

## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

FOREST AVENUE SHOPPERS TOWN  
FOREST AVENUE & BARRETT AVENUE  
STATEN ISLAND, NY 10302

### **TARGET PROPERTY COORDINATES**

Latitude (North):	40.625301 - 40° 37' 31.1"
Longitude (West):	74.137100 - 74° 8' 13.6"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	572983.0
UTM Y (Meters):	4497310.0
Elevation:	27 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

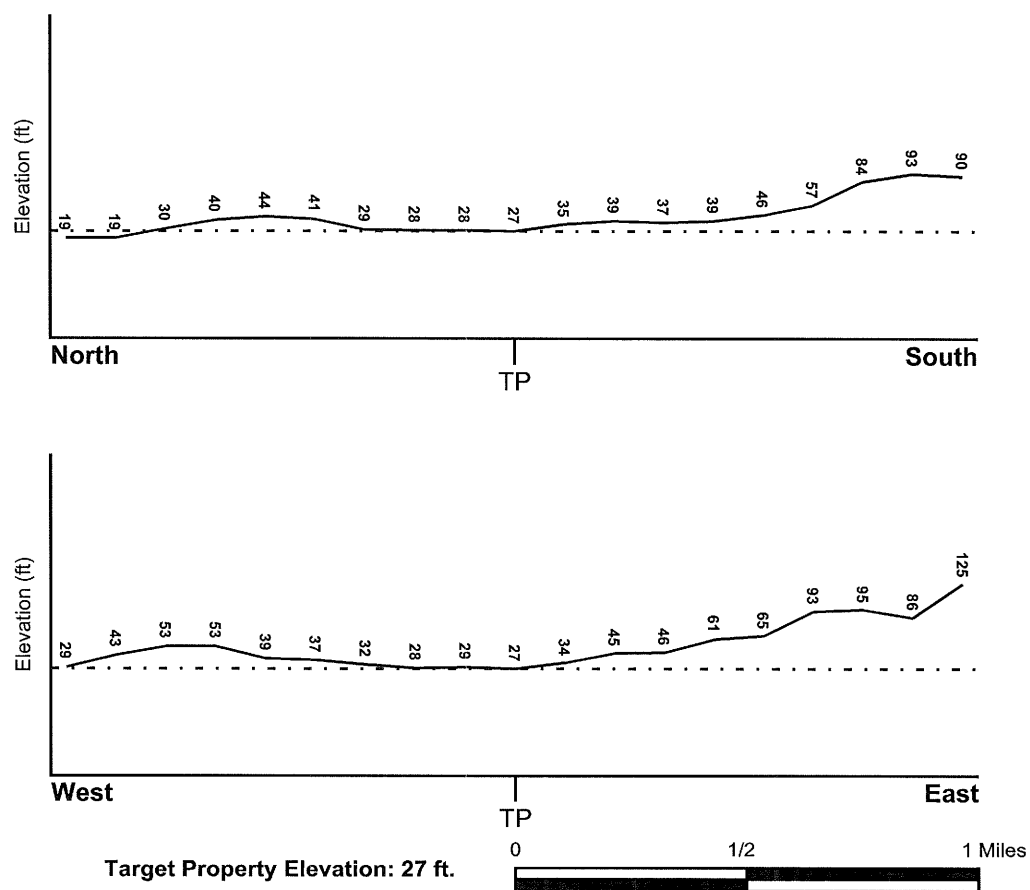
### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 40074-F2 ELIZABETH, NJ NY  
General Topographic Gradient: General NW  
Source: USGS 7.5 min quad index

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

Target Property County  
RICHMOND, NY

FEMA Flood  
Electronic Data  
Not Available

Flood Plain Panel at Target Property:

Not Reported

Additional Panels in search area:

Not Reported

### NATIONAL WETLAND INVENTORY

NWI Quad at Target Property  
ELIZABETH

NWI Electronic  
Data Coverage  
YES - refer to the Overview Map and Detail Map

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### *Site-Specific Hydrogeological Data\*:*

