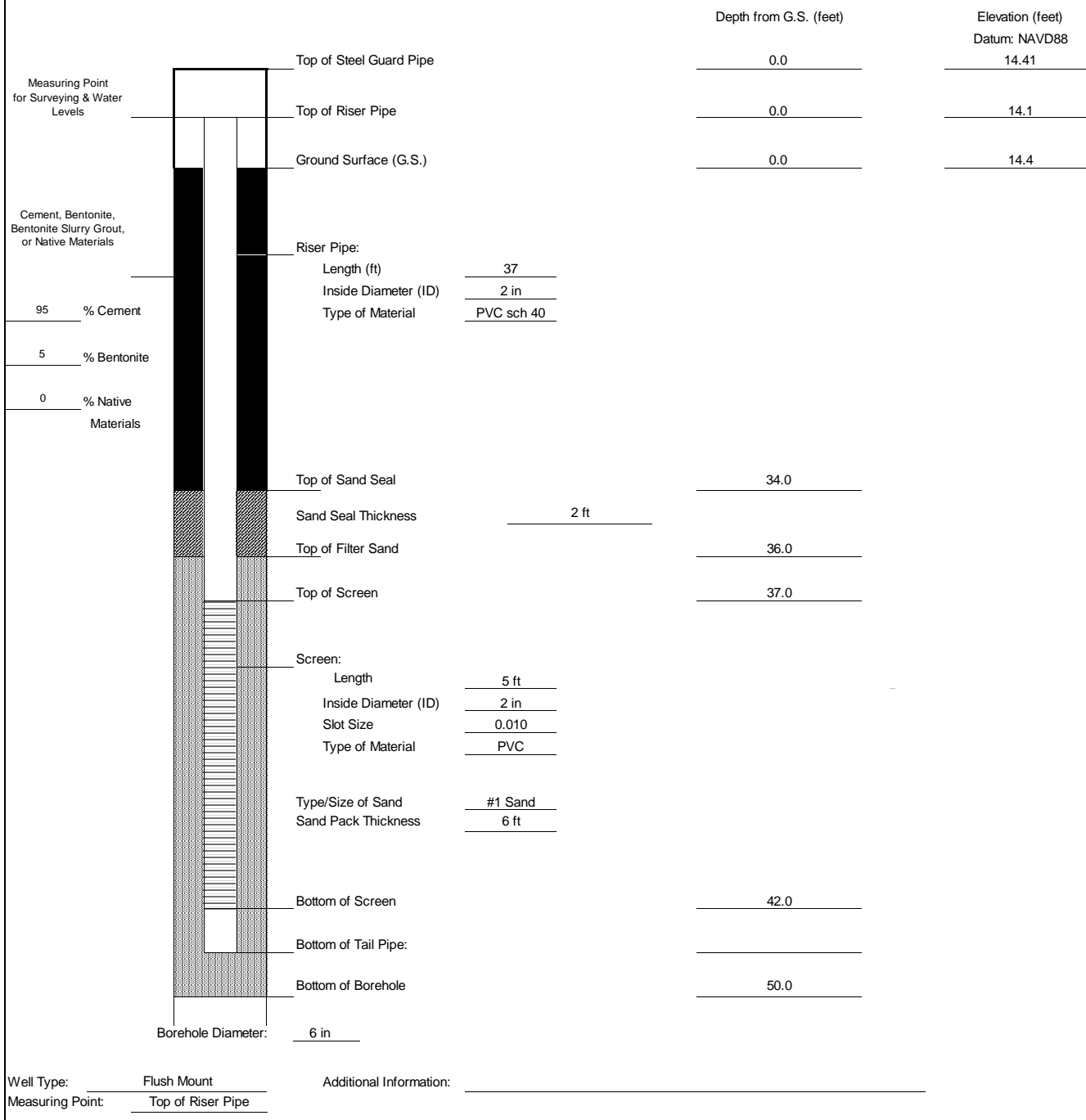
WELL ID: 132-P3A-MW105I

Date Installed: 1/16/2018

Inspector: Eric Acs

Contractor: SGS

MONITORING WELL CONSTRUCTION DETAIL



MONITORING WELL RECORD

PROPERTY OWNER: T. GADAY

Company/Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd Street, Suite 216 New York, New York 10001

WELL LOCATION: Ten West

Address: 800 Garfield Ave / 132-P3A-MW105 I confirmed by client / 6130

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610750 Northing (Y): 682658
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: January 11, 2018

DATE WELL COMPLETED: January 16, 2018

WELL USE: MONITORING

Other Use(s): _____

Local ID: 132-P3A-MW105 I

WELL CONSTRUCTION

Total Depth Drilled (ft.): 50 Finished Well Depth (ft.): 42 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	18.5	14		
Borehole	18.5	50	6		
Casing	0	37	2	PVC	40
Casing	0	18.5	6	Steel	40
Screen	37	42	2	pvc	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	18.5	14	6	78	1418	120
Grout	0	34	6	2	28	521	44
Grout	42	50	6	0	5	100	12
Gravel Pack	34	36	6	2	#00		
Gravel Pack	36	42	6	2	#1		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: No

Static Water Level: 7.5 ft. below land surface

Water Level Measure Tool: m scope

Well Development Period: 4 hrs.

Method of Development: pump & surge

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: _____

Drill Rig: Mobile Drill B-60

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 4: black OT - Other fill

4 - 17: brown GM - Silty gravels, gravel-sand-silt mixtures

17 - 24: red SM - Silty sands, sand-silt mixtures

24 - 38: brown GM - Silty gravels, gravel-sand-silt mixtures

38 - 50: brown SM - Silty sands, sand-silt mixtures

ADDITIONAL INFORMATION: Double cased well. Hole back grouted 50-42 ft. Well record entered on behalf of Larry Lynch.

Driller of Record: Wesley M Eichfeld,
MASTER LICENSE # 592848

Company: SGS NORTH AMERICA INC.

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: NICHOLAS A FALLUCCA, MASTER LICENSE # 749523

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: T. GADAY

Organization: Mid-Newark L.P. c/o Ten West Apparel

Address: 10 West 33rd Street, Suite 216

City: New York State: New York Zip Code: 10001

PROPOSED WELL LOCATION

Facility Name: Ten West

Address: 800 Garfield Ave / 132-P3A-MW105 I confirmed by client / 6136

County: Hudson Municipality: Jersey City Lot: 39 Block: 21510

Easting (X): 610750 Northing (Y): 682658

Local ID: 132-P3A-MW105 I

Coordinate System: NJ State Plane (NAD83) - USFEET

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 2

Regulatory Program

Requiring Wells/Borings: Owner Investigation

Depth (ft.): 50

Case ID Number: _____

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Sonic

Attachments: _____

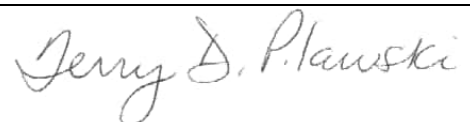
SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: October 19, 2017

Expiration Date: October 19, 2018

Approved by the authority of:

Bob Martin
Commissioner



Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT
New Well

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Ten West

List all AKAs: Ten West Apparel

Street Address: 800 Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG

2. Well Location (Street Address) 800 Garfield Ave, Jersey City, NJ

3. Well Location (Municipal Block and Lot) Block# 21510 Lot # 39

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):... E201712013
2. Site Well Number as shown on application or plans): 132-P3A-MW105I
3. Well Completion Date: 1/1518
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):
5. Total Depth of Well to the nearest ½ foot: 42'
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):..... 37'
7. Screen Length (or length of open hole) in feet: 5'
8. Screen or Slot Size: 0.010"
9. Screen or Slot Material: PVC
10. Casing Material (PVC, steel, or other – specify): PVC
11. Casing Diameter (inches): 2"
12. Static Water Level from top of casing at the time of installation (nearest 0.01'): 7.86
13. Yield (gallons per minute): 2.0
14. Development Technique (specify): Pump and Surge
15. Length of Time well is developed/pumped or bailed (hours and minutes): 2 hours



