

Table E - 8
1995 Groundwater Quality Results (mg/L) for the Weathered Lavery Till Unit

Location Code	Hydraulic Position	Chloride	Sulfate	Nitrate + Nitrite-N	Ammonia	Bicarbonate Alkalinity*	Carbonate Alkalinity*	Phosphate	Silica	Sulfide
908	UP(2)	7.8	1640	0.19	<0.05	302	<10.0	<0.010	4.2	<0.10
1005	UP(2)	2.2	78.1	<0.05	<0.05	368	<1.0	0.040	5.5	<0.10
1008C	UP(2)	32.7	24.6	<0.05	<0.05	216	<1.0	<0.010	5.0	<0.10
906	DOWN - B(2)	5.0	108	0.67	<0.05	223	<1.0	0.080	3.9	<0.10
907	DOWN - B(2)	2.6	92.4	0.05	<0.05	334	<1.0	<0.010	5.0	<0.10
1006	DOWN - B(2)	6.2	1320	<0.05	<0.05	326	<1.0	0.016	6.0	<0.10
1007	DOWN - B(2)	3.0	90.3	<0.05	<0.05	514	<10.0	0.14	6.3	<0.10
WNNDATR	DOWN - C(2)	57.9	124	0.32	<0.05	146	<1.0	0.011	2.4	<0.10
909	DOWN - C(2)	18.5	200	<0.05	0.36	570	<5.0	0.057	7.5	<0.10

Location Code	Hydraulic Position	Calcium		Magnesium		Sodium		Potassium		Iron		Manganese		Aluminum	
		Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.
908	UP(2)	472	516	171	178	24.5	26.0	6.00	5.40	8.80	0.094	0.380	0.006	4.40	<0.090
1005	UP(2)	108	113	36.4	37.4	11.3	9.50	1.50	1.50	0.210	<0.040	0.011	0.006	0.093	<0.090
1008C	UP(2)	73.3	80.0	19.1	20.2	13.7	13.9	1.00	0.830	0.046	<0.040	0.052	0.055	<0.090	<0.090
906	DOWN - B(2)	61.1	72.1	21.2	25.0	24.6	24.4	2.20	<0.400	1.80	0.190	0.042	<0.005	1.40	0.250
907	DOWN - B(2)	103	108	38.2	39.7	10.1	9.60	1.70	1.70	0.074	<0.040	0.034	0.032	<0.090	<0.090
1006	DOWN - B(2)	355	395	138	149	22.3	21.8	3.20	3.30	0.360	0.120	0.350	0.450	<0.090	<0.090
1007	DOWN - B(2)	159	161	60.4	17.9	17.7	17.9	7.00	6.60	16.7	0.130	0.610	0.088	6.90	<0.090
WNNDATR	DOWN - C(2)	91.6	95.4	23.1	23.8	48.4	49.4	3.10	3.00	0.250	0.085	0.009	<0.005	0.210	0.140
909	DOWN - C(2)	210	216	54.6	54.2	13.5	12.8	2.60	2.60	2.40	2.00	3.00	2.90	0.180	<0.090

* as mgCaCO₃/L
Sample collection period (rep) noted in parenthesis next to hydraulic position.

Table E - 9
1995 Groundwater Quality Results (mg/L) for the Unweathered Lavery Till Unit

