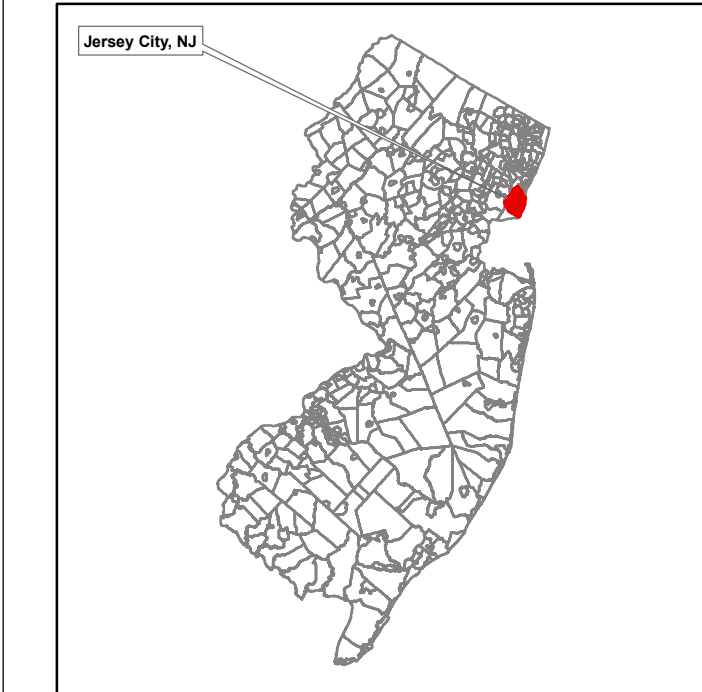
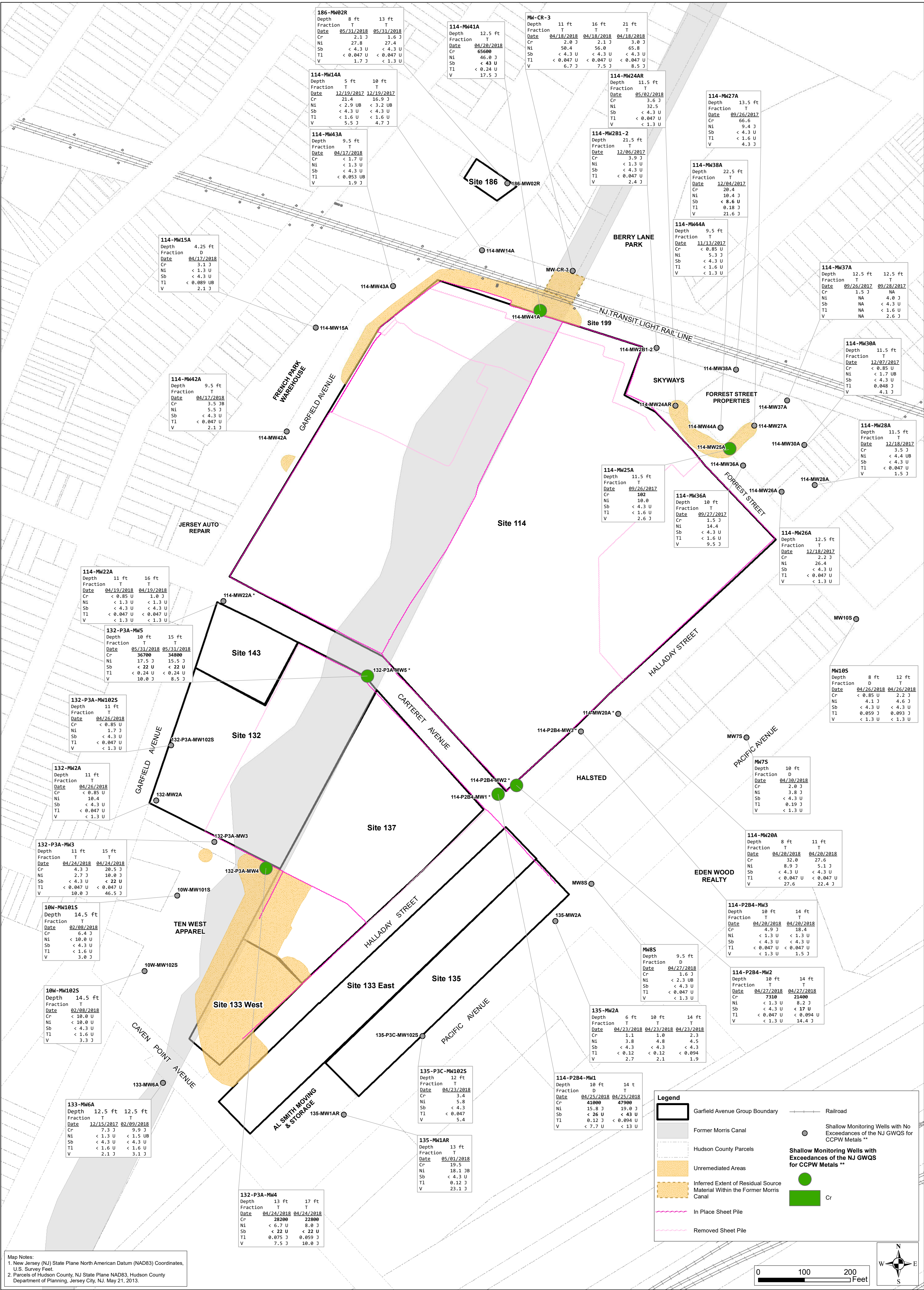


Appendix P

Figures Depicting Groundwater RI Results for CCPW Metals, Non-CCPW Metals, VOCs, and SVOCs



Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ANTIMONY	Sb	6
CHROMIUM	Cr	70
NICKEL	Ni	100
THALLIUM	Tl	2
VANADIUM	V	60

Notes:

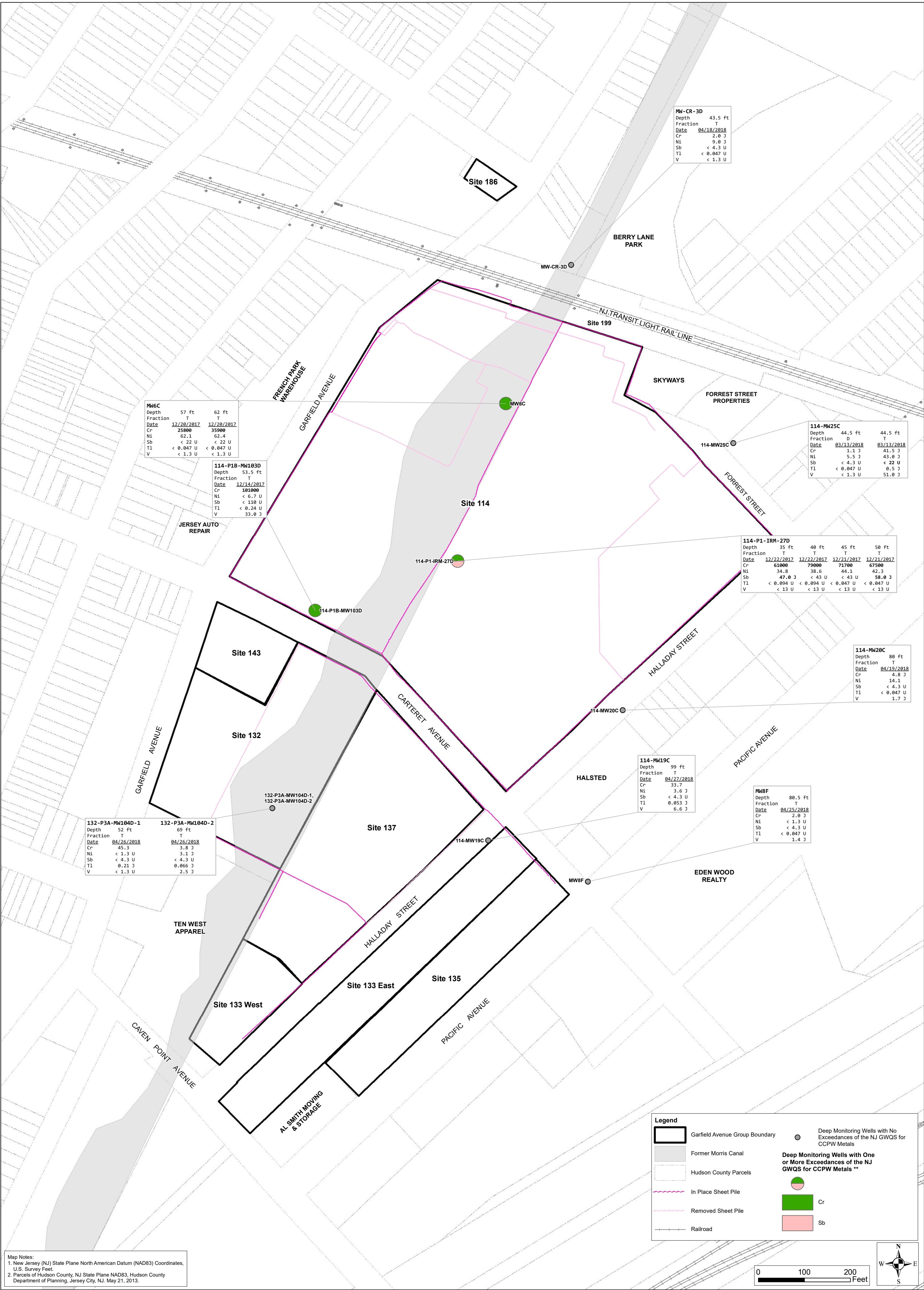
1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - Indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI field samples collected between September 26, 2017 and May 31, 2018.
5. Refer to the analytical data tables for qualifier definitions.
6. * - Indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.