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Site 114
List all AKAs: Garfield Avenue Group Chrome Sites (PPG)
Street Address: Garfield Avenue and Carteret Avenue
Municipality: City of Jersey City (Township, Borough or City)
County: Hudson Zip Code: 07305
Program Interest (PI) Number(s): G000008738 Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner PPG Industries
2. Well Location (Street Address) 70 Caven Point Avenue, Jersey City, NJ
3. Well Location (Municipal Block and Lot) Block # Lot #

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):
2. Site Well Number (As shown on application or plans): 132-P3A-MW105I
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
Latitude: North 40°42'24.72" Longitude: West 74°04'20.51"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
North 682695.3 East 610676.8
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 14.10
Elevation of Top of Outer Casing: 14.41 Elevation of Ground: 14.4
Check one: ☒ NAVD 88 ☐ NGVD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
The vertical datum is the North American Vertical Datum of 1988 (NAVD88) GEOID09 verified by differential GPS observations from the NGS CORS network on May 10, 2012. Benchmark: Reference stations NJI2, NJNT, NYBP, NYBR and NYVH.
7. Significant observations and notes:
On site control points used: BSM-359 (Spike in Caven Point Avenue , Elev= 10.83') and BSM-358 (Spike and Tag on ramp in 10West Property, Elev= 13.22')

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature:

Surveyor's Name: John D. Beattie License Number: 24GS04331900
Firm Name: Borbas Surveying & Mapping, LLC Certificate of Authorization #: 24GA28056200
Mailing Address: 402 Main Street
City/Town: Boonton State: New Jersey Zip Code: 07005
Phone Number: 973-316-8743 Ext: Fax: 973-402-6627

SEAL

Date: 2/7/2018



New Jersey Department of Environmental Protection
Site Remediation Program

**MONITORING WELL CERTIFICATION FORM A - AS-BUILT
CERTIFICATION**

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Industries (Site 114)

List all AKAs: _____

Street Address: Garfield Ave

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): _____ Case Tracking Number(s): _____

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner _____

2. Well Location (Street Address) _____

3. Well Location (Municipal Block and Lot) Block# _____ Lot # _____

SECTION C. WELL LOCATION SPECIFICS

- | | |
|--|------------------------|
| 1. Well Permit Number (This number must be permanently affixed to the well casing):.. | <u>2600082877</u> |
| 2. Site Well Number as shown on application or plans): | <u>133-MW1C</u> |
| 3. Well Completion Date: | <u>4-30-2007</u> |
| 4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'): | <u>0.4</u> |
| 5. Total Depth of Well to the nearest ½ foot: | <u>77.0</u> |
| 6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'): | <u>72.0</u> |
| 7. Screen Length (or length of open hole) in feet: | <u>5.0</u> |
| 8. Screen or Slot Size: | <u>10 slot</u> |
| 9. Screen or Slot Material: | <u>PVC</u> |
| 10. Casing Material (PVC, steel, or other – specify): | <u>PVC</u> |
| 11. Casing Diameter (inches): | <u>2.0</u> |
| 12. Static Water Level from top of casing at the time of installation (nearest 0.01'): | <u>n/a</u> |
| 13. Yield (gallons per minute): | <u>n/a</u> |
| 14. Development Technique (specify): | <u>HSA/ Mud Rotary</u> |
| 15. Length of Time well is developed/pumped or bailed (hours and minutes): | <u>n/a</u> |



New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: PPG Industries (Site 114)

List all AKAs:

Street Address: Garfield Avenue

Municipality: Jersey City (Township, Borough or City)

County: Hudson Zip Code: 07305

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1 Name of Well Owner

2 Well Location (Street Address)

3 Well Location (Municipal Block and Lot) Block# Lot #

SECTION C. WELL LOCATION SPECIFICS

1 Well Permit Number (This number must be permanently affixed to the well casing): 26-00082-877

2 Site Well Number As shown on application or plans): 133-MW1C

3 Geographic Coordinate NAD 83 to nearest 1/10 of a second:

Longitude West 74° 04' 20.61" Latitude North 40° 42' 20.65"

4 New Jersey State Plane Coordinates NAD 83 to nearest 10 feet:

North 682283.1 East 610670.8

5 Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 11.50

6 Source of elevation datum (benchmark, number/description and elevation/datum. If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation.)

The vertical datum is NAVD88 established by Borbas Surveying and Mapping from differential GPS observations from the NGS CORS Network in December, 2005.

7 Significant observations and notes:

Outer Casing Elevation: 11.86
Ground Surface Elevation: 11.9

Professional Land Surveyor's Name: J. Peter Borbas, P.L.S.

Date: 12/20/2011

SECTION D. LAND SURVEYOR'S CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

SEAL

Professional Land Surveyor's Signature: 

Date 12/20/2011

Surveyor's Name: J. Peter Borbas, P.L.S.

License Number: 24GS03165300

Mailing Address 402 Main Street

City/Town: Boonton

State New Jersey

Zip Code: 07005

Phone Number 973-316-8743

Ext.: N/A

Fax: 973-402-6627

Site Name: PPG Industries (Site 114)

Well Permit Number: 26-00082-877

Well Number: 133-MW1C



Client: PPG - GAG

Project Number: 05510-109-0504

Site Location: Jersey City, NJ / Ross Wox

Well Location: Hallday Trailer Yard Coords:

Method: HSA / Mud Rotary

WELL ID:

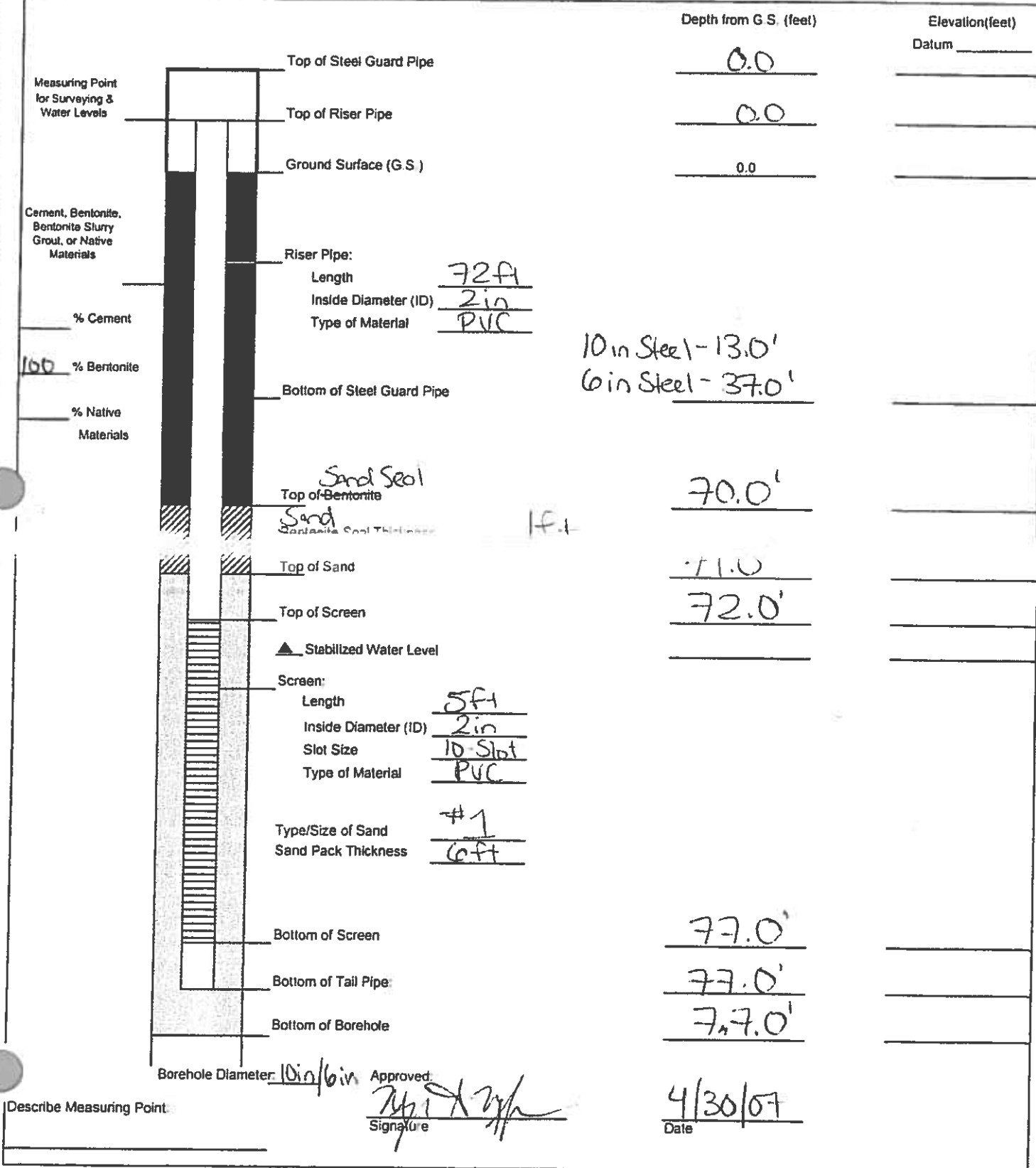
133-2C

Date Installed: 4/30/07

Inspector: M. Merdinger

Contractor: Eichelbergers

MONITORING WELL CONSTRUCTION DETAIL



Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller: N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation: 13.10