Location Code	Hydraulic Position	Chloride	Sulfate	Nitrate + Nitrite-N	Ammonia	Bicarbonate Alkalinity*	Carbonate Alkalinity*	Phosphate	Silica	Sulfide
405	UP(2)	170	74.9	0.20	<0.05	191	<1.0	0.017	2.1	<0.10
109	DOWN - B(2)	1.9	70.8	0.13	<0.05	218	<1.0	0.060	4.3	<0.10
110	DOWN - B(2)	<1.0	73.5	0.06	<0.05	234	<1.0	<0.010	4.5	<0.10
115	DOWN - B(2)	5.0	74.1	<0.05	<0.05	145	<1.0	0.060	3.1	<0.10
702	DOWN - B(2)	<1.0	272	0.25	<0.05	208	<1.0	0.15	3.8	<0.10
703	DOWN - B(2)	1.2	253	0.16	<0.05	178	<1.0	<0.010	3.5	<0.10
704	DOWN - B(2)	<1.0	82.9	<0.05	0.33	428	<1.0	<0.010	1.7	<0.10
705	DOWN - B(2)	12.4	35.3	<0.05	<0.05	190	<1.0	0.049	3.2	<0.10
707	DOWN - B(2)	8.8	30.5	0.30	<0.05	91.0	<1.0	<0.010	1.1	<0.10
904	DOWN - B(2)	6.2	149	0.17	<0.05	251	<1.0	<0.010	3.7	<0.10
107	DOWN - C(2)	3.2	150	0.07	<0.05	288	<1.0	<0.010	3.9	<0.10
108	DOWN - C(2)	1.3	136	0.54	<0.05	202	<1.0	0.025	3.6	<0.10
114	DOWN - C(2)	24.6	65.4	2.2	<0.05	239	<1.0	0.025	4.3	<0.10
409	DOWN - C(2)	<1.0	46.7	0.10	<0.05	130	<1.0	0.030	3.8	<0.10
910	DOWN - C(2)	<1.0	682	0.11	0.22	345	<1.0	0.12	4.0	<0.10

Location Code	Hydraulic Position	Calcium		Magnesium		Sodium		Potassium		Iron		Manganese		Aluminum	
		Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.
405	UP(2)	120	126	19.8	20.7	77.2	73.4	2.10	2.10	0.730	0.140	0.140	0.018	0.130	<0.090
109	DOWN - B(2)	81.6	76.0	21.4	18.7	20.6	18.5	3.00	1.20	10.0	<0.040	0.300	0.008	6.00	<0.090
110	DOWN - B(2)	71.3	73.9	21.7	21.8	22.4	22.9	1.40	1.40	0.074	<0.040	0.160	0.009	<0.090	<0.090
115	DOWN - B(2)	54.0	67.1	10.5	11.9	12.5	16.0	1.80	1.20	5.60	0.280	0.079	0.009	3.00	0.170
702	DOWN - B(2)	118	122	27.9	28.9	45.5	39.3	2.20	1.90	1.90	0.080	0.130	0.012	0.810	<0.090
703	DOWN - B(2)	113	107	23.4	22.4	19.9	18.7	1.40	1.40	0.250	<0.040	0.024	0.010	0.160	<0.090
704	DOWN - B(2)	168	163	23.5	22.0	7.80	2.20	3.00	2.10	0.210	<0.040	10.2	11.4	0.096	<0.090
705	DOWN - B(2)	79.8	78.0	13.3	12.3	53.7	5.90	2.20	0.880	5.40	<0.040	0.210	0.055	3.80	<0.090
707	DOWN - B(2)	40.0	43.0	6.50	6.60	5.00	4.50	1.10	<0.400	0.760	<0.040	0.014	<0.005	0.690	<0.090
904	DOWN - B(2)	117	101	34.5	31.7	21.5	22.2	2.80	<0.400	9.10	0.160	0.280	0.062	4.40	0.200
107	DOWN - C(2)	121	129	26.9	28.2	19.8	19.0	1.90	2.00	0.310	<0.040	0.038	<0.005	0.130	<0.090
108	DOWN - C(2)	86.2	82.8	22.6	22.0	20.7	21.4	1.60	1.50	0.220	<0.040	0.010	0.010	0.180	<0.090
114	DOWN - C(2)	106	108	14.9	15.6	11.8	10.8	1.30	1.20	3.20	1.30	0.180	0.260	0.440	<0.090
409	DOWN - C(2)	40.2	38.5	9.80	9.40	21.4	20.4	4.40	3.60	0.880	<0.040	0.078	<0.005	0.450	<0.090
910	DOWN - C(2)	203	210	89.2	93.4	38.2	38.2	6.00	6.10	2.50	0.054	0.180	0.190	1.20	<0.090

* as mgCaCO₃/L
Sample collection period (rep) noted in parenthesis next to hydraulic position.