CCPW - Chromate Chemical Production Waste
D - dissolved fraction
ft - feet
GWQS - Groundwater Quality Standard
NJDEP = New Jersey Department of Environmental Protection
NJ = New Jersey
RI = Remedial Investigation
T = total fraction

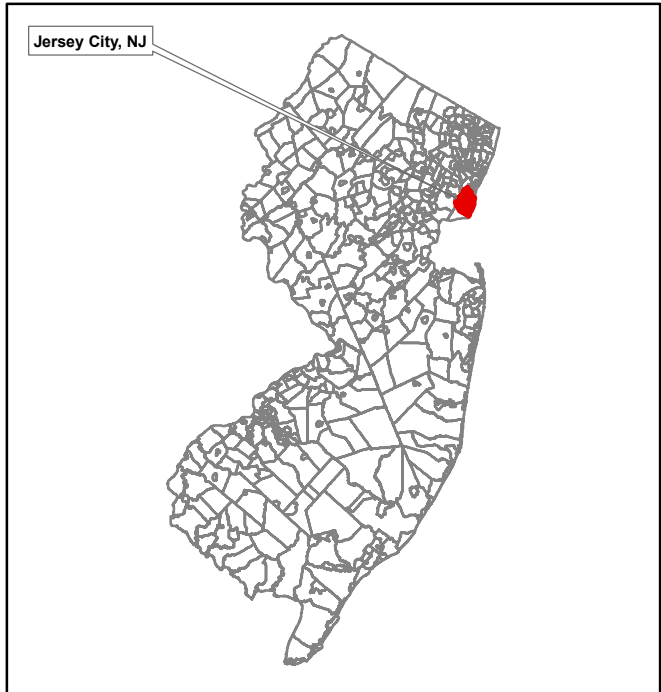
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FIGURE P-1
GROUNDWATER RI ANALYTICAL RESULTS -
CCPW METALS IN THE
SHALLOW WATER-BEARING ZONE



Map Notes:
1. New Jersey (NJ) State Plane North American Datum (NAD83) Coordinates, U.S. Survey Feet.
2. Parcels of Hudson County, NJ State Plane NAD83, Hudson County Department of Planning, Jersey City, NJ, May 21, 2013.



Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ANTIMONY	Sb	6
CHROMIUM	Cr	70
NICKEL	Ni	100
THALLIUM	Tl	2
VANADIUM	V	60

Notes:
1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI samples collected between September 26, 2017 and May 31, 2018.
5. Refer to the analytical data tables for qualifier definitions.
6. * - indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.
CCPW - Chromate Chemical Production Waste
D - dissolved fraction
ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
NJ - New Jersey
RI - Remedial Investigation
T = total fraction

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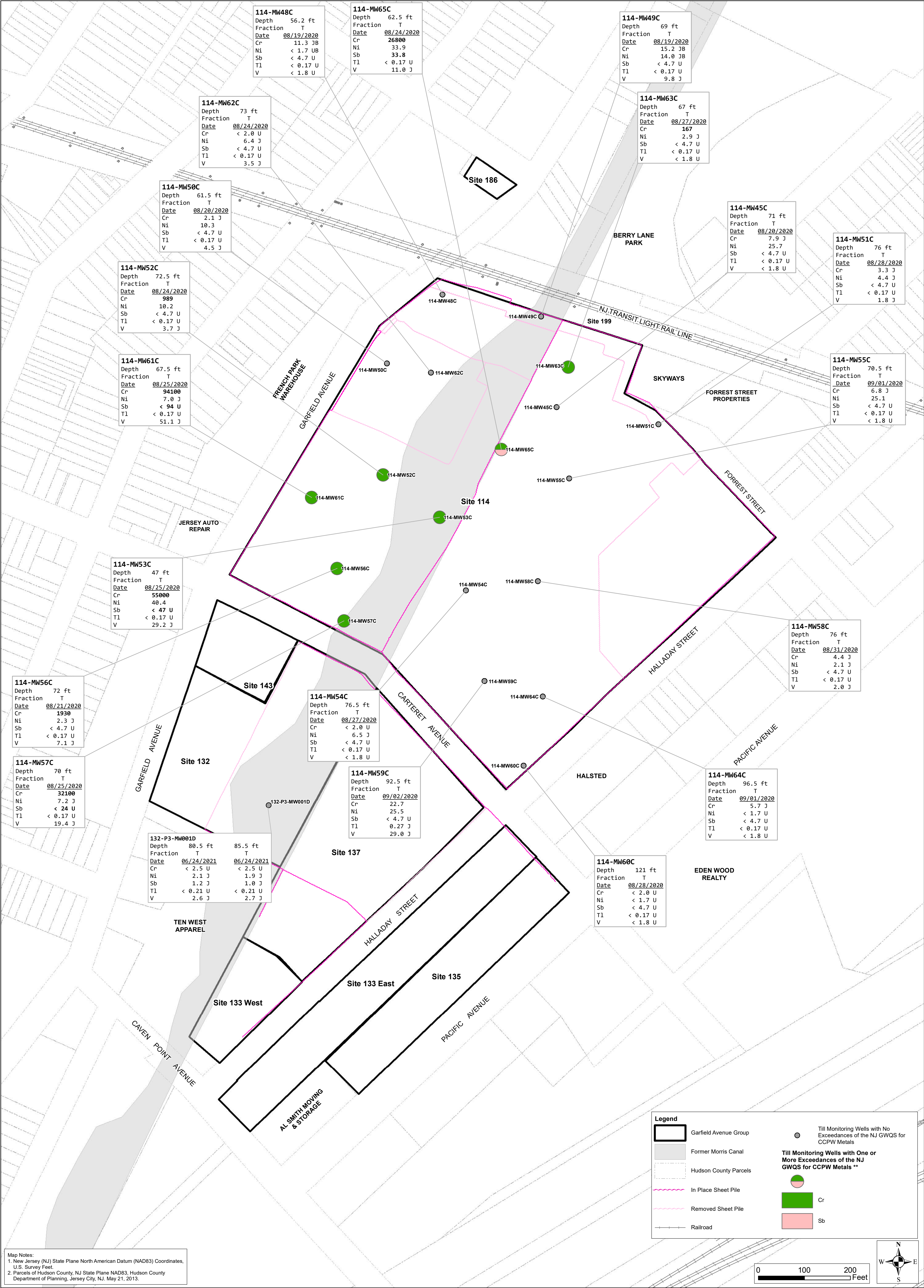
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FIGURE P-3
GROUNDWATER RI ANALYTICAL RESULTS -
CCPW METALS IN THE
DEEP WATER-BEARING ZONE



Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ANTIMONY	Sb	6
CHROMIUM	Cr	70
NICKEL	Ni	100
THALLIUM	Tl	2
VANADIUM	V	60

Notes:

1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - Indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI field program between August 19 and September 2, 2020.
5. Refer to the analytical data tables for qualifier definitions.
6. * - Indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.