State Plane Coordinates
X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 1 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
0		2 in dia PVC Riser Bentonite-cement Grout 6 in and 10 in Steel Casings	0.0			Very Dark Brown (10YR 2/2) medium to fine SAND, little medium to fine Gravel, trace organics, plastic, moist, loose. No odor.
1		133-1CA (1.0-2.0) Cr+6, TAL Metals	0.0			
2						Soft Dig refusal on brick foundation. No sample, augered through.
3						
4		133-1CB (4.0-4.5) Cr+6, TAL Metals	N/A	50/2		Very Dark Gray (5YR 3/1) SILT, some coarse Sand (Fill Sand), crushed Fill Material (brick), trace organics, wet, loose. Diesel fuel odor. Refusal on Brick.
5			N/A	1		No Recovery
6				3		
7				4		
8				10		
9			N/A	N/A		Brick foundation. No sample, augered through.
10		133-1CC (9.0-10.0) Cr+6, TAL Metals 133-1CCD (9.0-10.0) Cr+6, TAL Metals	N/A	1		Gray (5Y 5/1) SILT, trace coarse to fine Sand interbedded with Ash and crushed Fill Material (C/D), moist to wet, loose. Black water in sample. No odor.
11				6		
				7		No Recovery
				6		Gray (5Y 5/1) SILT, trace coarse to fine Sand interbedded with Ash and crushed Fill Material

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller: N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation: 13.10

State Plane Coordinates X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 2 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
12			N/A	3		(C/D), moist to wet, very loose. Black water in sample. No odor.
				4		No Recovery
				5		No Recovery
				4		No Recovery
13		133-1CD (13.0-14.0) MS/MSD, Cr+6, TAL Metals	N/A	1		Dark Gray (Gley1 4N/0) PEAT, organics, cohesive, very soft, moist. No odor.
				2		
				1		
				2		No Recovery
15		133-1CE (15.0-15.5) Cr+6, TAL Metals	N/A	2		Dark Gray (Gley1 4N/0) PEAT, trace organics, cohesive, very soft, moist. Slight sulfur odor.
				2		
				2		
				2		No Recovery
17		133-1CF (17.0-18.0) MS/MSD, Cr+6, TAL Metals	0.0	WH		Dark Gray (Gley 4N/0) organic CLAY, little Silt, trace organics and shells, moist, cohesive, very soft. No odor.
				1		
			0.0	1		No Recovery
				1		No Recovery
19		133-1CG (19.0-20.0) Cr+6, TAL Metals	0.0	2		Dark Gray (Gley 4N/0) organic CLAY, little Silt, trace organics and shells, moist, cohesive, very soft. No odor.
		133-1CGD (19.0-20.0) Cr+6, TAL Metals		1		
			0.0	1		No Recovery
				1		No Recovery
21		133-1CH (21.0-21.5) Cr+6, TAL Metals	0.0	1		Dark Gray (Gley 4N/0) organic CLAY, little Silt, trace organics and shells, moist, cohesive, very soft. No odor.
				2		No Recovery
22						No Recovery

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller: N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation 13.10

State Plane Coordinates X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 3 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
23		133-1CI (23.0-23.5) Cr+6, TAL Metals	0.0	8		Gray (Gley 5N/0) very fine SAND and SILT, trace Clay and medium rounded Gravel, wet, medium dense. No odor.
24			0.0	14		Weak Red (10R 4/3) very fine SAND, some Silt, trace Clay and fine to medium round Gravel, wet, medium dense. No odor.
25			0.0	3		No Recovery
26			0.0	2		Weak Red (10R 4/3) coarse to fine graded SAND, trace rounded fine Gravel and Silt, wet, very loose. No odor.
27		133-1CJ (27.0-27.8) Cr+6, TAL Metals	0.0	6		Weak Red (10R 4/3) medium to coarse SAND, trace Silt, little fine to medium rounded Gravel, loose, wet. No odor.
28			0.0	5		No Recovery
29			0.0	6		Weak Red (10R 4/3) coarse to fine graded SAND, some to little Silt, little medium to coarse rounded Gravel, wet, loose. No odor.
30			0.0	5		No Recovery
31		133-1CK (31.0-31.5) MS/MSD, Cr+6, TAL Metals	0.0	6		Weak Red (10R 4/3) medium to fine SAND and SILT, trace fine to medium rounded Gravel, wet, loose. No odor.
32			0.0	6		No Recovery
33			0.0	6		No Recovery

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller: N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation: 13.10

State Plane Coordinates X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 4 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
34				5		Weak Red (10R 4/3) fine SAND and SILT, wet, loose. No odor.
			0.0	6		
35				6		No Recovery
			0.0	2		Weak Red (10R 4/3) fine SAND and SILT, wet, very loose. No odor.
				4		
36			0.0	4		Weak Red (10R 4/4) SILT, some very fine Sand, wet, loose. No odor.
				5		No Recovery
37			0.0	4		Weak Red (10R 4/4) SILT, little very fine Sand, wet, very loose. No odor.
				1		No Recovery
38				3		
			N/A	4		
39				6		Weak Red (10R 4/4) SILT, little to trace very fine Sand, wet, loose. No odor.
				5		
40				6		
				7		No Recovery
41			0.0	8		Weak Red (10R 4/4) SILT, trace to none very fine Sand, wet, loose. No odor.
				6		
42			0.0	7		No Recovery
				9		
43			0.0	7		Weak Red (10R 4/4) SILT, trace to none very fine Sand, wet, loose. No odor.
				6		
44			0.0	7		

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED

Client: PPG Industries**Site:** Site 133**Site Location:** Jersey City, NJ**Geologist:** B. Ergezen, M. Merdinger**Drilling Company:** Eichelbergers**Driller:** N. Moyer**Drilling Date:** 3/29/2007**Well Completion Date:** 4/26/2007**Elevation:** 13.10**State Plane Coordinates:** X: 682282.8 Y: 610670.5**Drilling Method:** HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 5 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
45				7		No Recovery
			0.0	4		Weak Red (10R 4/4) SILT, little to trace very fine Sand, wet, loose. No odor.
				5		
46			0.0	6		No Recovery
				8		
47			0.0	8		Weak Red (10R 4/4) SILT, wet, loose. No odor.
				8		
48			0.0	7		
				8		No Recovery
49			0.0	7		Weak Red (10R 4/4) SILT, wet, loose. No odor.
50			0.0	8		
				8		No Recovery
51			0.0	7		Weak Red (10R 4/4) SILT, trace to none very fine Sand, wet, loose. No odor.
				6		
52			0.0	6		
				7		No Recovery
53			0.0	7		Weak Red (10R 4/4) SILT, wet, loose. No odor.
				8		
54			0.0	7		Weak Red (10R 5/4) SILT and little interbedded Silty Clay, loose, wet. No odor.
				5		No Recovery
55			0.0	6		Weak Red (10R 4/4) SILT, wet, loose. No odor.