Table E - 10
1995 Groundwater Quality Results (mg/L) for the Kent Recessional Sequence

Location Code	Hydraulic Position	Chloride	Sulfate	Nitrate + Nitrite-N	Ammonia	Bicarbonate Alkalinity*	Carbonate Alkalinity*	Phosphate	Silica	Sulfide
901	UP(2)	11.7	6.1	<0.05	0.44	175	<1.0	0.049	4.2	<0.10
902	UP(2)	24.0	7.1	<0.05	0.44	199	<1.0	0.020	5.1	<0.10
1001	UP(2)	32.9	5.8	<0.05	0.51	175	<1.0	0.048	4.8	<0.10
1008B	UP(2)	41.9	9.0	<0.05	0.38	164	<1.0	0.043	4.6	<0.10
903	DOWN - B(2)	1.4	155	<0.05	0.20	284	<1.0	0.049	5.5	<0.10
1002	DOWN - B(2)	<1.0	282	<0.05	0.68	463	<1.0	0.011	7.6	<0.10
1003	DOWN - B(2)	10.6	12.2	<0.05	0.39	213	<1.0	0.062	4.2	<0.10
1004	DOWN - B(2)	1.1	20.6	<0.05	0.27	225	<1.0	0.010	5.8	<0.10
8610	DOWN - B(2)	<1.0	216	<0.05	0.21	224	<1.0	0.22	5.2	<0.10
8611	DOWN - B(2)	1.1	293	<0.05	<0.05	269	<1.0	<0.010	5.3	<0.10

Location Code	Hydraulic Position	Calcium		Magnesium		Sodium		Potassium		Iron		Manganese		Aluminum	
		Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.	Total	Diss.
901	UP(2)	36.4	36.7	9.50	9.70	31.2	32.0	3.30	3.40	0.670	0.100	0.110	0.100	0.230	<0.090
902	UP(2)	45.0	47.6	14.0	14.5	31.2	32.0	2.10	2.10	0.860	0.660	0.080	0.082	<0.090	<0.090
1001	UP(2)	37.0	33.5	9.20	8.40	47.3	46.4	2.40	2.10	1.10	0.430	0.064	0.043	0.280	<0.090
1008B	UP(2)	49.8	43.5	10.1	9.50	55.5	43.9	2.50	2.60	0.700	0.610	0.095	0.085	<0.090	<0.090
903	DOWN - B(2)	82.7	83.9	37.4	37.8	43.7	44.0	3.00	3.00	0.750	0.250	0.140	0.130	0.180	<0.090
1002	DOWN - B(2)	151	156	62.4	63.9	38.4	38.8	2.40	2.50	2.40	1.90	0.120	0.120	0.120	<0.090
1003	DOWN - B(2)	31.4	32.6	8.30	8.90	56.2	58.6	1.90	2.00	0.300	<0.040	0.120	0.120	0.092	<0.090
1004	DOWN - B(2)	44.8	46.9	17.1	18.2	29.4	29.9	1.50	1.50	0.310	0.170	0.070	0.060	<0.090	<0.090
8610	DOWN - B(2)	50.9	44.2	43.5	42.3	72.5	75.0	4.00	4.00	3.30	<0.040	0.120	0.038	1.00	<0.090
8611	DOWN - B(2)	97.9	93.0	35.6	36.7	70.6	74.4	2.80	3.00	1.80	<0.040	0.090	0.013	0.260	<0.090

* as mgCaCO₃/L
Sample collection period (rep) noted in parenthesis next to hydraulic position.

Table E - 11
Modified Practical Quantitation Limits (PQLs) in $\mu\text{g/L}$
for Appendix IX Parameters