CCPW - Chromate Chemical Production Waste
ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
NJ - New Jersey
RI - Remedial Investigation
T = total fraction

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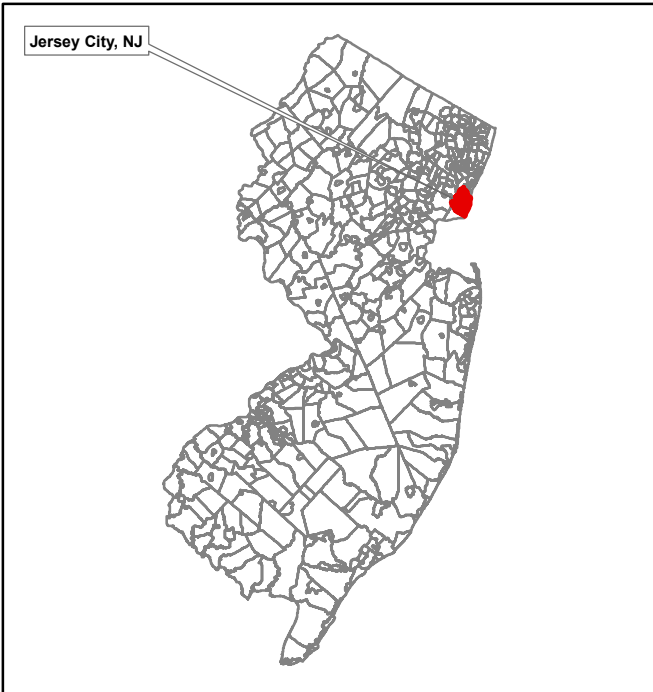
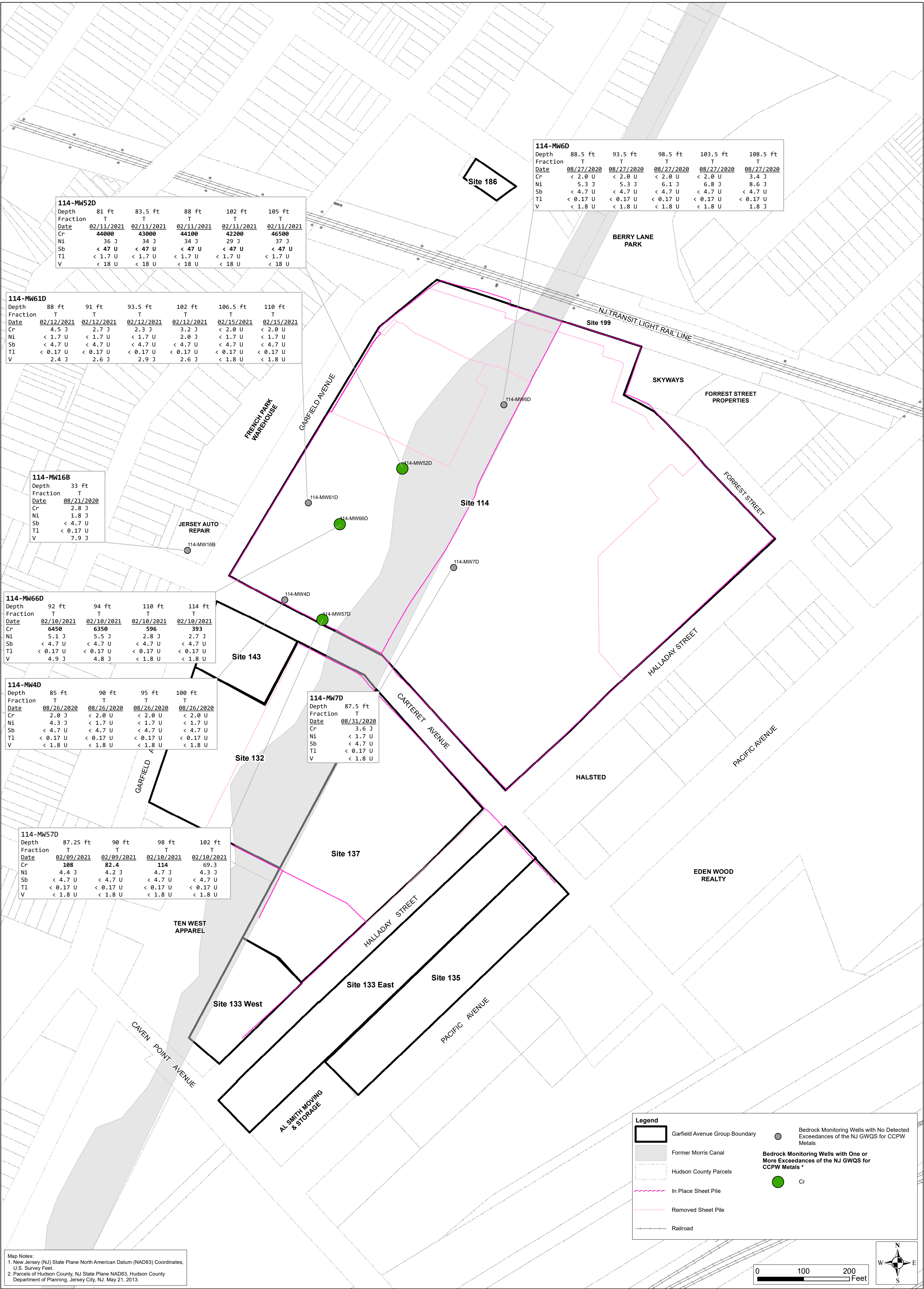
FIGURE P-4
GROUNDWATER RI ANALYTICAL RESULTS -
CCPW METALS IN THE
BASAL TILL/WEATHERED BEDROCK

DATE: 2021-08-12

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Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ANTIMONY	Sb	6
CHROMIUM	Cr	70
NICKEL	Ni	100
THALLIUM	Tl	2
VANADIUM	V	60

Notes:

1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI samples collected between August 19, 2020 and February 15, 2021.
5. Refer to the analytical data tables for qualifier definitions.
6. * - only detected parameters present above their respective 7. Sample depths are measured relative to top of inner well casing.

GWQS are shown as exceedances.
CCPW - Chromate Chemical Production Waste
ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
NJ = New Jersey
RI = Remedial Investigation
T = total fraction

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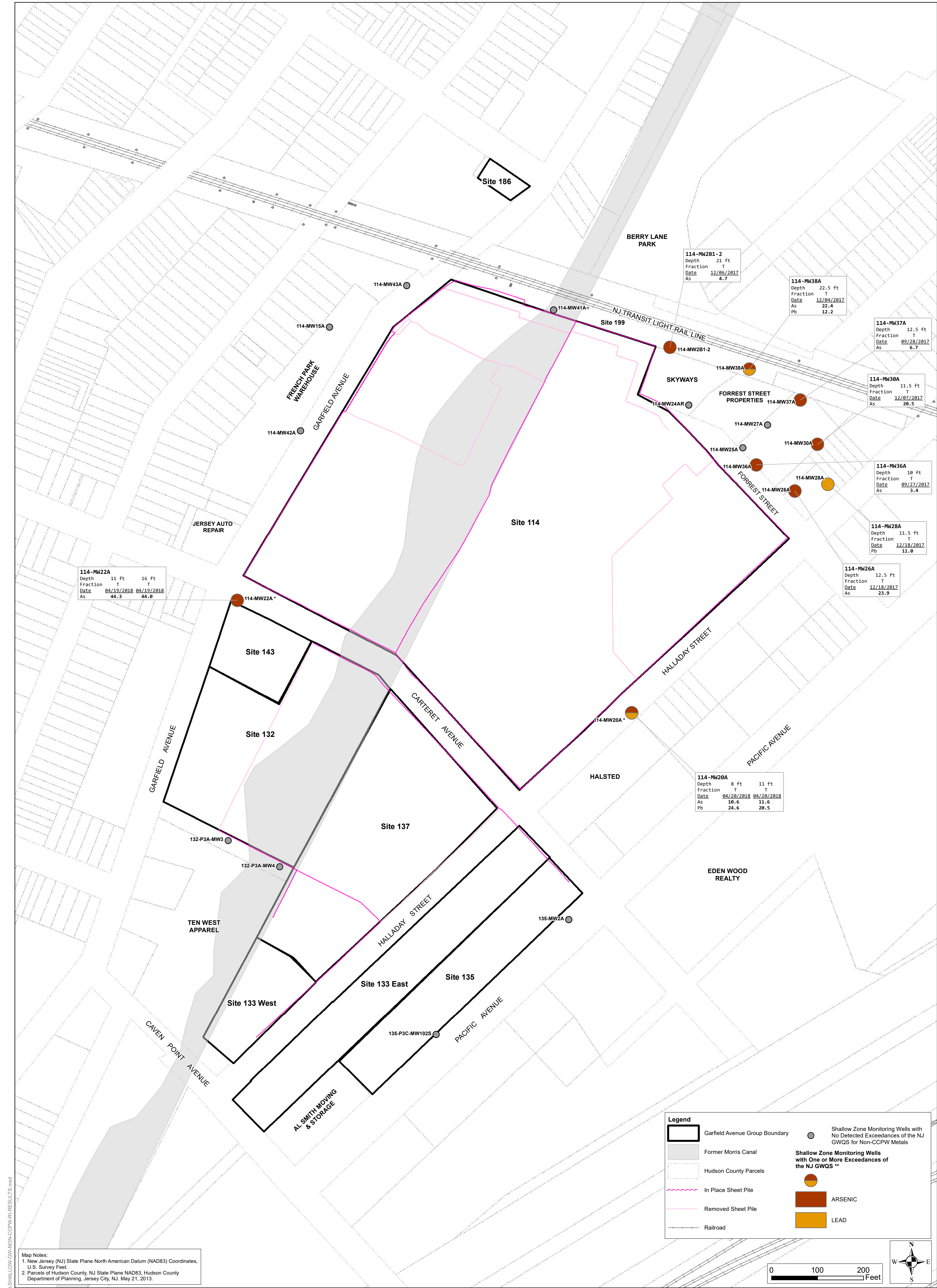
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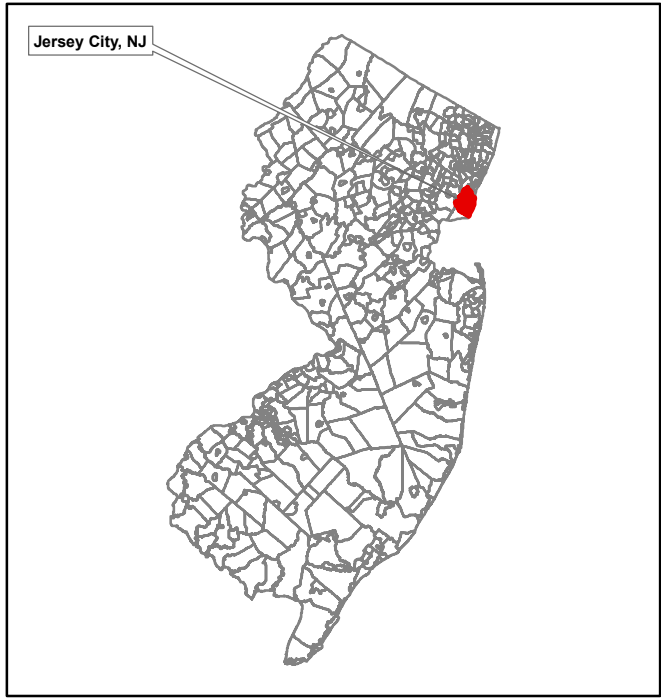
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FIGURE P-5
GROUNDWATER RI ANALYTICAL RESULTS -
CCPW METALS IN THE
BEDROCK WATER-BEARING ZONE



Map Notes:
1. New Jersey (NJ) State Plane North American Datum (NAD83) Coordinates, U.S. Survey Feet.
2. Parcels of Hudson County, NJ State Plane NAD83, Hudson County Department of Planning, Jersey City, NJ, May 21, 2013.



Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ARSENIC	As	3
LEAD	Pb	5

Notes:
1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI samples collected between September 26, 2017 and May 31, 2018.
5. Refer to the analytical data tables for qualifier definitions.
6. * - indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.
CCPW - Chromate Chemical Production Waste
D - dissolved fraction
ft - feet
GWQS - Groundwater Quality Standard
MGP = manufactured gas plant
NJDEP = New Jersey Department of Environmental Protection
NJ = New Jersey
RI = Remedial Investigation

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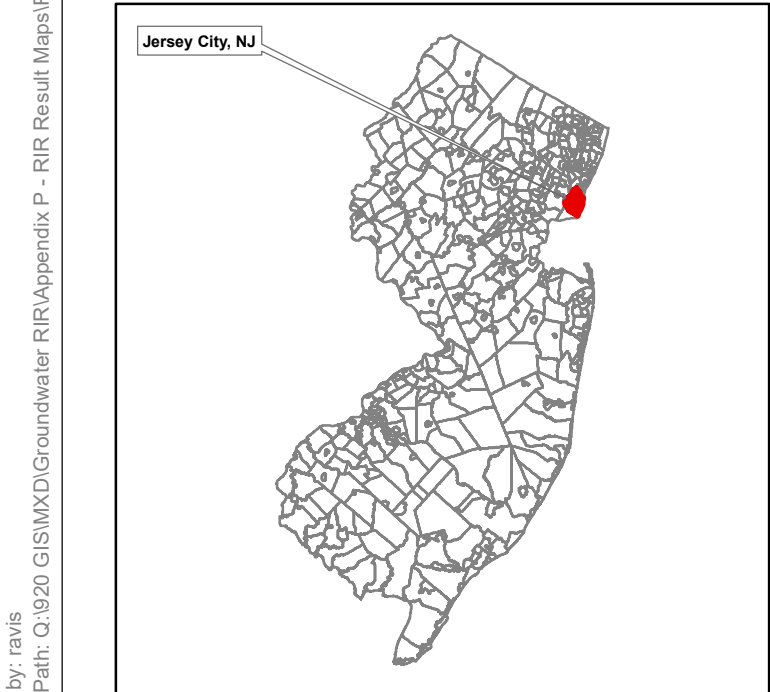
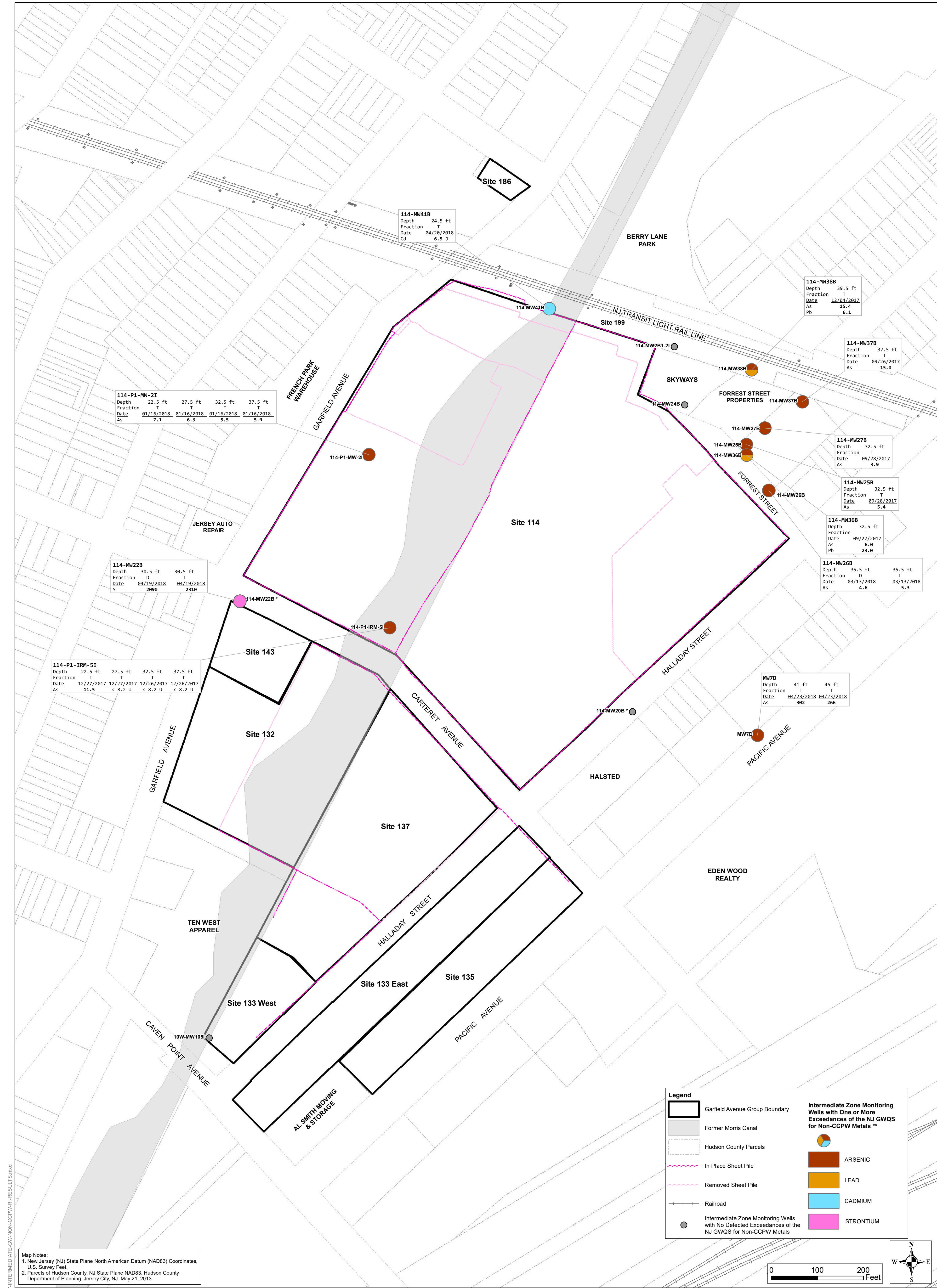
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FIGURE P-6
GROUNDWATER RI ANALYTICAL RESULTS -
NON-CCPW METALS IN THE
SHALLOW WATER-BEARING ZONE