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation 13.10

State Plane Coordinates X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 6 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
56			0.0	5		Dark Gray (5YR 4/1) CLAY, some Silt, with trace interbedded Weak Red (10R 5/4) Silt, moist, cohesive, medium. No odor.
57				6		
58				7		No Recovery
59				3		Dark Gray (5YR 4/1) CLAY and Weak Red (10R 5/4) SILT, interbedded, firm, cohesive, soft. No odor.
60				4		
61				4		
62				4		
63				4		
64				7		
65				6		Reddish Brown (2.5YR 4/3) interbedded Silty CLAY and SILT, cohesive, medium, moist. No odor.
66			0.0	3		
				3		
				5		
				4		
				6		
				6		
				6		Gray (5Y 5/1) CLAY, interbedded with trace Weak Red (10R 5/4) Silt and very fine Sand, cohesive, medium, moist. No odor.
				3		Gray (5Y 5/1) CLAY, interbedded with some Weak Red (10R 5/4) Silt and very fine Sand, cohesive, soft, moist. No odor.
				4		
				6		

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Client: PPG Industries

Site: Site 133

Site Location: Jersey City, NJ

Geologist: B. Ergezen, M. Merdinger

Drilling Company: Eichelbergers

Driller: N. Moyer

Drilling Date: 3/29/2007

Well Completion Date: 4/26/2007

Elevation: 13.10

State Plane Coordinates: X: 682282.8 Y: 610670.5

Drilling Method: HSA/Mud Rotary

ENSR | AECOM

133-MW1C

Page: 7 of 7

Depth (ft)	Well Construction Diagram	Well Construction Description and Sample Information	PID (ppm)	Blows/6"	Lithology	Lithologic Description
67			0.0	6		No Recovery
68			0.0	7		Gray (5Y 5/1) CLAY, interbedded with some Weak Red (10R 5/4) Silt and very fine Sand, cohesive, medium, moist. No odor.
69			0.0	9		
70		#00 Sand Seal	0.0	27		Weak Red (10R 5/4) SILT, interbedded with Clayey SILT, loose, moist. No odor.
71		#1 Sand Filter Pack	0.0	13		Weak Red (10R 5/4) SILT, some fine to coarse sub-angular Gravel, little Silt, trace Clay, wet, medium dense. No odor.
72		2 in dia 10-Slot PVC Screen	0.0	14		No Recovery
73			0.0	14		Weak Red (10R 5/4) SILT, some fine to coarse Sand and fine to coarse sub-angular Gravel, wet, medium dense. No odor.
74			0.0	13		No Recovery
75			0.0	12		Weak Red (10R 5/4) SILT, some fine to coarse Sand and fine to coarse sub-angular Gravel, wet, medium dense. No odor.
76			0.0	12		No Recovery
77			0.0	12		Weak Red (10R 5/4) SILT, some fine to coarse Sand and fine to coarse sub-angular Gravel, wet, medium dense. No odor.
			N/A	10		No Recovery
			N/A	12		
			N/A	10		
			N/A	11		
			N/A	13		
			0.0	35		Weak Red (10R 5/4) SILT, some fine to coarse sub-angular Gravel, little cobble-sized Rocks, trace fine Sand, moist, dense to very dense. No odor.
			0.0	30		
			0.0	50/3		No Recovery
			NULL			Refusal at 77 ft.

NOTES: Coordinates are provided in New Jersey State Plane NAD 1983

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

ENSR ALCOM <small>THESE PRINTS ARE IN PRELIMINARY DRAFT AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL VIEWS ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>		Client: PPG - GAG Group (AOC Orphans) Project Number: 05510-109-0504 Site Location: Jersey City, NJ Coordinates: _____ Elevation: _____ Drilling Method: HSA/Mud Rotary Sample Type(s): Split Spoon Boring Diameter: 6-8 inch		BORING ID: 133-7C Sheet: 1 of 7 Monitoring Well Installed: 4 Screened Interval: 72-77' Depth of Boring: 77' Water Level: _____					
Weather: _____ Drilling Contractor: Eichelbergers		Logged By: M. Mendinger Ground Elevation: _____		Date/Time Started: 4/19/07 Date/Time Finished: 4/26/07					
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Flows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (if known)	Lab Sample ID	Lab Sample Depth (ft.)
1									
2									
3									
4	133-7CB (4.0-4.5)	50/2	0.6	N/A			4.0-4.6 Very Dark Gray (5YR 3/1) SILT, s.c. Sand (Fill-Sand), crushed Fill Material (Brick)		
5									
6									
7									
8									
9									
10	133-7CC (9.0-10.0) 1505	1 6	1.0 0.0	0.0 0.0			9.0-10.0 Gray (5Y 5/1) SILT, c.f.-c. Sand interbedded w/ Ash and crushed Fill Material (C/D), moist to wet, Black water, s-firm, N/O.		
NOTES: *PID not working correctly. PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by _____ Date _____							Date _____ Time _____ Depth to groundwater while drilling _____ _____ _____ _____ _____ _____		

ENSURE						Chem: PPG - GAG Group (AOC Orphan)							BORING ID:	
						Project Number: 05510-109-0304								
						Site Location: Jersey City, NJ								
						Coordinates:								Elevation:
						Drilling Method: HSA Mud Rotary								Monitoring Well Installed: Y
						Sample Type(s): Split Spoon								Boring Diameter: 6-8 inch Screened Interval:
						Weather:								Date/Time Started: 4/19/07
						Logged by: M. Merdinger								Date/Time Finished:
						Ground Elevation:								Water Level:
						Drilling Contractor: Eichelbergers								
Depth (ft.)	Geologic sample ID	Sample Depth (ft.)	Blows per ft.	Recovery (inches)	Headspace (ppm)	L.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if known)	Lab Sample ID	Lab Sample Depth (Ft.)					
0	133-1CCO	7												
1	(9.0-10.0) 1506	6												
2		3	0.8*	0.0			11.0-11.6 SAA							
3		4												
4		5												
5		6												
6	133-1CDO	1	*1.4	0.0			13.0-14.4 Dark Gray (Gley) N/O PEAT,							
7	(13.0-14.0) MS/MSD	2	*	0.0			Organics, firm, moist, N/O.							
8	1520	1												
9		2												
10		3												
11	133-1CFE	2	1.8	N/A			15.0-16.8 SAA, trace organics, slight sulfur odor.							
12	(15.0-15.5) 1530	2												
13		2												
14		2												
15	133-1CFE w/HH	1	1.3	0.0			17.0-18.3 Dark Gray (Gley) organic CLAY, & silt, & organics and shells, moist, firm, sulfur odor.							
16	(17.0-18.0) 1515 MS/MSD	1		0.0										
17		1												
18		1												
19	133-1CG	2	1.3	0.0			19.0-20.3 SAA							
20	(19.0-20.0) 1525	1		0.0										

NOTES:
PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGE PREPARED AT THE REQUEST OF COUNSEL THIS IS A PRELIMINARY DRAFT IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS NO ONE MAY RELY ON THIS DRAFT IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Checked by _____ Date: 4/23/07

ENSR		Client: PPG - GAG Group (AOC Orphans)		BORING ID: 133-1C					
Project Number: 05510-109-0504		Site Location: Jersey City, NJ		Sheet: 3 of 3					
Coordinates:		Elevation:		Monitoring Well Installed: Y					
Drilling Method: HSA Mud Rotary		Boring Diameter: 6-8 inch		Screened Interval:					
Sample Type(s): Split Spoon		Ground Elevation:		Depth of Boring:					
Weather:		Logged By: M. Meidinger		Date/Time Started: 4/19/07					
Drilling Contractor: Eichelbergers		Date/Time Finished:		Water Level:					
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per ft	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if Known)	Lab Sample ID	Lab Sample Depth (ft)
20	133-1CGD (19.0-20.0)	1	1526						
21	133-7CII (21.0-21.5)	1	1530	0.5	0.0		21.0-21.5 SAA		
22		2							
23		2							
24		3							
25	133-1CII (23.0-23.5)	8	1515	1.4	0.0		23.0-23.9 Gray (clay 1 SN/O) of SAND and SILT, trace clay and m round Gravel, moist, s-firm, N/O.		
26	5-day CAT	13			0.0		23.9-24.4 Weak Red (10R 4/3) of SAND, s.s. H.		
27		14							
28		3		1.6	0.0		25.0-26.6 Weak Red (10R 4/3) c-f graded SAND		
29		2			0.0		l-f round Gravel and Silt, wet, loose, N/O.		
30		2							
31		3							
32	133-1CJ (27.0-27.8)	6	0940	0.8	0.0		we 27.0-27.8 Weak Red (10R 4/3) m-c SAND, s.s. Silt, l-f-m rounded Gravel, loose, wet, N/O.		
33	Hold	7			0.0				
34	133-1CJD (27.0-27.8)	5	0941						
35		6	1151b						
36		6		1.4	0.0		29.0-30.4 Weak Red (10R 4/3) c-f graded SAND, s-l Silt, l m-c round Gravel, wet, loose, N/O.		
37		6			0.0				

