

## Water-Data Report 2009

**393610075250001 Local number 330927- Welchvill MW31**

 Northern Atlantic Coastal Plain aquifer system  
 Vincentown Formation

Salem County, NJ

LOCATION.--Lat 39°36'10", long 75°25'00" referenced to North American Datum of 1927, Mannington Township, Salem County, NJ, Hydrologic Unit 02040206.

**WATER-QUALITY RECORDS**

WELL CHARACTERISTICS.--Depth 25 ft. Upper casing diameter 2 in; top of first opening 20 ft, bottom of last opening 25 ft.

DATUM.--Land-surface datum is 29 ft above National Geodetic Vertical Datum of 1929. Measuring point: Undefined.

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

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

**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, feet below	Depth to water	Dis-solved oxygen, mg/L	Dis-solved oxygen, percent of saturation	Flow rate, instantaneous	pH, water, unfltrd	Specif-ic conductance, field, std	Turbdty, light, 90+/-30	Pump or flow period	Dis-solved solids, prior to sampling, 180degC	Dis-solved solids, dried @ 180degC	
		mm Hg (00025)	LSD (72019)	(00300)	(00301)	gal/min (00059)	(00400)	μS/cm @ 25 degC (00095)	deg C (00010)	NTRU (63676)	minutes (72004)	mg/L (70300)	mg/L (70301)
Apr 07...	1015	746	15.00	8.4	82	.50	4.9	527	12.9	2.8	45	323	E251

**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	Calcium, mg/L (00900)	Magnes-iun, mg/L (00915)	Potas-sium, mg/L (00925)	Sodium, mg/L (00935)	Alka-linity, wat flt	Bicar-bonate, wat flt	Chlor-ide, infl pt titr., mg/L	Fluor-ide, water, mg/L	Silica, water, mg/L as SiO2	Sulfate, water, mg/L (00955)	Ammonia + org-N, water, mg/L as N (00945)	Ammonia, water, mg/L as N (00623)
Apr 07...	180	44.7	15.7	2.25	13.8	3	4	116	.10	6.5	39.4	.13	E.011

**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)
Apr 07...	2.33	<.002	.009	182	87	.11	.14	.71	E.86	6	.06	41.5	<.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)
Apr 07...	2.7	9.3	<.04	.13	119	.36	<.2	<.1	<.1	<.04	<.006	<.010	E.092

**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)
Apr 07...	<.010	<.004	<.004	<.005	<.010	<.008	<.006	.035	<.04	<.120	<.014	<.200	<.060

**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,	fltrd,	water,	fltrd,	fltrd,	fltrd,	wat flt	fltrd,	fltrd,	fltrd,		
	fltrd,	fltrd,	0.7 $\mu$ GF	fltrd,	fltrd,	fltrd,	0.7 $\mu$ GF	fltrd,	fltrd,	fltrd,	fltrd,		
	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L		
	(61636)	(38933)	(82687)	(79846)	(04041)	(61585)	(61586)	(82682)	(62169)	(62170)	(39572)	(38775)	
Apr 07...	<.05	<.010	<.014	<.006	<.040	<.016	<.020	<.006	<.029	<.012	<.005	<.02	<.08

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

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Date	Dimeth-	Disulf-	Disul-	Endo-			Ethion	Etho-	Fenami-				
	Diethyl-	oate,	sulfone	foton,	sulfan	EPTC,	Ethion	prop.	phos	Fenami-	Fipro-		
	drin,	water,	sulfone	water,	sulfate	water,	monoxon	Ethion,	sulfone	sulfide	nil		
	water,	fltrd	water,	fltrd	water,	fltrd	water,	fltrd	water,	water,	water,		
	fltrd,	0.7 $\mu$ GF	fltrd,	fltrd,	fltrd,								
	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L								
	(39381)	(82662)	(61640)	(82677)	(61590)	(82668)	(61644)	(82346)	(82672)	(61645)	(61591)	(62167)	
Apr 07...	<.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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Date	Fipro-	Fipro-	Fono-	Hexa-	Ipro-	Isofen-	lambda-			Methyl			
	nil	nil,	fonofos	zinone,	dione,	phos,	Cyhalo-	Mala-	Mala-	para-			
	sulfone	water,	water,	water,	water,	water,	thrin,	oxon,	laxyl,	oxon,			
	water,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	water,	water,	water,	water,			
	fltrd,	0.7 $\mu$ GF	fltrd,	0.7 $\mu$ GF	fltrd,	0.7 $\mu$ GF	fltrd,	fltrd,	fltrd,	fltrd,			
	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L	$\mu$ g/L			
	(62168)	(62166)	(04095)	(04025)	(61593)	(61594)	(61595)	(61652)	(39532)	(61596)	(61598)		
Apr 07...	<.024	<.040	<.010	<.008	<.014	<.006	<.010	<.080	<.020	<.007	<.006	<.01	<.008

**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-	fluor-	meth-	Phorate	Phorate	Phosmet	Prome-	Prome-	panil,	
	water,	water,	water,	butanil	fen,	alin,	oxon,	water,	oxon,	ton,	tryn,	water,	
	filtrd,	filtrd,	0.7µ GF	filtrd,	filtrd,	filtrd	filtrd,	0.7µ GF	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	
	(39415)	(82630)	(82671)	(61599)	(61600)	(82683)	(61666)	(82664)	(61668)	(61601)	(04037)	(04036)	
Apr 07...	.037	<.016	<.002	<.010	<.006	<.012	<.03	<.020	<.05	<.200	<.01	<.006	<.014

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

Part 10 of 13

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

Date	Propar-	Propy-	Tebu-	Ter-					trans-	Tri-	1,1,1-		
	gite,	zamide,	Simazine,	thiuron	bufos	Terbu-	Ter-	Thio-	Propi-	flur-	Tri-		
	water,	water,	zine,	water,	theflu-	oxon	buthyl-	bencarb	con-	alain,	chloro-		
	filtrd	filtrd	filtrd	filtrd	sulfone	water,	azine,	water,	zole,	water,	water,		
	0.7µ GF	0.7µ GF	0.7µ GF	0.7µ GF	water,	filtrd	water,	filtrd	water,	filtrd	filtrd		
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
	(82685)	(82676)	(04035)	(82670)	(61606)	(61674)	(82675)	(04022)	(82681)	(79847)	(61610)	(82661)	
Apr 07...	<.02	<.004	<.010	<.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	CFC-113	1,1-Di-chloro-ethane,	1,1-Di-chloro-ethene,	1,2-Di-chloro-benzene	1,3-Di-chloro-benzene	Benzene	Bromo-di-chloro-methane	Chloro-benzene	1,2-Di-chloro-ethene,	cis-1,2-Di-chloro-ethene,	Di-bromo-ethane	Di-chloro-ethane	Di-chloro-ethane	Di-ethyl ether,
		water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,	water,
		unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	unfltrd	wat unf	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)
Apr 07...		<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.2	<.2	<.2	<.2

**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)	
Apr 07...	<.2	<.1	<.2	<.2	<.2	1.0	<.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	Beta radioac	
	Tri- bromo- methane water, unfltrd	Tri- chloro- ethene, water, unfltrd	chloro- fluoro- methane water, unfltrd	Tri- chloro- methane water, unfltrd	Vinyl chlor- ide, 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)			
Apr 07...	<.2	<.1	<.2	<.1	<.2	R-.5	1.2	1.7	1.9			