DATE: 2021-08-12

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Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ARSENIC	As	3
CADMIUM	Cd	4
LEAD	Pb	5

Notes:
1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI samples collected between September 26, 2017 and May 31, 2018.
5. Refer to the analytical data tables for qualifier definitions.
6. * - indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.
CCPW - Chromate Chemical Production Waste
D - dissolved fraction
ft - feet
GWQS - Groundwater Quality Standard
MGP = manufactured gas plant
NJDEP = New Jersey Department of Environmental Protection
NJ = New Jersey
RI = Remedial Investigation

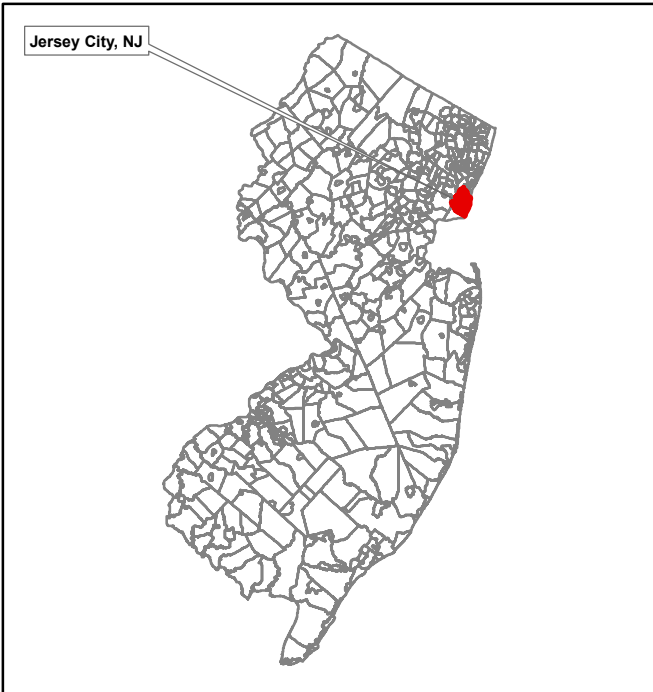
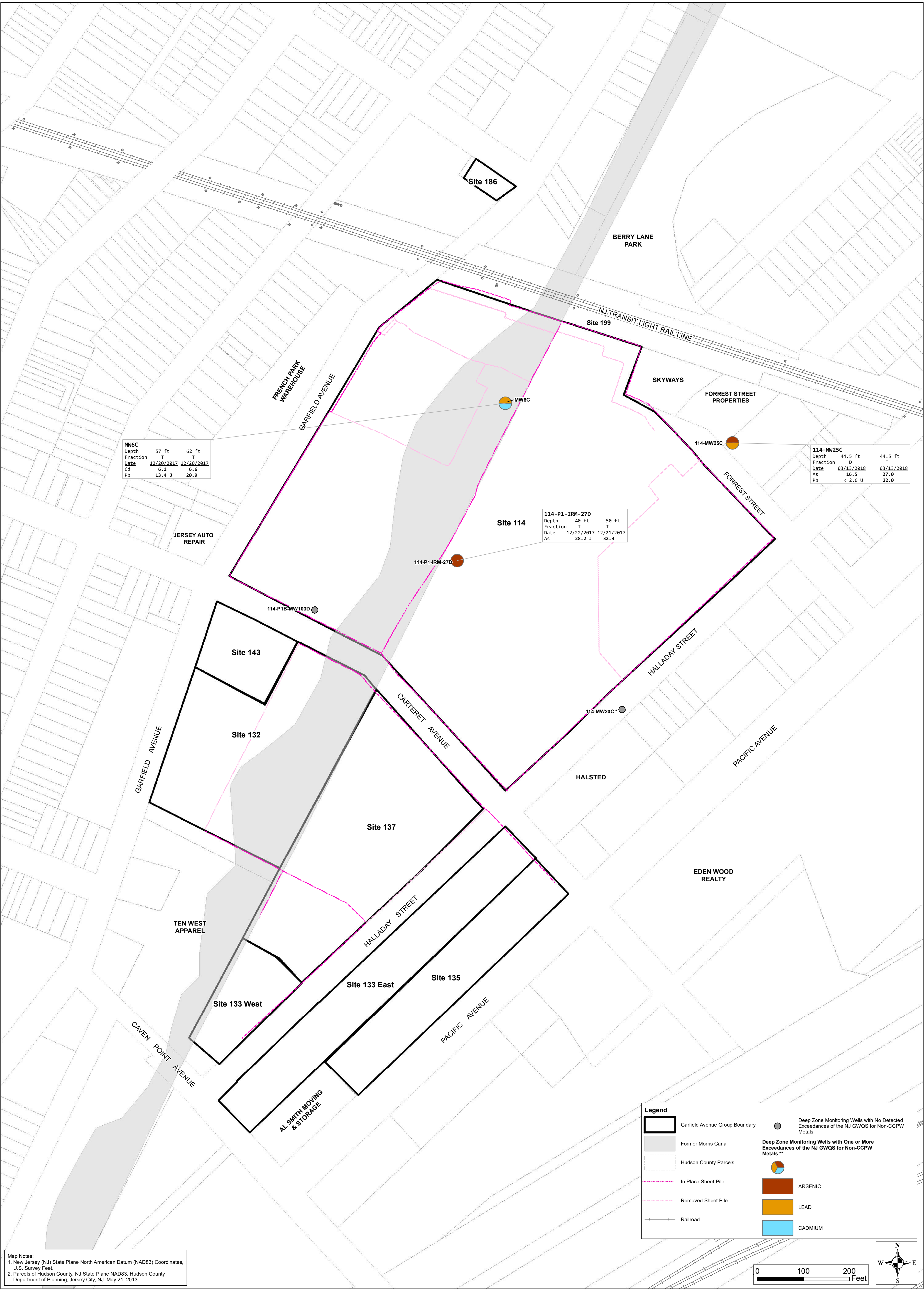
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FIGURE P-7
GROUNDWATER RI ANALYTICAL RESULTS -
NON-CCPW METALS IN THE
INTERMEDIATE WATER-BEARING ZONE

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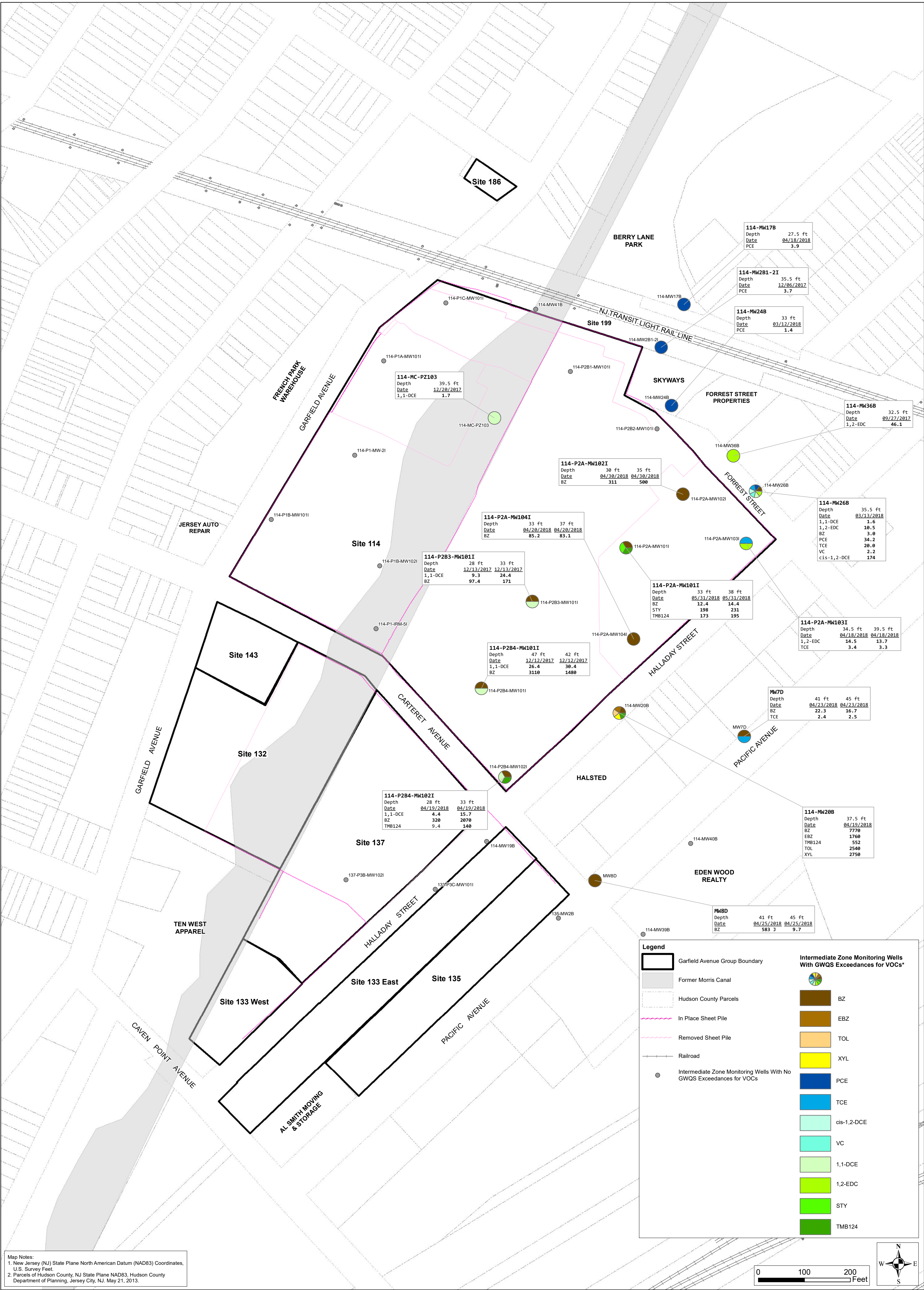
Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
ARSENIC	As	3
CADMIUM	Cd	4
LEAD	Pb	5

Notes:
1. All concentrations are presented in units of micrograms per liter (ug/L).
2. **Bold** - indicates the concentration is greater than the NJDEP GWQS for the analyte.
3. Where samples were collected from multiple depths within the same well, sample depths are indicated next to the concentration.
4. Results presented on this map are from RI samples collected between September 26, 2017 and May 31, 2018.
5. Refer to the analytical data tables for qualifier definitions.
6. * - indicates that the well was sampled during the RI field program between 2017-2018, but has since been decommissioned during soil remedial activities.
7. ** - only detected parameters present above their respective GWQS are shown as exceedances.
8. Sample depths are measured from the top of inner well casing.
CCPW - Chromate Chemical Production Waste
D - dissolved fraction
ft - feet
GWQS - Groundwater Quality Standard
MGP = manufactured gas plant
NJDEP = New Jersey Department of Environmental Protection
NJ = New Jersey
RI = Remedial Investigation

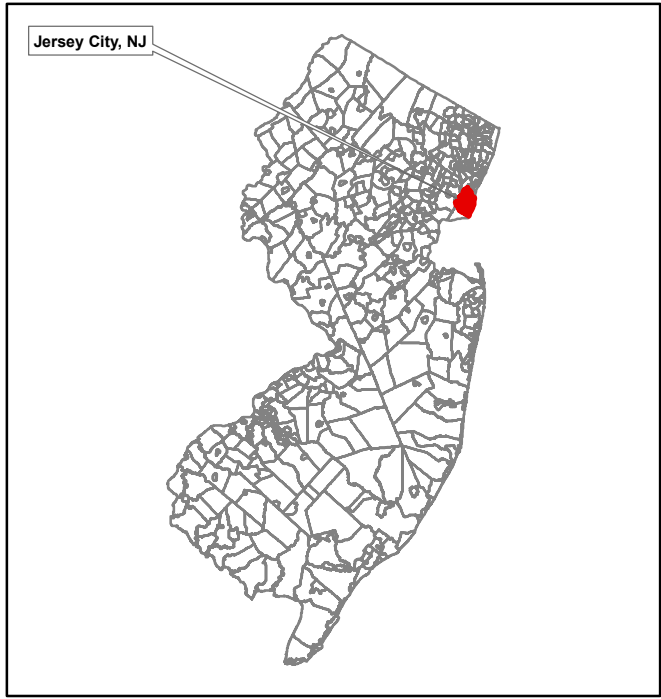
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FIGURE P-8
GROUNDWATER RI ANALYTICAL RESULTS -
NON-CCPW METALS IN THE
DEEP WATER-BEARING ZONE



Map Notes:
1. New Jersey (NJ) State Plane North American Datum (NAD83) Coordinates, U.S. Survey Feet.
2. Parcels of Hudson County, NJ State Plane NAD83, Hudson County Department of Planning, Jersey City, NJ, May 21, 2013.