NOTES:
* Start 4/24/07 Mud Rotary

Privileged and Confidential

ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Chg. Led by

Date

Date

Time

Depth to ground water while drilling

[illegible]

ENSURE ALUM		Client: PPG - GAG Group (AOC Orphans)		BORING ID: 133-1C					
Project Number: 05510-109-0504		Site Location: Jersey City, NJ		Sheet: 5of					
Coordinates:		Elevation:		Monitoring Well Installed: Y					
Drilling Method: HISA Mud Rotary		Boring Diameter: 6-8 inch		Screened Interval:					
Sample Type(s): Split Spoon		Ground Elevation:		Depth of Boring:					
Weather:		Logged By: M. Mendinger		Date Time Started: 4/19/07					
Drilling Contractor: Eichelbergers		Date Time Finished:		Water Level:					
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per ft	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (ft)
40			6						
41			7						
42			8	1.0	0.0		41.0-42.0 weak Red (10R 4/4) SILT, t 10 n		
			6		0.0		vf Sand, wet, loose, N/O.		
			7						
			9						
43			7	1.6	0.0		43.0-44.6 SAA, wet, loose, N/O.		
			6		0.0				
			7						
			7						
46			4	1.0	0.0		45.0-46.0 SAA, 8-10 n vf Sand, wet, loose, N/O.		
			5		0.0				
			6						
			8						
48			8	1.6	0.0		47.0-48.6 SAA, no Sand, wet, S-firm, N/O.		
			8		0.0				
			7						
			8						
49			7	1.4	0.0		49.0-50.4 weak Red (10R 4/4) SILT, wet, Semi-firm, N/O.		
50			7		0.0				
NOTES: * Start 4/26/07 Mud Rotary							Date	Time	Depth to groundwater while drilling
PRIVILEGED AND CONFIDENTIAL. ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.									
Checked by									
Date									

ENSUR ALLIUM		Client: PPG - GAG Group (AOC Orphans)		BORING ID:					
		Project Number: 05510-109-0504		133-1C					
		Site Location: Jersey City, NJ							
		Coordinates:		Elevation:					
		Drilling Method HSA Mud Rotary		Monitoring Well Installed: 4					
		Sample Type(s): Split Spoon		Boring Diameter: 6-8 inch					
		Weather:		Screened Interval:					
		Logged By: M Mendiger		Date/Time Started: 2/1/19/07					
		Ground Elevation:		Depth of Boring:					
		Drilling Contractor: Eichelbergers		Water Level:					
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if Known)	Lab Sample ID	Lab Sample Depth (ft.)
50			8						
51			8						
52			7	1.3	0.0		51.0 - 52.3 Weak Red (10R 4/1) SILT, clay w/ Sand, wet, s-firm, N/O.		
			6		0.0				
			6		0.0				
			7						
53			7	1.4	0.0		53.0 - 54.3 Weak Red (10R 4/1) SILT, wet, loose, N/O.		
54			8		0.0		54.3 - 54.4 Weak Red (10R 5/4) SILT and interbedded Silty Clay, s-firm, wet, N/O.		
			7						
			6	1.5	0.0		55.0 - 55.5 Weak Red (10R 5/4) SILT, wet, loose, N/O.		
56			5		0.0		55.5 - 56.5 Dark Gray (5YR 4/1) CLAY, s-silt, w/te interbedded Weak Red (10R 5/4) Silt, moist, firm, N/O.		
			6						
			7						
57			3	2.0	0.0		57.0 - 59.0 Dark Gray (5YR 4/1) CLAY and Weak Red (10R 5/4) SILT, interbedded, firm moist, N/O.		
58			4		0.0				
			4		0.0				
			4		0.0				
59			4	2.0	0.0		59.0 - 59.9 SAA, firm, moist, N/O.		
60			7		0.0		59.9 - 61.0 Reddish Brown (2.5YR 4/3)		

NOTES:	Date	Title	Depth to groundwater while drilling
PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by _____ Date: _____			

ENSR ALCOA <small>THIS NOTE IS NOT INTENDED TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>		Client: PPG - GAG Group (AOC Orphans) Project Number: 05510-109-0504 Site Location: Jersey City, NJ Coordinates: _____ Elevation: _____ Drilling Method: HSA/Mud Rotary Sample Type(s): Split Spoon				BORING ID: <div style="font-size: 2em; font-weight: bold;">133-1C</div> Sheet: 8 of 8 Monitoring Well Installed: <input checked="" type="checkbox"/> Screened Interval: 72-77' Depth of Boring: 77' Water Level: _____	
		Weather: _____ Logged By: M. Mendinger Drilling Contractor: Eichelberrers Ground Elevation: _____ Date/Time Started: 4/14/07 Date/Time Finished: 4/26/07					

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if Known)	Lab Sample ID	Lab Sample Depth (ft.)
70			13						
71			12						
72			12	0.7	0.0		71.0 - 71.7 SAA, wet, s-firm, N/O		
73			13						
74			11						
75			10						
76			12	0	N/A		No Recovery		
77			10						
78			11						
79			12						
80			35	1.3	0.0		75.0 - 76.3 Weak Red (10R 5/4) silty s-fine sub-sandy Gravel, & cobble-sized Rocks, & f. Sand, moist, firm, N/O.		
81			30		0.0				
82			50/3						
83									
84									
85									
86							Refusal at 77 ft. Set Well at 77 ft.		

NOTES: PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by: _____ Date: _____	Date	Time	Depth to groundwater while drilling

ENSR ACCUM												
<small>If these notes are incomplete and have been prepared for personal use only, no one may rely on them for any purpose. All views are subject to change as additional information becomes available or is clarified.</small>						Client: PPG - GAG Group (AOC Orphans)						
						Project Number: 05510-109-0503						
						Site Location: Jersey City, NJ						
						Coordinates:						
						Elevation:						
Drilling Method: Gasprober Hand Auger - Soft Dies						Monitoring Well Installed:						
Sample Type(s): Acetate Liner						Boring Diameter: 2-inch						
Weather:						Logged By: B. Engelen						
Drilling Contractor: TPI						Date/Time Started: 09:30						
						Ground Elevation:						
						Date/Time Finished: 10:20						
						Water Level:						
Depth (ft)	Geologic Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (gpm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if Known)	Lab Sample ID	Lab Sample Depth (ft.)			
1							Drillers had to stop at about 2 ft depth. Very few soil samples observed. Reason rsg there seems to be old brick foundation at this location.					
2				2%			Very dark brown (10YR, 2/1) m-f SAND little m-f gravel, trace organics, moist, loose n/o plastic, fill.	B3 ICA	2 ft 102.0			
3												
4												
5												
6												
7												
8												
9												
10												
NOTES: PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by _____ Date _____										Date	Time	Depth to groundwater while drilling

Well ID 133-MW1C

Low Flow Ground Water Sample Collection Record

C745

Interval #1

Client: PPG - Site 119 Date: 6/22/11 Time Start: 0930 am/pm
 Project No: 60154801.0005 Finish: 1100 am/pm
 Site Location: Kersey City, NJ
 Weather Conds: _____ Collector(s): M. Merdinger, D. Chamberland

1. WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length 77 c. Length of Water Column _____ (a-b)

Casing Diameter/Material

b. Water Table Depth 4.2 d. Calculated System Volume (see back) _____2 in PVC

2. WELL PURGE DATA

a. Purge Method: Low Flow (Ground Pump)

b. Acceptance Criteria defined (see workplan)

