

Water-Data Report 2010

395900074242801 Local number 291405- Manchester MW62

 Northern Atlantic Coastal Plain aquifer system
 Cohansey Sand-Kirkwood Formation

Ocean County, NJ

LOCATION.--Lat 39°59'00", long 74°24'28" referenced to North American Datum of 1927, Manchester Township, Ocean County, NJ, Hydrologic Unit 02040301.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 18 ft. Upper casing diameter 2 in; top of first opening 13 ft, bottom of last opening 18 ft.

DATUM.--Land-surface datum is 120 ft above National Geodetic Vertical Datum of 1929. Measuring point: Undefined.

PERIOD OF RECORD.--Water years 2000, 2005, and 2010.

REMARKS.--New Jersey Department of Environmental Protection Watershed Management Area 13. Undeveloped Land Use Indicator.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the New Jersey Department of Environmental Protection.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**

Part 1 of 9

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	Flow rate, instantaneous, gallons per minute (00059)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)
04-21-2010	0930	755	4.00	7.5	66	.50	4.6	191	10.0

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 9

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Date	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)		Pump or flow period prior to sampling, minutes	Dissolved solids dried at 180 °C, water, filtered, mg/L	Dissolved solids, sum of constituents, milligrams per liter	Hardness, water, mg/L as CaCO ₃	Calcium, water, mg/L	Magne sium, water, mg/L	Potassium, water, mg/L	Sodium, water, mg/L
	(72004)	(70300)						(00915)	(00925)	(00930)
04-21-2010	1.9	40	89	E 87	4.69	1.15	.436	.25	25.9	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 3 of 9

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Date	Alkalinity, water, filtered, inflection- point, incremental titration method, field, mg/L as CaCO ₃ (39086)		Bicarbonate, water, filtered, inflection- point, incremental titration method, field,	Chloride, water, filtered, mg/L	Fluoride, water, filtered, mg/L	Silica, water, filtered, mg/L as SiO ₂	Sulfate, water, filtered, mg/L	Ammonia plus organic nitrogen, water, mg/L as N (00623)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)
	(00453)	(00940)	(00950)	(00955)	(00945)	(00623)	(00608)	(00631)	(00608)	(00631)
04-21-2010	< 1	2	44.0	E .06	2.4	10.9	< .10	E .014	E .03	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 4 of 9

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Date	Orthophosphates									
	Nitrite, water, filtered, mg/L as N (00613)	phate, water, filtered, mg/L as P (00671)	Aluminum, water, filtered, µg/L (01106)	Barium, water, filtered, µg/L (01005)	Beryllium, water, filtered, µg/L (01010)	Cadmium, water, filtered, µg/L (01025)	Chromium, water, filtered, µg/L (01030)	Copper, water, filtered, µg/L (01040)	Iron, water, filtered, µg/L (01046)	Lead, water, filtered, µg/L (01049)
04-21-2010	< .002	< .008	796	30	.10	.22	< .12	E .83	< 6	.05

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 5 of 9

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Date	Manganese, water, filtered,	Mercury, water, filtered,	Nickel, water, filtered,	Zinc, water, filtered,	Antimony, water, filtered,	Arsenic, water, filtered,	Boron, water, filtered,	Selenium, water, filtered,	1,2-Di chloro ethane, water, unfiltered,	1,2- Dichloro propane, water, unfiltered,
	µg/L (01056)	µg/L (71890)	µg/L (01065)	µg/L (01090)	µg/L (01095)	µg/L (01000)	µg/L (01020)	µg/L (01145)	µg/L (32103)	µg/L (34541)
04-21-2010	55.6	<.010	1.3	20.8	<.05	.25	7	.15	<.2	<.1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 6 of 9