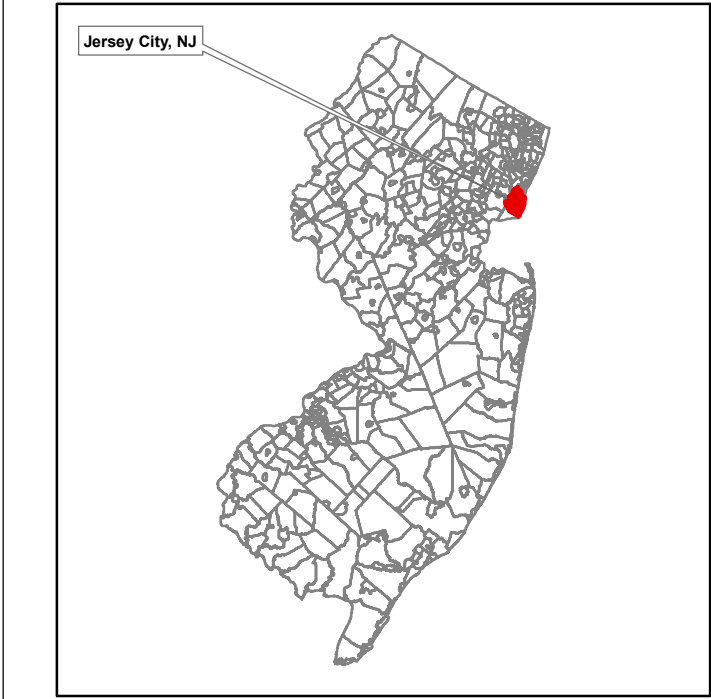
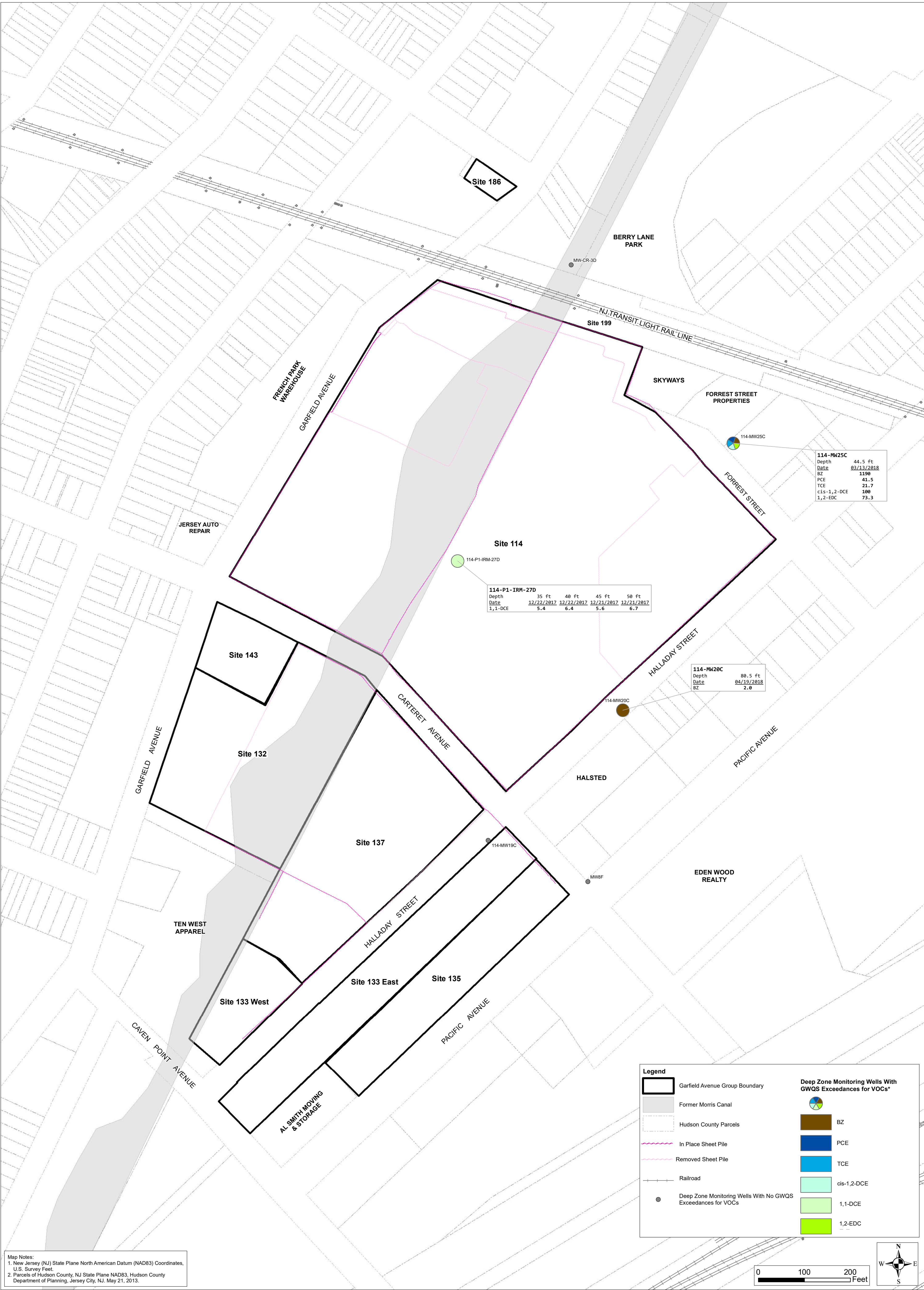
Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
BENZENE	BZ	1
ETHYLBENZENE	EBZ	700
TOLUENE	TOL	600
XYLENES	XYL	1000
TETRACHLOROETHENE	PCE	1
TRICHLOROETHYLENE	TCE	1
CIS-1,2-DICHLOROETHENE	cis-1,2-DCE	70
VINYL CHLORIDE	VC	1
1,1-DICHLOROETHYLENE	1,1-DCE	1
1,2-DICHLOROETHANE	1,2-EDC	2
STYRENE (MONOMER)	STY	100
1,2,4-TRIMETHYLBENZENE	TMB124	100

Notes:
1. **Bold** - Indicates the concentration is greater than the NJDEP GWQS for the analyte.
2. Refer to the analytical data tables for qualifier definitions.
3. Analytical results shown on this figure are from samples collected during the groundwater RI, from September 26, 2017 to May 31, 2018.
4. All results are reported in units of micrograms per liter (ug/L).
5. Data boxes only present results for detected parameters that exceed their respective GWQS.
6. * - only detected parameters present above their respective GWQS are shown as exceedances.
7. Sample depths are measured from the top of inner well casing.
ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
RI - Remedial Investigation
VOC - volatile organic compound

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FIGURE P-10
GROUNDWATER RI ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS IN THE
INTERMEDIATE WATER-BEARING ZONE

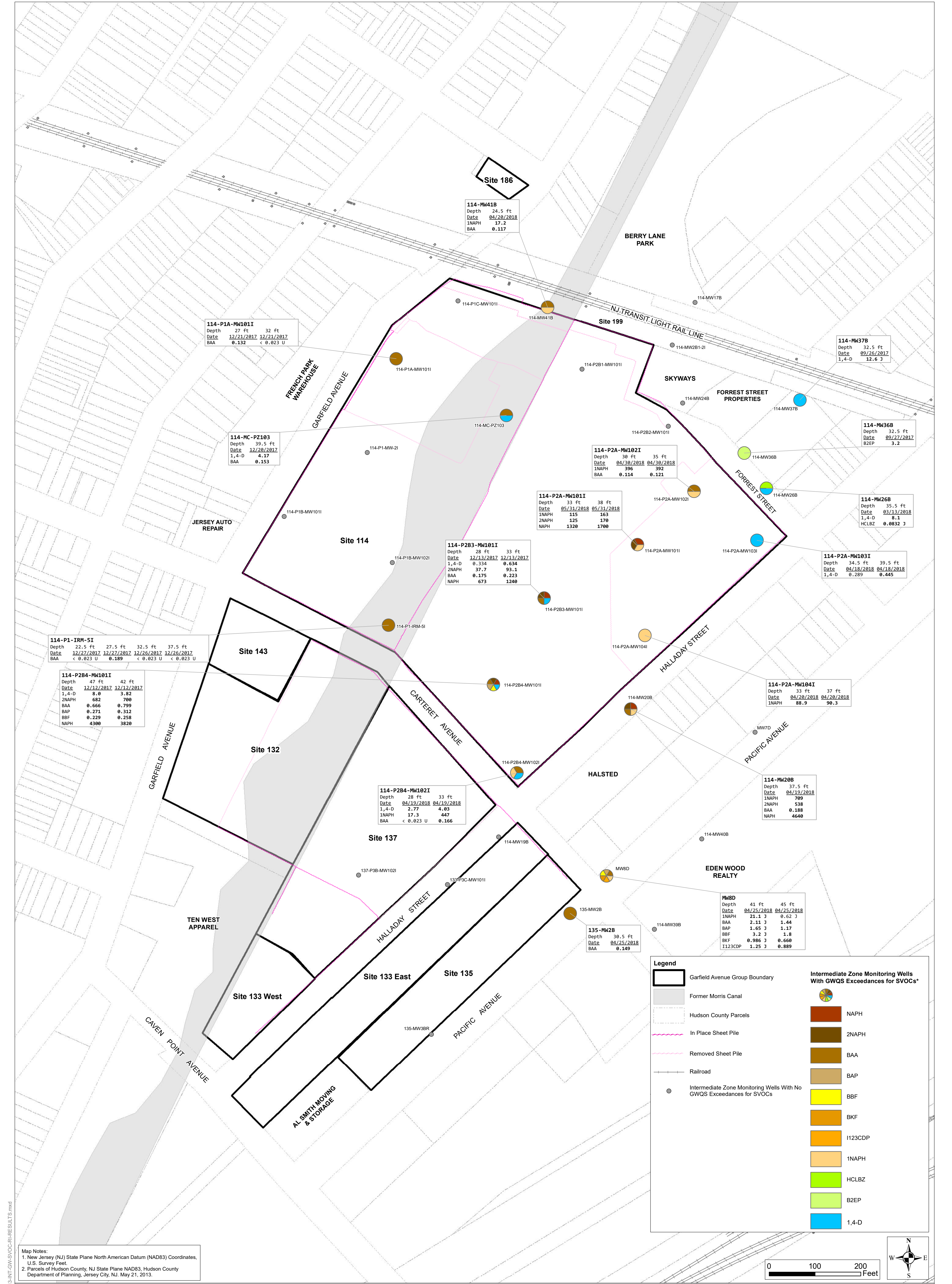


Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
BENZENE	BZ	1
TETRACHLOROETHENE	PCE	1
TRICHLOROETHYLENE	TCE	1
CIS-1,2-DICHLOROETHENE	cis-1,2-DCE	70
1,1-DICHLOROETHYLENE	1,1-DCE	1
1,2-DICHLOROETHANE	1,2-EDC	2

FIGURE P-11
GROUNDWATER RI ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS
IN THE DEEP WATER-BEARING ZONE

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Map Notes:

1. New Jersey (NJ) State Plane North American Datum (NAD83) Coordinates, U.S. Survey Feet.
2. Parcels of Hudson County, NJ State Plane NAD83, Hudson County Department of Planning, Jersey City, NJ, May 21, 2013.

Jersey City, NJ

Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
NAPHTHALENE	NAPH	300
2-METHYLNAPHTHALENE	2NAPH	30
BENZO(A)ANTHRACENE	BAA	0.1
BENZO(A)PYRENE	BAP	0.1
BENZO(B)FLUORANTHENE	BBF	0.2
BENZO(K)FLUORANTHENE	BKF	0.5
INDENO(1,2,3-CD)PYRENE	I123CDP	0.2
1-METHYLNAPHTHALENE	1NAPH	5
HEXACHLOROBENZENE	HCLBZ	0.02
BIS(2-ETHYLHEXYL)PHTHALATE	B2EP	3
1,4-DIOXANE	1,4-D	0.4

Notes:

1. **Bold** - Indicates the concentration is greater than the NJDEP GWQS for the analyte.
2. Refer to the analytical data tables for qualifier definitions.
3. Analytical results shown on this figure are from samples collected during the groundwater RI, from September 26, 2017 to May 31, 2018.
4. All results are reported in units of micrograms per liter (ug/L).
5. Data boxes only present results for detected parameters that exceed their respective GWQS.
6. * - only detected parameters present above their respective GWQS are shown as exceedances.
7. Sample depths are measured from the top of inner well casing.

ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
RI - Remedial Investigation
SVOC - semi-volatile organic compound

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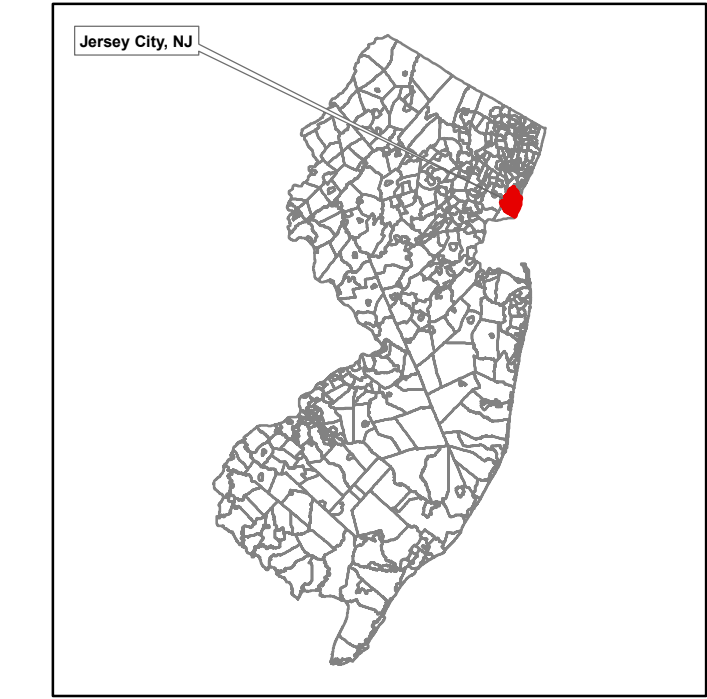
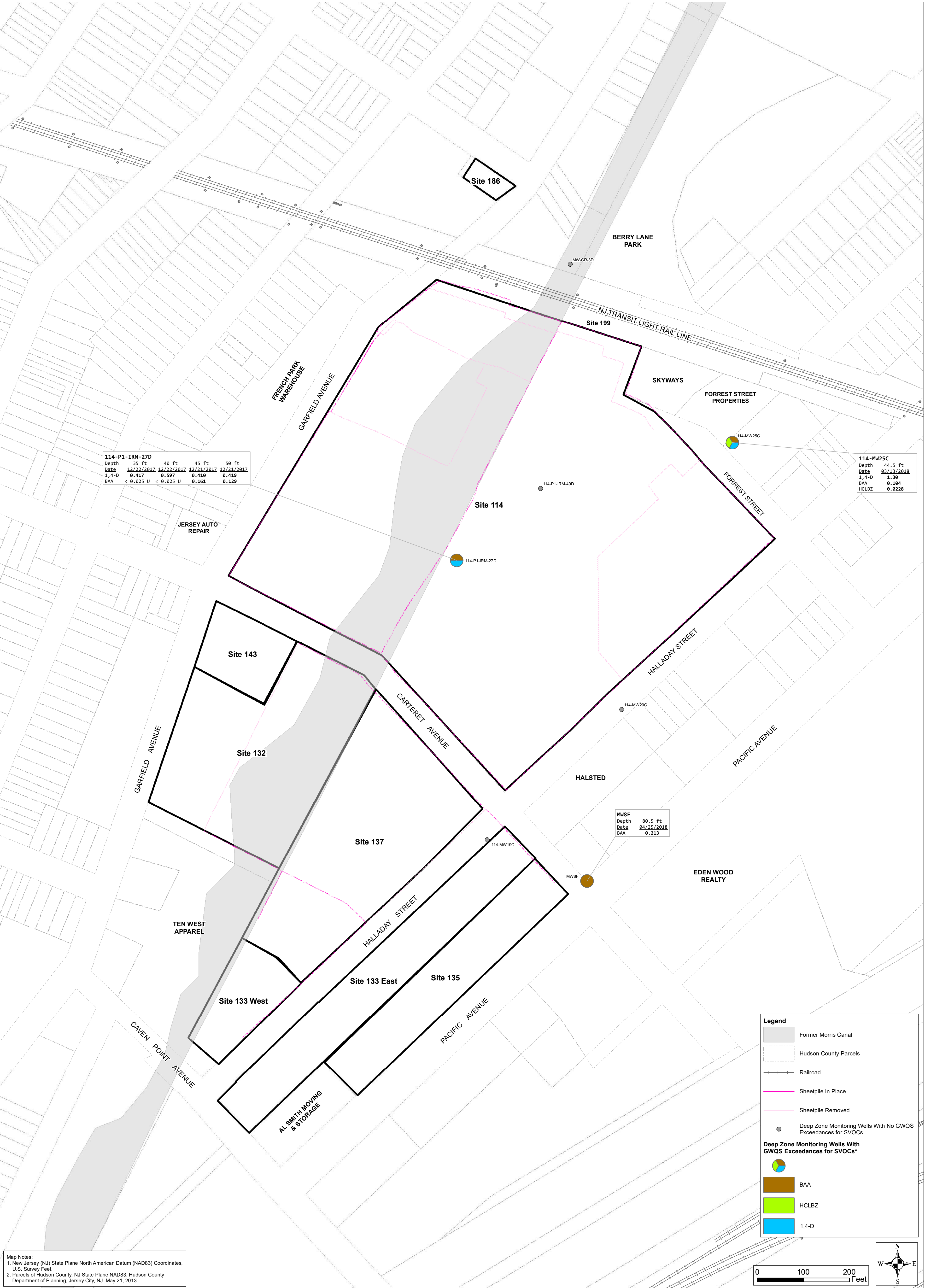
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FIGURE P-13
GROUNDWATER RI ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
IN THE INTERMEDIATE WATER-BEARING ZONE

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Analyte	Analyte Short Name	NJDEP GWQS (ug/L)
BENZO(A)ANTHRACENE	BAA	0.1
HEXACHLOROBENZENE	HCLBZ	0.02
1,4-DIOXANE	1,4-D	0.4

Notes:
1. **Bold** - Indicates the concentration is greater than the NJDEP GWQS for the analyte.
2. Refer to the analytical data tables for qualifier definitions.
3. Analytical results shown on this figure are from samples collected during the groundwater RI, from September 26, 2017 to May 31, 2018.
4. All results are reported in units of micrograms per liter (ug/L).
5. Data boxes only present results for detected parameters that exceed their respective GWQS.
6. * - only detected parameters present above their respective GWQS are shown as exceedances.
7. Sample depths are measured from the top of inner well casing.
ft - feet
GWQS - Groundwater Quality Standard
NJDEP - New Jersey Department of Environmental Protection
RI - Remedial Investigation
SVOC - semi-volatile organic compound



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FIGURE P-14
GROUNDWATER RI ANALYTICAL RESULTS
SEMI-VOLATILE ORGANIC COMPOUNDS
IN THE DEEP WATER-BEARING ZONE

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