- Temperature 3% DO 10%
 - pH ± 1.0 unit ORP ± 10 mV
 - Sp. Cond. 3% Drawdown < 0.2

c. Field Testing Equipment used

Make

Model

Serial Number

YST6820#FL1000LaMotte2020e#100126

Time (24hr)	Volume Remove (Liters)	Temp. (°C)	pH	Spec. Cond. (uS/cm)	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0940	0	16.51	10.21	0.959	2.88	210.6	42.3	200	5.40	Clear/No odor
0945	1	16.39	10.15	0.959	2.45	212.7	35.6	200	5.40	"
0950	3	16.36	10.13	0.957	2.26	213.9	28.9	200	5.40	Clear/No odor
0955	4	16.33	10.09	0.956	2.12	215.3	17.2	200	5.40	"
1000	5	16.37	9.97	0.853	1.96	220.7	7.01	200	5.40	Clear/No odor
1005	6	16.39	9.74	0.857	1.86	218.8	4.38	200	5.45	"
1010	7	16.74	9.20	0.895	1.30	218.7	1.76	200	5.45	Clear/No odor
1015	8	16.52	8.42	0.937	1.16	227.1	5.42	200	5.45	"
1020	9	16.21	7.92	0.983	0.86	238.4	4.31	200	5.45	Clear/No odor
1025	10	16.14	7.69	1.009	0.85	241.2	4.25	200	5.45	"
1030	11	16.15	7.67	1.017	1.05	229.9	4.22	200	5.45	Clear/No odor

d. Acceptance criteria pass/fail

Yes No

N/A

Has required volume been removed

☐ ☐☒

Has required turbidity been reached

☒ ☐☐

Have parameters stabilized

☒ ☐☐

(continued on back)

3. SAMPLE COLLECTION:

Method: Dedicated Tubing/Pump

Sample ID: 133-MW1C-6A01-74.5 Container Type: 3 No. of Containers: 3 Preservation: — Analysis Req.: XCP Time: 1050
CMS/USD 3 HN/Cr Lim TAC/Methods 1050

Comments: Headspace: 0.0 ppm
Pump set at 74.5 ft

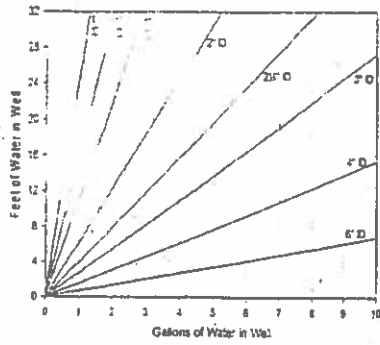
Signature

M. Merdinger

Date

6/22/11

Purge Volume Calculation



ID (in)	Volume / Gallon	Linear Ft of Pipe / Liter
0.25	0.0025	0.0097
0.375	0.0057	0.0217
0.5	0.0102	0.0386
0.75	0.0229	0.0869
1	0.0408	0.1544
1.25	0.0637	0.2413
1.5	0.0918	0.3475
2	0.1632	0.6178
2.5	0.2550	0.9653
3	0.3672	1.3900
4	0.6528	2.4711
6	1.4688	5.5600

(continued from front)

[illegible]

ENSR AECOM		Client: PPG - GAG Group (AOC Orphans)				BORING ID: PPG-133 1-C			
		Project Number: 05510-109-0503							
THESE NOTES ARE INCOMPLETE AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL VIEWS ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.		Site Location: Jersey City, NJ				Sheet: of			
		Coordinates:				Elevation:			
		Drilling Method: Geoprobe Hand Auger - Soft Dies				Monitoring Well Installed:			
		Sample Type(s): Acetate Liner				Boring Diameter: 2-inch			
Weather:		Logged By: B. Engelen		Date/Time Started: 09:30		Depth of Boring:			
Drilling Contractor: TPI		Ground Elevation:		Date/Time Finished: 10:20		Water Level:			
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (mm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (if known)	Lab Sample ID	Lab Sample Depth (ft)
1							Drillers had to stop at about 2ft depth. Very few soil samples observed. Reason is there seems to be old brick foundation at this location.		
2					0.0		Very dark brown (10YR, 2/2) m-f SAND little m-f gravel, trace organics, moist, loose n/o plastic, fill.	133 1CA	2ft 1020
3							ROD 5-29-07 BE		
4									
5									
6									
7									
8									
9									
10									
NOTES: PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by _____ Date: _____							Date	Time	Depth to groundwater while drilling

ENSR ALCOM		Client: PPG - GAG Group (AOC Orphans)				BORING ID: 133-1C																											
<small>THESE NOTES ARE INCOMPLETE AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL VIEWS ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>		Project Number: 05510-109-0504				Sheet: 1 of 7																											
		Site Location: Jersey City, NJ				Monitoring Well Installed: 4																											
		Coordinates:				Elevation:																											
		Drilling Method: HSA/Mud Rotary				Screened Interval: 72'-77'																											
		Sample Type(s): Split Spoon				Boring Diameter: 6-8 inch																											
Weather:		Logged By: M. Meindinger		Date/Time Started: 4/19/07		Depth of Boring: 77'																											
Drilling Contractor: Eichelbergers		Ground Elevation:		Date/Time Finished: 4/26/07		Water Level:																											
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (ft.)																								
1																																	
2																																	
3																																	
4	133-1CB (4.0-4.5) 1450	50/2	0.6	N/A			4.0-4.6 Very Dark Gray (SYR 3/1) SILT, s.c. Sand (Fill Sand), crushed Fill Material (Brick), trace organics, wet, loose, Diesel Fuel odor.																										
5			1	0	N/A		No Recovery																										
6			3																														
7			4																														
8			10																														
9			N/A		N/A		Brick Layer → Augered Through																										
10	133-1CC (9.0-10.0) 1505	1	1.0	0.0			9.0-10.0 Gray (SY 5/1) SILT, c. f-c Sand interbedded w/ Ash and crushed Fill Material (C/P), moist to wet, Black water, s-firm, N/O.																										
NOTES: *PID not working correctly.							<table border="1"> <tr> <th>Date</th> <th>Time</th> <th>Depth to groundwater while drilling</th> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>			Date	Time	Depth to groundwater while drilling																					
Date	Time	Depth to groundwater while drilling																															
<small>PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>							Checked by: Date:																										

ENSR		AFCDM		Client: PPG - GAG Group (AOC Orphans)				Project Number: 05510-109-0504		BORING ID: 133-1C	
THESE NOTES ARE INCOMPLETE AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL CHANGES ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.				Site Location: Jersey City, NJ		Coordinates:		Elevation:		Sheet: 2 of	
Weather:				Drilling Contractor: Eichelbergers		Logged By: M. Merdinger		Date/Time Started: 4/19/07		Monitoring Well Installed: Y	
Sample Type(s): Split Spoon				Ground Elevation:		Boring Diameter: 6.8 inch		Date/Time Finished:		Screened Interval:	
Depth (ft)				Geologic Sample ID		Sample Depth (ft)		Blows per 6"		Recovery (inches)	
				Handspace (ppm)		U.S.C.S.		MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (if known)		Lab Sample ID	
										Lab Sample Depth (ft.)	
0		133-1CC	7								
		(9.0-10.0)	6								
		1506									
1			3	0.8*	0.0			11.0-11.6 SAA			
			4								
			5								
			4								
3		133-1CD	1	1.4*	0.0			13.0-14.4 Dark Gray (Gley) 4N/0			
		(13.0-14.0)	2	*	0.0			organics, firm, moist, N/O.			
		MS/MSD	1								
		1520	2								
			1								
			2								
5		133-1CF	2	1.8	N/A			15.0-16.8 SAA, trace organics, slight			
		(15.0-15.5)	2					Sulfur odor.			
		1530	2								
			2								
			2								
7		133-1CF with	1.3	0.0				17.0-18.3 Dark Gray (Gley) 4N/0			
		(17.0-18.0)	1					CLAY, & silt, & organics and shells, moist,			
		1515	1		0.0			firm, sulfur odor.			
		MS/MSD	1								
			1								
9		133-1CG	2	1.3	0.0			19.0-20.3 SAA			
		(19.0-20.0)	1		0.0						
		1525									
20											

NOTES: *PID is not working correctly - Begin HSA

DATE: 4/23/07

PRIVILEGED AND CONFIDENTIAL

ATTORNEY-CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL.

THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Checked by: _____ Date: _____

ENSR AECOM		Client: PPG - GAG Group (AOC Orphans)				BORING ID: 133-1C	
<small>ITEM NOTES ARE INCOMPLETE AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL VIEWERS ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>		Project Number: 05510-109-0504					
		Site Location: Jersey City, NJ				Sheet: 3 of 3	
		Coordinates:		Elevation:		Monitoring Well Installed: <input checked="" type="checkbox"/>	
		Drilling Method: HSA/Mud Rotary		Boring Diameter: 6-8 inch		Screened Interval:	
		Sample Type(s): Split Spoon		Date/Time Started: 4/19/07		Depth of Boring:	
Weather:		Logged By: M. Mendinger		Date/Time Finished:		Water Level:	
Drilling Contractor: Eichelbergers		Ground Elevation:					

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (ft.)
20	133-1CG2	19.0-20.0	1						
	1526		1						
21	133-1CI1	21.0-21.5	1	0.5	0.0		21.0-21.5 SAA		
	1530		2						
22			2						
23			3						
24	133-1CI1	23.0-23.5	8	1.4	0.0		23.0-23.9 Gray (Gley) SN/O) of SAND and SILT, trace clay and m round Gravel, moist, s-firm, N/O.		
	1545		13		0.0		23.9-24.4 Weak Red (10R 4/3) of SAND, s silt, clay and f-m round Gravel, wet, loose, N/O.		
25	5 day CAT		14						
26			12						
			3	1.6	0.0		25.0-26.6 Weak Red (10R 4/3) c-f graded SAND, f F round Gravel and Silt, wet, loose, N/O.		
			2		0.0				
			2						
			3						
* 27	133-1CJ	27.0-27.8	6	0.8	0.0		27.0-27.8 Weak Red (10R 4/3) m-c SAND, s silt, & f-m rounded Gravel, loose, wet, N/O.		
	0940		7		0.0				
28	133-1CSD	27.0-27.8	5						
	0941		6						
29			6	1.4	0.0		29.0-30.4 Weak Red (10R 4/3) c-f graded SAND, s-l silt, & m-c round Gravel, wet, loose, N/O.		
30			6		0.0				

NOTES:

* Start 4/24/07 Mud Rotary

Date

Time

Depth to groundwater while drilling

PRIVILEGED AND CONFIDENTIAL
 ATTORNEY-CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL.
 THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED
 ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY
 RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL
 INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.
 Checked by: _____ Date: _____

ENSR		AECOM		Client: PPG - GAG Group (AOC Orphans)						BORING ID: 133-1C		
				Project Number: 05510-109-0504								
				Site Location: Jersey City, NJ								
				Coordinates:				Elevation:		Sheet: 4 of		
				Drilling Method: HSA/Mud Rotary						Monitoring Well Installed: Y		
				Sample Type(s): Split Spoon				Boring Diameter: 6-8 inch		Screened Interval:		
Weather:				Logged By: M. Mendinger				Date/Time Started: 7/19/07		Depth of Boring:		
Drilling Contractor: Eichelbergers				Ground Elevation:				Date/Time Finished:		Water Level:		
Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S.	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (if known)				Lab Sample ID	Lab Sample Depth (Ft.)
30			5									
31	133-JCK 31.0-31.5 MS MSD HOLD 0955	6	0.8	0.0			31.0-31.8 Weak Red (10R 4/3) m-f SAND, and SILT, t f-m rounded Gravel, wet, loose, N/O.					
32		5		0.0								
33		6										
34		6										
35		6										
36		2	1.1	0.0			35.0-35.9 SAA					
37		4		0.0			35.9-36.1 Weak Red (10R 4/4) SILT, some vf Sand, wet, loose, N/O.					
38		4										
39		5										
40		4	0.2	0.0			37.0-37.2 Weak Red (10R 4/4) SILT, l vf Sand, wet, loose, N/O.					
41		1										
42		3										
43		4										
44		6	1.2	N/A			39.0-40.2 SAA, l-t vf Sand.					
45		5										
NOTES: Start 7/25/07 Mud Rotary							Date	Time	Depth to groundwater while drilling			
PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.												
Checked by _____ Date _____												

ENSR AECOM		Client: PPG - GAG Group (AOC Orphans)				BORING ID: 133-1C	
<small>THESE NOTES ARE INCOMPLETE AND HAVE BEEN PREPARED FOR PERSONAL USE ONLY. NO ONE MAY RELY ON THEM FOR ANY PURPOSE. ALL USES ARE SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.</small>		Project Number: 05510-109-0504				Sheet: 5 of	
		Site Location: Jersey City, NJ				Monitoring Well Installed: Y	
		Coordinates:				Elevation:	
		Drilling Method: HSA/Mud Rotary				Screened Interval:	
		Sample Type(s): Split Spoon				Boring Diameter: 6-8 inch	
Weather:		Logged By: M. Mendinger		Date/Time Started: 4/19/57		Depth of Boring:	
Drilling Contractor: Eichelbergers		Ground Elevation:		Date/Time Finished:		Water Level:	

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Blows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size, odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (ft.)
40			6						
41			7						
42			8	1.0	0.0		41.0-42.0 weak Red (10R 4/4) SILT, t to n		
43			6		0.0		vf Sand, wet, loose, N/O.		
44			7						
45			9						
46			7	1.6	0.0		43.0-44.6 SAA, wet, loose, N/O.		
47			6		0.0				
48			7						
49			7						
50			4	1.0	0.0		45.0-46.0 SAA, t to n vf Sand, wet, loose, N/O.		
51			5		0.0				
52			6						
53			8						
54			8	1.6	0.0		47.0-48.6 SAA, no Sand, wet, s-firm, N/O.		
55			8		0.0				
56			7						
57			8						
58			7	1.4	0.0		49.0-50.4 Weak Red (10R 4/4) SILT, wet, Semi-firm, N/O.		
59			7		0.0				

NOTES: * Start 4/26/07 Mud Rotary PRIVILEGED AND CONFIDENTIAL ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL. THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL INFORMATION BECOMES AVAILABLE OR IS CLARIFIED. Checked by _____ Date _____	Date	Time	Depth to groundwater while drilling

[illegible]

ENSR | ATCOM

Client: PPG - GAG Group (AOC Orphans)

Project Number: 05510-109-0504

Site Location: Jersey City, NJ

Coordinates:

Elevation:

BORING ID:

133-1C

Sheet: 7 of 7

Drilling Method: HSA/Mud Rotary

Monitoring Well Installed: 4

Sample Type(s): Split Spoon

Boring Diameter: 6-8 inch

Screened Interval: 72-74'

Weather:

Logged By: M. Mendinger

Date/Time Started: 4/19/07

Depth of Boring: 77'

Drilling Contractor: Eichelbergers

Ground Elevation:

Date/Time Finished:

Water Level:

Depth (ft)	Geologic sample ID	Sample Depth (ft)	Flows per 6"	Recovery (inches)	Headspace (ppm)	U.S.C.S	MATERIALS: Color, size, range, MAIN COMPONENT, minor component(s), moisture content, structure, angularity, maximum grain size odor, and Geologic Unit (If Known)	Lab Sample ID	Lab Sample Depth (Ft.)
60			36				Interbedded Silty CLAY and SILT, firm, moist, N/O.		
61			35		0.0				
62			3	2.0	0.0		61.0-63.0 SAA, firm, moist, N/O.		
63			3		0.0				
64			5		0.0				
65			4		0.0				
66			6	2.0	0.0		63.0-63.9 SAA, moist, firm, N/O.		
67			6		0.0		63.9-65.0 Gray (54 5/1) CLAY, interbedded with t Weak Red (10R 5/4) Silt and v.f. Sand, firm, moist, N/O.		
68			6		0.0				
69			6		0.0				
70			3	1.8	0.0		65.0-66.8 SAA, some Weak Red (10R 5/4) Silt, firm, moist, N/O.		
71			4		0.0				
72			6		0.0				
73			6		0.0				
74			7	1.9	0.0		67.0-68.0 SAA, moist, firm, N/O.		
75			9		0.0		68.0-68.5 Weak Red (10R 5/4) SILT, interbedded w/ Weak Red (10R 5/4) Clayey SILT, firm, moist, N/O.		
76			27		0.0		68.5-68.9 Weak Red (10R 5/4) f-c SAND, s f-c sub-ang Gravel, & Silt, t Clay, wet, loose, N/O.		
77			13		0.0				
78			14	1.0	0.0		69.0-70.0 Weak Red (10R 5/4) SILT s f-c Sand and f-c sub-ang Gravel, wet, loose, N/O.		
79			14		0.0				