Search Radius: 1.25 miles  
Status: Not found

### AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID  
Not Reported

LOCATION  
FROM TP

GENERAL DIRECTION  
GROUNDWATER FLOW

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### ROCK STRATIGRAPHIC UNIT

Era:	Mesozoic
System:	Triassic
Series:	Triassic
Code:	Tr (decoded above as Era, System & Series)

#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinator soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam  
loam  
loamy sand  
silt loam  
sand

Surficial Soil Types: fine sandy loam  
loam  
loamy sand  
silt loam  
sand

Shallow Soil Types: silt loam

Deeper Soil Types: sandy loam  
gravelly - coarse sand  
coarse sand

### ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS2137385	1/8 - 1/4 Mile NE
2	USGS2137390	1/2 - 1 Mile NE
3	USGS2137400	1/2 - 1 Mile NE
4	USGS2137406	1/2 - 1 Mile NNW
5	USGS2137397	1/2 - 1 Mile NE
6	USGS2137411	1/2 - 1 Mile NNE
7	USGS2137413	1/2 - 1 Mile NNE
8	USGS2137379	1/2 - 1 Mile East
9	USGS2137387	1/2 - 1 Mile ENE

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

# PHYSICAL SETTING SOURCE MAP - 1516443.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data

**TARGET PROPERTY:** Forest Avenue Shoppers Town  
**ADDRESS:** Forest Avenue & Barrett Avenue  
**CITY/STATE/ZIP:** Staten Island NY 10302  
**LAT/LONG:** 40.6253 / 74.1371

**CUSTOMER:** Leggette, Brashears & Graham  
**CONTACT:** Sean Groszkowski  
**INQUIRY #:** 1516443.2s  
**DATE:** September 22, 2005 12:24 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**1**  
**NE**  
**1/8 - 1/4 Mile**  
**Lower**

**FED USGS USGS2137385**

Agency cd:	USGS	Site no:	403741074080501
Site name:	R 74		
Latitude:	403741		
Longitude:	0740805	Dec lat:	40.62815927
Dec lon:	-74.13430951	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	20	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	SAND AND GRAVEL		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**2**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS2137390**

Agency cd:	USGS	Site no:	403748074074201
Site name:	R 29		
Latitude:	403748		
Longitude:	0740742	Dec lat:	40.6301037
Dec lon:	-74.12792046	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	35	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST



## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	SAND AND GRAVEL		
Well depth:	99	Hole depth:	Not Reported
Source of depth data:	other reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**3**  
**NE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS2137400**

Agency cd:	USGS	Site no:	403800074074301
Site name:	R 55		
Latitude:	403800		
Longitude:	0740743	Dec lat:	40.63343696
Dec lon:	-74.12819826	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	18	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	SAND AND GRAVEL		
Well depth:	81	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**4**  
**NNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS2137406**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency cd:	USGS	Site no:	403805074084401
Site name:	R 68		
Latitude:	403805		
Longitude:	0740844	Dec lat:	40.63482576
Dec lon:	-74.14514316	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	34	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	43	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**5  
NE  
1/2 - 1 Mile  
Higher**

**FED USGS      USGS2137397**

Agency cd:	USGS	Site no:	403756074073101
Site name:	R 17		
Latitude:	403756		
Longitude:	0740731	Dec lat:	40.63232588
Dec lon:	-74.12486483	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	30	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	SAND AND GRAVEL		
Well depth:	74	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Peak flow data count: Not Reported  
 Water quality data end date: Not Reported  
 Ground water data begin date: Not Reported  
 Ground water data count: Not Reported

Water quality data begin date: Not Reported  
 Water quality data count: Not Reported  
 Ground water data end date: Not Reported

Ground-water levels, Number of Measurements: 0

**6**

**NNE**

**1/2 - 1 Mile**

**Lower**

**FED USGS**

**USGS2137411**

Agency cd:	USGS	Site no:	403808074074501
Site name:	R 44		
Latitude:	403808		
Longitude:	0740745	Dec lat:	40.63565913
Dec lon:	-74.12875384	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	ELIZABETH S-24-1	Map scale:	Not Reported
Altitude:	10	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	SAND AND GRAVEL		
Well depth:	67	Hole depth:	Not Reported
Source of depth data:	other reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