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Date	1,1,2-Tri chloro-							Bromo dichloro benzene,		Chloro benzene,							
	1,4- Dichloro benzene, water, unfiltered,	1,1,1-Tri chloro ethane, water, unfiltered,	1,2,2- trifluoro ethane, water, unfiltered,	1,1-Di chloro ethane, water, unfiltered,	1,1-Di chloro ethene, water, unfiltered,	1,2- Dichloro benzene, water, unfiltered,	1,3- Dichloro benzene, water, unfiltered,	Benzene, water, unfiltered,	recover able, µg/L (34571)	recover able, µg/L (34506)	recover able, µg/L (77652)	recover able, µg/L (34496)	recover able, µg/L (34501)	recover able, µg/L (34536)	recover able, µg/L (34566)	recover able, µg/L (34030)	recover able, µg/L (32101)
04-21-2010	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1

WATER-QUALITY DATA
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Part 7 of 9

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Date	cis-1,2-Di chloro ethene, water, unfiltered,	Dibromo methane, water, unfiltered,	Di chloro difluoro methane, water, unfiltered,	Dichloro methane, water, unfiltered,	Diethyl ether, water, unfiltered,	Di iso propyl ether, water, unfiltered,	Ethyl benzene, water, unfiltered,	Methyl tert-butyl ether, water, unfiltered,	Methyl tert-pentyl ether, water, unfiltered,	m-Xylene plus p- xylene, water, unfiltered,	
	µg/L (77093)	µg/L (32105)	µg/L (34668)	µg/L (34423)	µg/L (81576)	µg/L (81577)	µg/L (81577)	µg/L (34371)	µg/L (78032)	µg/L (50005)	µg/L (85795)
04-21-2010	<.1	<.2	<.2	<.2	<.2	<.2	<.1	<.2	<.2	<.2	<.2

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Part 8 of 9

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Date	o-Xylene, water, unfiltered, recover mg/L (00681)	Styrene, water, unfiltered, recover µg/L (77135)	ethyl ether, water, unfiltered, recover µg/L (7128)	Tetra tert-Butyl chloro ethene, water, unfiltered, recover µg/L (50004)	Tetra methane, water, unfiltered, recover µg/L (34475)	Toluene, water, unfiltered, recover µg/L (32102)	trans-1,2- Di chloro ethene, water, unfiltered, recover µg/L (34010)	Tribromo methane, water, unfiltered, recover µg/L (34546)	Tri chloro ethene, water, unfiltered, recover µg/L (32104)	
	Organic carbon, water, filtered, able, µg/L (00681)	Organic carbon, water, unfiltered, able, µg/L (77135)	Organic carbon, water, unfiltered, able, µg/L (7128)	Organic carbon, water, unfiltered, able, µg/L (50004)	Organic carbon, water, unfiltered, able, µg/L (34475)	Organic carbon, water, unfiltered, able, µg/L (32102)	Organic carbon, water, unfiltered, able, µg/L (34010)	Organic carbon, water, unfiltered, able, µg/L (34546)	Organic carbon, water, unfiltered, able, µg/L (32104)	
04-21-2010	E .6	< .1	< .1	< .1	< .1	< .2	< .1	< .1	< .2	< .1

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Part 9 of 9

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Date	Tri chloro fluoro methane, water, unfiltered, recover µg/L (34488)	Tri chloro methane, water, unfiltered, recover µg/L (32106)	Vinyl chloride, water, unfiltered, recover µg/L (39175)	radioactivi ty, water, Th-230 curve, able, µg/L (39175)	Alpha radioactivi ty, water, Th-230 curve, picocuries per liter (04126)	Gross beta radioactivi ty, water, Cs-137 curve, picocuries per liter (03515)
	Tri chloro fluoro methane, water, unfiltered, recover µg/L (34488)	Tri chloro methane, water, unfiltered, recover µg/L (32106)	Vinyl chloride, water, unfiltered, recover µg/L (39175)	radioactivi ty, water, Th-230 curve, able, µg/L (39175)	Alpha radioactivi ty, water, Th-230 curve, picocuries per liter (04126)	Gross beta radioactivi ty, water, Cs-137 curve, picocuries per liter (03515)
04-21-2010	< .2	1.9	< .2	2.4	2.3	