NOTES:

PRIVILEGED AND CONFIDENTIAL
ATTORNEY CLIENT PRIVILEGED. PREPARED AT THE REQUEST OF COUNSEL.
THIS IS A PRELIMINARY DRAFT. IT HAS BEEN PREPARED BASED
ON PRELIMINARY INFORMATION AND ON ASSUMPTIONS. NO ONE MAY
RELY ON THIS DRAFT. IT IS SUBJECT TO CHANGE AS ADDITIONAL
INFORMATION BECOMES AVAILABLE OR IS CLARIFIED.

Checked by

Date

Date Time Depth to ground water while drilling

MONITORING WELL RECORD

PROPERTY OWNER: N/A CITY OF JERSEY CITY

Company/Organization: City of Jersey City

Address: 280 Grove St Room B-5 Jersey City, New Jersey 07302

WELL LOCATION: PPG Industries

Address: Caven Point Ave

County: Hudson Municipality: Jersey City Lot: 1 Block: 24301

Easting (X): 610580 Northing (Y): 682201
Coordinate System: NJ State Plane (NAD83) - USFEET

DATE WELL STARTED: November 26, 2013

DATE WELL COMPLETED: November 27, 2013

WELL USE: MONITORING

Other Use(s): _____

Local ID: 133-MW3A

WELL CONSTRUCTION

Total Depth Drilled (ft.): 15 Finished Well Depth (ft.): 15 Well Surface: Flush Mount

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating/Screen # Used (lbs/ch no.)
Borehole	0	15	8		
Casing	0	10	2	PVC	sch 40
Screen	10	15	2	pvc	.10

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in.)	Inner Diameter (in.)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	8	8	2		300	8
Gravel Pack	8	15	8	2	medium sand		

Grouting Method: Pressure method (Tremie Pipe)

Drilling Method: Hollow Stem Augers

ADDITIONAL INFORMATION

Protective Casing: No

Static Water Level: 8 ft. below land surface

Water Level Measure Tool: m scope

Well Development Period: 1 hrs.

Method of Development: pump

Pump Type: _____

Pump Capacity: gpm

Total Design Head: ft.

Drilling Fluid: na

Drill Rig: mobil drill b 80

Health and Safety Plan Submitted? Yes

ATTACHMENTS:

GEOLOGIC LOG

0 - 1: black OT - Other black top

1 - 5: gray SM - Silty sands, sand-silt mixtures 2in pvc

5 - 10: tan SM - Silty sands, sand-silt mixtures 2in pvc

10 - 15: red SM - Silty sands, sand-silt mixtures 2in pvc

ADDITIONAL INFORMATION:

Driller of Record: Thomas Lynch,
MONITORING LICENSE # 435631

Company: SGS NORTH AMERICA INC.

WELL PERMIT

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: WESLEY M EICHFELD, MASTER LICENSE # 592848

Permit Issued to: SGS NORTH AMERICA INC.

Company Address: PO BOX 423 WEST CREEK, NJ 08092

PROPERTY OWNER

Name: N/A CITY OF JERSEY CITY

Organization: City of Jersey City

Address: 280 Grove St Room B-5

City: Jersey City State: New Jersey Zip Code: 07302

PROPOSED WELL LOCATION

Facility Name: PPG Industries

Address: Caven Point Ave

County: Hudson Municipality: Jersey City Lot: 1 Block: 24301

Easting (X): 610580 Northing (Y): 682201
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: 133-MW3A

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: MONITORING

Other Use(s): _____

Diameter (in.): 4

Regulatory Program

Depth (ft.): 50

Requiring Wells/Borings: _____

Pump Capacity (gpm): 0

Case ID Number: _____

Drilling Method: Mud Rotary

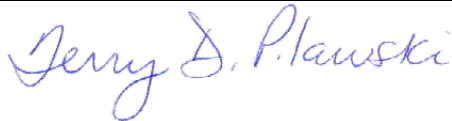
Deviation Requested: N

Attachments: _____

SPECIFIC CONDITIONS/REQUIREMENTS

Approval Date: November 19, 2013
Expiration Date: November 19, 2014

Approved by the authority of:
Bob Martin
Commissioner


Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

WELL PERMIT

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]

ATTACHMENT 2

Photolog

Phase 3B South Photo Log

Photo 1 (Left): Facing north. Location of well 10W-MW101S post-excavation.

Photo 2 (Right): Close-up facing north. Location of well 10W-MW101S post-excavation.



Photo 3 (Left): Facing northeast. Location of well 10W-MW102S post-excavation.

Photo 4 (Right): Close-up facing northeast. Location of well 10W-MW102S post-excavation.

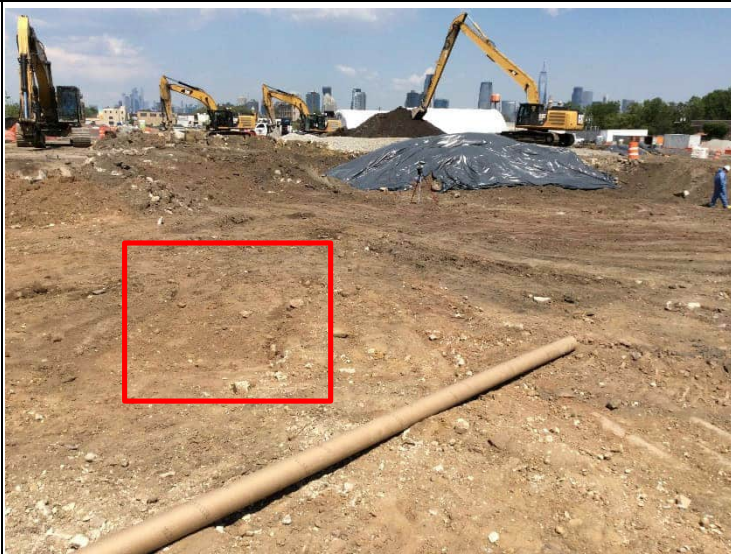


Photo 5 (Left): Facing Northeast. Location of well 10W-MW105I post-excitation.

Photo 6 (Right): Close-up facing Northeast. Location of well 10W-MW105I post-excitation



Photo 7 (Left): Facing Northeast. Location of well 132-P3A-MW3 post-excitation. 132-P3A-MW3 remains in place.

Photo 8 (Right): Close-up facing northeast. Location of well 132-P3A-MW3 post-excitation. 132-P3A-MW3 remains in place.



Photo 9 (Left): Facing west. Location of well 132-P3A-MW3 post-restoration.

Photo 10 (Right): Facing west. Location of well 132-P3A-MW3 post-restoration.



Photo 11 (Left): Facing east. Location of well 132-P3A-MW4 post-excavation.

Photo 12 (Right): Close-up facing east. Location of well 132-P3A-MW4 post-excavation.



Photo 13 (Left): Facing Northeast. Location of well 132-P3A-MW105I post-excavation.

Photo 14 (Right): Close-up facing Northeast. Location of well 132-P3A-MW105I post-excavation.



Photo 15 (Left): Facing Northeast. Location of well 133-MW1C post-excavation.

Photo 16 (Right): Close-up facing Northeast. Location of well 133-MW1C post-excavation.



Photo 17 (Left): Facing east. Location of well 133-MW3A post-excavation.

Photo 18 (Right): Close-up facing east. Location of well 133-MW3A post-excavation.



FIGURE 1

Site Plan