COMPOUND	PQL	COMPOUND	PQL
<i>Appendix IX Volatiles</i>		<i>Appendix IX Volatiles</i>	
Acetone	10	Methacrylonitrile	5
Acetonitrile	100	Methyl ethyl ketone	10
Acrolein	5	Methyl iodide	5
Acrylonitrile	5	Methyl methacrylate	10
Allyl chloride	100	4-Methyl-2-pentanone	10
Benzene	5	Methylene bromide	5
Bromodichloromethane	5	Methylene chloride	5
Bromoform	5	Pentachloroethane	5
Bromomethane	10	Propionitrile	50
Carbon disulfide	10	Styrene	5
Carbon tetrachloride	5	1,1,1,2-Tetrachloroethane	5
Chlorobenzene	5	1,1,2,2-Tetrachloroethane	5
Chloroethane	10	Tetrachloroethylene	5
Chloroform	5	Toluene	5
Chloromethane	10	1,1,1-Trichloroethane	5
Chloroprene	5	1,1,2-Trichloroethane	5
1,2-Dibromo-3-chloropropane	5	1,2,3-Trichloropropane	5
Dibromochloromethane	5	Vinyl acetate	10
1,2-Dibromoethane	5	Vinyl chloride	10
Dichlorodifluoromethane	5	Xylene (total)	5
1,1-Dichloroethane	5	cis-1,3-Dichloropropene	5
1,2-Dichloroethane	5	trans-1,2-Dichloroethylene	5
1,1-Dichloroethylene	5	trans-1,3-Dichloropropene	5
1,2-Dichloropropane	5	trans-1,4-Dichloro-2-butene	5
Ethyl benzene	5	Trichloroethylene	5
Ethyl methacrylate	5	Trichlorofluoromethane	5
2-Hexanone	10	1,2-Dichloroethylene (total)	5
Isobutyl alcohol	100		

Note: Specific quantitation limits are highly matrix-dependent and may not always be achievable.

Table E - 11 (continued)
Modified Practical Quantitation Limits (PQLs) in $\mu\text{g/L}$
for Appendix IX Parameters

COMPOUND	PQL	COMPOUND	PQL
<i>Appendix IX Semivolatiles</i>		<i>Appendix IX Semivolatiles</i>	
Acenaphthene	10	2,4-Dinitrophenol	25
Acenaphthylene	10	2,4-Dinitrotoluene	10
Acetophenone	10	2,6-Dinitrotoluene	10
2-Acetylaminofluorene	10	Diphenylamine	10
4-Aminobiphenyl	10	Ethyl methanesulfonate	10
Aniline	10	Famphur	10
Anthracene	10	Fluoranthene	10
Aramite	10	Fluorene	10
Benzo[a]anthracene	10	Hexachlorobenzene	10
Benzo[a]pyrene	10	Hexachlorobutadiene	10
Benzo[b]fluoranthene	10	Hexachlorocyclopentadiene	10
Benzo[ghi]perylene	10	Hexachloroethane	10
Benzo[k]fluoranthene	10	Hexachloropropene	10
Benzyl alcohol	10	Indeno(1,2,3-cd)pyrene	10
Bis(2-chlorethyl)ether	10	Isodrin	10
Bis(2-chloroethoxy)methane	10	Isophorone	10
Bis(2-ethylhexyl)phthalate	10	Isosafrole	10
Bis(2-chloro-1- methlethyl) ether	10	Kepone	10
4-Bromophenyl phenyl ether	10	Methapyrilene	10
Butyl benzyl phthalate	10	Methyl methanesulfonate	10
Carbazole	10	3-Methylcholanthrene	10
Chlorobenzilate	10	2-Methylnaphthalene	10
2-Chloronaphthalene	10	1,4-Naphthoquinone	10
2-Chlorophenol	10	1-Naphthylamine	10
4-Chlorophenyl phenyl ether	10	2-Naphthylamine	10
Chrysene	10	Nitrobenzene	10
Di-n-butyl phthalate	10	5-Nitro-o-toluidine	10
Di-n-octyl phthalate	10	4-Nitroquinoline 1-oxide	10
Diallate	10	N-Nitrosodi-n-butylamine	10
Dibenz[a,h]anthracene	10	N-Nitrosodiethylamine	10
Dibenzofuran	10	N-Nitroso-di-N-propylamine	10
3,3-Dichlorobenzidine	10	N-Nitrosodimethylamine	10
2,4-Dichlorophenol	10	N-Nitrosodipropylamine	10
2,6-Dichlorophenol	10	N-Nitrosodiphenylamine	10
Diethyl phthalate	10	N-Nitrosomethylethylamine	10
Dimethoate	10	N-Nitrosomorpholine	10
7,12-Dimethylbenz[a]anthracen	10	N-Nitrosopiperidine	10
3,3-Dimethylbenzidine	20	N-Nitrosopyrrolidine	10
2,4-Dimethylphenol	10	Naphthalene	10
Dimethyl Phthalate	10	0,0,0-Triethyl phosphorothioate	10
4,6-Dinitro-o-cresol	25	0,0-Diethyl 0-2-pyrazinyl-phospho	10

Note: Specific quantitation limits are highly matrix-dependent and may not always be achievable.