**7**

**NNE**

**1/2 - 1 Mile**

**Higher**

**FED USGS**

**USGS2137413**

Agency cd:	USGS	Site no:	403813074075401
Site name:	R 117. 1		
Latitude:	403813.09		
Longitude:	0740754.50	Dec lat:	40.63707299
Dec lon:	-74.1313928	Coor meth:	N
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	Not Reported	Altitude method:	Not Reported
Altitude accuracy:	Not Reported	Altitude datum:	Not Reported
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	20040624
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	66	Hole depth:	66
Source of depth data:	geologist	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2004-07-23	Ground water data end date:	2004-11-16
Ground water data count:	5		

Ground-water levels, Number of Measurements: 0

**8**  
**East**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS2137379**

Agency cd:	USGS	Site no:	403735074071401
Site name:	R 128. 1		
Latitude:	403735.41	Dec lat:	40.62660657
Longitude:	0740713.54	Coor meth:	N
Dec lon:	-74.12001468	Latlong datum:	NAD27
Coor accr:	H	District:	36
Dec latlong datum:	NAD83	County:	085
State:	36	Land net:	Not Reported
Country:	US	Map scale:	Not Reported
Location map:	Not Reported	Altitude method:	Not Reported
Altitude:	Not Reported	Altitude datum:	Not Reported
Altitude accuracy:	Not Reported		
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	20040609
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	55	Hole depth:	55
Source of depth data:	geologist	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2004-07-23	Ground water data end date:	2004-11-18
Ground water data count:	5		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

9

ENE

FED USGS

USGS2137387

1/2 - 1 Mile

Higher

Agency cd:	USGS	Site no:	403742074071501
Site name:	R 75		
Latitude:	403742		
Longitude:	0740715	Dec lat:	40.62843709
Dec lon:	-74.12042025	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	36
State:	36	County:	085
Country:	US	Land net:	Not Reported
Location map:	JERSEY CITY S-24-2	Map scale:	Not Reported
Altitude:	85	Altitude method:	M
Altitude accuracy:	10	Altitude datum:	NGVD29
Hydrologic:	Not Reported		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	EST
Local standard time flag:	N		
Type of ground water site:	Test hole, not completed as a well		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	85	Hole depth:	Not Reported
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NY Radon

### Radon Test Results

Zip	Num Sites	< 4 Pci/L	>= 4 Pci/L	>= 20 Pci/L	Avg > 4 Pci/L	Max Pci/L
10302	2	2 (100%)	0 (0%)	0 (0%)	2.00	2.9

Federal EPA Radon Zone for RICHMOND County: 3

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

### Federal Area Radon Information for RICHMOND COUNTY, NY

Number of sites tested: 61

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.670 pCi/L	98%	2%	0%
Basement	1.250 pCi/L	84%	15%	2%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

### **New York State Wetlands**

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Coverages are based on official New York State Freshwater Wetlands Maps as described in Article 24-0301 of the Environmental Conservation Law.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

## ADDITIONAL ENVIRONMENTAL RECORD SOURCES

### **FEDERAL WATER WELLS**

#### **PWS: Public Water Systems**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### **PWS ENF: Public Water Systems Violation and Enforcement Data**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

### **USGS Water Wells: USGS National Water Inventory System (NWIS)**

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STATE RECORDS

#### **New York Public Water Wells**

Source: New York Department of Health  
Telephone: 518-458-6731

#### **New York Facility and Manifest Data**

Source: NYSDEC  
Telephone: 518-457-6585  
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

### RADON

#### **State Database: NY Radon**

Source: Department of Health  
Telephone: 518-402-7556  
Radon Test Results

#### **Area Radon Information**

Source: USGS  
Telephone: 703-356-4020  
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### **EPA Radon Zones**

Source: EPA  
Telephone: 703-356-4020  
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration