

## Water-Data Report 2009

**393818075132401 Local number 330680- Coles Farm 1 Obs MW28**

 Northern Atlantic Coastal Plain aquifer system  
 Cohansey Sand-Kirkwood Formation

Salem County, NJ

LOCATION.--Lat 39°38'48.2", long 75°13'23.7" referenced to North American Datum of 1983, Upper Pittsgrove Twp, Salem County, NJ, Hydrologic Unit 02040206.

**WATER-QUALITY RECORDS**

WELL CHARACTERISTICS.--Depth 32 ft. Upper casing diameter 2 in; top of first opening 27 ft, bottom of last opening 32 ft.

DATUM.--Land-surface datum is 144.35 ft above National Geodetic Vertical Datum of 1929. Measuring point: TOP OF PVC CASING. SURVEYED ALTITUDE OF MP = 146.877, 2.53 ft above land-surface datum, Feb. 26, 1991, to present.

PERIOD OF RECORD.--Water years 1999, 2004, and 2009.

REMARKS.--New Jersey Department of Environmental Protection Watershed Management Area 18. Agricultural Land Use Indicator.

COOPERATION.--Physical measurements and samples for laboratory analysis were collected in cooperation with the New Jersey Department of Environmental Protection and the New Jersey Geological Survey.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Time	Baro-metric pressure, mm Hg (00025)	Depth to water level, feet (LSD 72019)	Dis-solved oxygen, mg/L (00300)	Dis-solved percent of saturation (00301)	Flow rate, instantaneous gal/min (00059)	pH, water, unfltrd field, std units (00400)	Specif-ic conductance, 25 degC (00095)	Turbdty white light, 90+/-30 deg C (NTRU 63676)	Pump or flow period prior to sampling, minutes (72004)	Dis-solved solids, 180degC wat flt mg/L (70300)	Dis-solved solids, sum of constituents, (70301) mg/L
Jul 13...	1205	755	17.00	10.2	99	.29	5.0	278	13.5	.3	33	172
												E176

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, mg/L (00915)	Magnes-ium, water, mg/L (00925)	Potas-sium, water, mg/L (00935)	Sodium, water, mg/L (00930)	Alka-linity, wat flt inf tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt infl pt titr., mg/L (00453)	Chlor-ide, water, mg/L (00940)	Fluor-ide, water, mg/L (00950)	Silica, water, filtrd, mg/L SiO2 (00955)	Sulfate water, filtrd, mg/L (00945)	Ammonia + org-N, water, filtrd, mg/L as N (00623)	Ammonia water, filtrd, mg/L as N (00608)
Jul 13...	120	33.1	9.10	1.68	2.56	8	10	15.7	<.08	9.7	61.2	E.09	<.020

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phosphate, water, fltrd, mg/L as P (00671)	Alum- inum, water, fltrd, μg/L (01106)	Barium, water, fltrd, μg/L (01005)	Beryll- ium, water, fltrd, μg/L (01010)	Cadmium, water, fltrd, μg/L (01025)	Chrom- ium, water, fltrd, μg/L (01030)	Copper, water, fltrd, μg/L (01040)	Iron, water, fltrd, μg/L (01046)	Lead, water, fltrd, μg/L (01049)	Mangan- ese, water, fltrd, μg/L (01056)	Mercury water, fltrd, μg/L (71890)
Jul 13...	8.57	<.002	E.006	13.6	90	.06	.05	.21	<1.0	<4	.18	12.8	<.010

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Nickel, water, fltrd, μg/L (01065)	Zinc, water, fltrd, μg/L (01090)	Antimony, water, fltrd, μg/L (01095)	Arsenic, water, fltrd, μg/L (01000)	Boron, water, fltrd, μg/L (01020)	Selen- ium, water, fltrd, μg/L (01145)	1,2-Di- chloro- ethane, water, fltrd μg/L (32103)	1,2-Di- chloro- propane, water, fltrd μg/L (34541)	1,4-Di- chloro- benzene, water, fltrd μg/L (34571)	1-Naph- thol, water, fltrd μg/L (49295)	2,6-Di- ethyl- aniline, water, fltrd μg/L (82660)	2-Chloro- -2'-6'- diethyl acet-anilide, water, fltrd, μg/L (61618)	CIAT, water, fltrd, μg/L (04040)
Jul 13...	1.8	4.6	<.04	.23	17	1.1	<.2	<.1	<.1	<.04	<.006	<.010	E.148

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 5 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	2-Ethyl- 6-methyl- aniline wat flt μg/L (61620)	3,4-Di- chloro- aniline water, fltrd, μg/L (61625)	3,5-Di- chloro- aniline water, fltrd, μg/L (61627)	4-Chloro- 2-methyl- phenol, wat flt μg/L (61633)	Aceto- chlor, water, fltrd, μg/L (49260)	Ala- chlor, water, fltrd, μg/L (46342)	alpha- sulfan, water, fltrd, μg/L (34362)	Endo- zine, water, fltrd, μg/L (39632)	Atra- xon, water, fltrd, μg/L (61635)	Azin- phos- methyl, water, fltrd μg/L (82686)	Azin- phos- methyl, water, fltrd μg/L (82673)	Ben- flur- alin, water, fltrd μg/L (82680)	Car- baryl, water, fltrd μg/L (82674)
Jul 13...	<.010	<.004	<.004	<.005	<.010	<.008	<.006	.056	<.04	<.120	<.014	<.200	<.060

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 6 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Chlor-	cis-	cis-					Desulf-	Desulf-		
	pyrifos	Per-	Propri-	Cyana-	Cyflu-	Cyper-	DCPA,	fipro-	fipro-	Diazi-	chlor-
	Chlor-	methrin	conazole,	zine,	thrin,	methrin	water,	nil,	nil,	non,	vos,
	oxon,	water,	water,	water,	water,	water,	water,	amide,	water,	water,	water,
	water,	water,	filtrd,	water,	filtrd,	filtrd,	filtrd,	wat flt	filtrd,	filtrd,	filtrd,
	filtrd,	filtrd,	0.7μ GF	filtrd,	filtrd,	filtrd,	0.7μ GF		filtrd,	filtrd,	filtrd,
	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
	(61636)	(38933)	(82687)	(79846)	(04041)	(61585)	(61586)	(82682)	(62169)	(62170)	(39572)
Jul											
13...	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	<.012	<.005
											<.02
											<.08

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 7 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Dimeth-	Disulf-	Disul-	Endo-					Etho-	Fenami-		
	Diethyl-	oate,	sulfone	foton,	sulfan	EPTC,	Ethion		prop.	phos	Fenami-	Fipro-
	drin,	water,	water,	water,	sulfate	water,	monoxon	Ethion,	water,	sulfone	phos	nil
	water,	water,	filtrd,	water,	filtrd,	filtrd,	0.7μ GF	water,	filtrd,	water,	water,	water,
	filtrd,	filtrd,	0.7μ GF	filtrd,	0.7μ GF	filtrd,	0.7μ GF	water,	filtrd,	filtrd,	filtrd,	filtrd,
	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
	(39381)	(82662)	(61640)	(82677)	(61590)	(82668)	(61644)	(82346)	(82672)	(61645)	(61646)	(61591)
Jul												
13...	<.009	<.006	<.01	<.04	<.022	<.002	<.02	<.012	<.016	<.053	<.08	<.03
											<.013	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

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[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Fipro-	Fipro-	Fonofos	Hexa-	Ipro-	Isofen-	lambda-			Methyl		
	nil	nil,	water,	zinone,	dione,	phos,	Cyhalo-	Mala-	Mala-	para-	par-	
	water,	water,	water,	water,	water,	water,	thrin,	oxon,	laxyl,	oxon,	thion,	water,
	filtrd,											
	0.7μ GF											
	μg/L											
	(62168)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)	(61596)	(61598)	(61664)
Jul												
13...	<.024	<.040	<.010	<.008	<.014	<.006	<.010	<.080	<.020	<.007	<.006	<.01
											<.008	

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 9 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Metola-	Metri-	Moli-	Oxy-	Pendi-					Pro-		
	chlor,	buzin,	nate, water,	Myclo- butanil	fluor- fen,	meth- alin, water,	Phorate oxon, water,	Phorate oxon, water,	Phosmet	Prome- ton, water,	Prome- tryn, water,	panil, water,
	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	fltrd
	fltrd,	fltrd,	0.7µ GF	fltrd,	fltrd,	0.7µ GF	fltrd,	0.7µ GF	fltrd,	fltrd,	fltrd,	0.7µ GF
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)	(61601)	(04037)	(04036)
Jul												
13...	<.014	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05	<.200	E.01	<.006
												<.014

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

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Date	Propar-	Propy-	Tebu-	Ter-					trans-	Tri-		1,1,1-
	gite,	zamide,	Sima-	thiuron	bufos	Terbu-	Ter-	Thio-	Propi-	flur-	chloro-	Tri-
	water,	water,	zine,	water,	theflu-	oxon	buthyl-	bencarb	con-	alin,	ethane,	chloro-
	fltrd	fltrd	fltrd,	fltrd,	sulfone	water,	water,	water,	zole,	water,	water,	water,
	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	water,	fltrd,	fltrd,	fltrd,	water,	fltrd,	fltrd,	fltrd
	µg/L											
	(82685)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)	(79847)	(61610)	(82661)
Jul												
13...	<.02	<.004	E.009	<.02	<.010	<.04	<.02	<.01	<.016	<.02	<.035	<.012
												<.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 11 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	1,1-Di-	1,1-Di-	1,2-Di-	1,3-Di-	Bromo-					cis-	Di-	Di-	Di-
	chloro-	chloro-	chloro-	chloro-	di-	Chloro-	1,2-Di-	bromo-	chloro-	chloro-	chloro-	chloro-	ethyl
	ethane,	ethene,	benzene,	benzene	Benzene	methane	benzene	ethene,	chloro-	benzene	methane	methane	methane
	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,
	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	(77652)	(34496)	(34501)	(34536)	(34566)	(34030)	(32101)	(34301)	(77093)	(32105)	(34668)	(34423)	(81576)
Jul													
13...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	<.2	<.2

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 12 of 13

[Remark codes: &lt;, less than; E, estimated; R, radchem non-detect, below ssLc.]

Date	Methyl												trans- 1,2-Di- chloro- ethene,
	Diiso- propyl ether, water, unfltrd	Ethyl- benzene water, unfltrd	Methyl t-butyl ether, water, unfltrd	tert- butyl ether, water, unfltrd	meta- pentyl ether, water, unfltrd	+ para- Xylene, water, unfltrd	Organic carbon, water, unfltrd	o- Xylene, water, unfltrd	Styrene water, unfltrd	t-Butyl ethyl ether, water, unfltrd	Tetra- chloro- ethene, water, unfltrd	Tetra- chloro- methane water, unfltrd	Toluene water, unfltrd
μg/L (81577)	μg/L (34371)	μg/L (78032)	μg/L (50005)	μg/L (85795)	mg/L (00681)	μg/L (77135)	μg/L (77128)	μg/L (50004)	μg/L (34475)	μg/L (32102)	μg/L (34010)	μg/L (34546)	
Jul 13...	<.2	<.1	<.2	<.2	.4	<.1	<.1	<.1	<.1	<.1	<.2	<.1	<.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 13 of 13

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Date	Tri-									Beta radioac
	Tri- bromo- methane water, unfltrd	Tri- chloro- ethene, water, unfltrd	chloro- fluoro- methane water, unfltrd	Tri- chloro- methane water, unfltrd	Vinyl chloride, water, unfltrd	Alpha radioac 30 day, wat flt	Alpha radioac 72 hr, wat flt	Alpha radioac 30 day, wat flt	Beta radioac 72 hr, wat flt	
μg/L (32104)	μg/L (39180)	μg/L (34488)	μg/L (32106)	μg/L (32106)	μg/L (39175)	pCi/L (62639)	pCi/L (62636)	pCi/L (62645)	pCi/L (62642)	
Jul 13...	<.2	<.1	<.2	<.1	<.2	R.0	1	2.2	1.3	