Table E - 11 (continued)

**Modified Practical Quantitation Limits (PQLs) in µg/L
for Appendix IX Parameters**

COMPOUND	PQL	COMPOUND	PQL
<i>Appendix IX Semivolatiles</i>		<i>Appendix IX Semivolatiles</i>	
p-(Dimethylamino)azobenzene	10	2,3,4,6-Tetrachlorophenol	10
p-Chloroaniline	10	Tetraethyl dithiopyrophosphate	10
p-Chloro-m-cresol	10	1,2,4-Trichlorobenzene	10
p-Cresol	10	2,4,5-Trichlorophenol	25
p-Dichlorobenzene	10	2,4,6-Trichlorophenol	10
p-Nitroaniline	25	alpha,alpha-Dimethylphenethylamine	10
p-Nitrophenol	25	m-Cresol	10
p-Phenylenediamine	10	m-Dichlorobenzene	10
Parathion	10	m-Dinitrobenzene	10
Pentachlorobenzene	10	m-Nitroaniline	25
Pentachloronitrobenzene	10	o-Cresol	10
Pentachlorophenol	25	o-Dichlorobenzene	10
Phenacetin	10	o-Nitroaniline	25
Phenanthrene	10	o-Nitrophenol	10
Phenol	10	o-Toluidine	10
Pronamide	10	sym-Trinitrobenzene	10
Pyrene	10	2-Picoline	10
Safrole	10	Pyridine	10
1,2,4,5-Tetrachlorobenzene	10	1,4-Dioxane	10
<i>Pesticides and PCBs</i>		<i>Pesticides and PCBs</i>	
Aldrin	0.1	Methoxychlor	1
alpha Chlordane	0.5	Methyl parathion	10
gamma Chlordane	0.5	PCB-1242	1
Chlordane (total)	0.5	PCB-1254	1
2,4-D	10	PCB-1221	1
4,4-DD	0.1	PCB-1232	1
4,4-DDE	0.1	PCB-1248	1
4,4-DDT	0.1	PCB-1260	1
Dieldrin	0.1	PCB-1016	1
Dinoseb	10	Phorate	10
Disulfoton	10	Silvex	2
Endosulfan I	0.1	2,4,5-T	2
Endosulfan II	0.1	Toxaphene	1
Endosulfan sulfate	0.1	alpha-BHC	0
Endrin	0.1	beta-BHC	0
Endrin aldehyde	0.2	delta-BHC	0
Hepatachlor	0.1	gamma-BHC (Lindane)	0
Hepatachlor epoxide	0		

Note: Specific quantitation limits are highly matrix-dependent and may not always be achievable.

Table E - 11 (concluded)
Modified Practical Quantitation Limits (PQLs) in $\mu\text{g/L}$
for Appendix IX Parameters

COMPOUND	PQL	COMPOUND	PQL
<i>Metals</i>		<i>Metals</i>	
Antimony*	60	Mercury*	0.2
Arsenic*	10	Nickel*	40
Barium*	200	Selenium*	5
Beryllium*	5	Silver*	10
Cadmium*	5	Thallium*	10
Chromium*	10	Tin	3,000
Cobalt	50	Vanadium	50
Copper	25	Zinc	20
Lead*	3		

* These parameters comprise the WVDP sampling list for metals from RCRA Part 261, Appendix VIII, Hazardous Constituents List.

Note: Specific quantitation limits are highly matrix-dependent and may not always be achievable.

Table E - 12

***1,1,1-Trichloroethane (1,1,1-TCA), 1,1-Dichloroethane (1,1-DCA), and
Dichlorodifluoromethane (DCDFMeth) Sampling Results for 1995
at Selected Groundwater Monitoring Locations***

Location	Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	DCDFMeth (µg/L)
WNGSEEP	12/01/94	< 5.0	< 5.0	< 5.0
	03/06/95	< 5.0	< 5.0	< 5.0
	09/07/95	< 5.0	< 5.0	< 5.0
8609	12/07/94	< 5.0	3.0*	< 5.0
	03/06/95	< 5.0	2.0*	< 5.0
8612	12/01/94	2.5*	36.5	8.0
	03/01/95	3.0*	41.0	6.5
	06/15/95	3.0*	44.0	5.5
	09/07/95	3.25*	41.0	7.5
803	12/01/94	< 5.0	< 5.0	4.0*
	03/14/95	< 5.0	< 5.0	4.5*
	06/08/95	< 5.0	< 5.0	< 5.0
	09/07/95	< 5.0	< 5.0	< 5.0

* Compound was detected below the practical quantitation limit (PQL).

Table E - 13

***Tributyl Phosphate Sampling Results for 1995 at Selected
Groundwater Monitoring Locations***

Location	Date	Tributyl Phosphate* (µg/L)
111	06/14/95	54
	09/13/95	36
8605	06/14/95	510
	09/13/95	500

* Detection limit for TBP is 10 µg/L.

Table E - 14
RCRA Hazardous Constituent List and Appendix IX Metals (µg/L) Sampling Results

Location Code	Hydraulic Position	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper
Sand and Gravel									
301	UP(3)	<5.00	<2.50	151	<1.50	<5.00	755	NA	NA
301	UP(4)	<4.00	<4.00	133	<2.00	<5.00	169	NA	NA
401	UP(3)	<15.0	9.50	474	<1.50	<5.00	1620	NA	NA
401	UP(4)	<4.00	<4.00	499	<2.00	<5.00	618	NA	NA
403	UP(3)	<15.0	<2.00	248	<1.50	<5.00	99.5	NA	NA
403	UP(4)	19.0	3.00	284	<1.00	<5.00	3130	NA	NA
706	UP(1)	NA	4.30	150	NA	<1.70	10.0	NA	NA
706	UP(2)	NA	12.0	210	NA	<5.00	28.0	NA	NA
706	UP(3)	<2.50	3.00	143	<1.50	<5.00	7.50	NA	NA
706	UP(4)	<3.00	<4.00	127	<2.00	<5.00	<10.0	NA	NA
NB1S	UP(1)	NA	<2.00	66.0	NA	<0.20	18.0	NA	NA
NB1S	UP(2)	NA	34.0	86.0	NA	<5.00	46.0	NA	NA
201	DOWN - B(3)	<2.50	2.00	304	<1.50	<5.00	80.0	NA	NA
103	DOWN - C(3)	32.5	26.5	24.0	<1.50	<5.00	5.25	NA	NA
104	DOWN - C(3)	<60.0	<5.00	150	<5.00	<5.00	4.90	NA	NA
111	DOWN - C(3)	<60.0	<5.00	90.0	<5.00	<5.00	<10.0	<50.0	<20.0
205	DOWN - C(3)	2.50	14.0	108	<1.50	<5.00	364	NA	NA
406	DOWN - C(3)	<2.50	2.50	120	<1.50	<5.00	5.00	NA	NA
406	DOWN - C(4)	<4.00	<4.00	92.0	<2.00	<5.00	<10.0	NA	NA
408	DOWN - C(3)	<60.0	<5.00	310	<5.00	<5.00	370	NA	NA
408	DOWN - C(4)	<60.0	<5.00	340	<5.00	<5.00	310	NA	NA
501	DOWN - C(3)	<60.0	<5.00	290	<5.00	<5.00	24.0	NA	NA
502	DOWN - C(3)	<60.0	<5.00	380	<5.00	<5.00	2000	<50.0	15.0
502	DOWN - C(4)	<60.0	<5.00	390	2.88	<5.00	2500	20.0	18.0
602	DOWN - C(3)	<5.00	5.50	187	<1.50	<5.00	15.0	NA	NA
602	DOWN - C(4)	<4.00	<4.00	381	<2.00	<5.00	<10.0	NA	NA
604	DOWN - C(3)	<5.00	14.7	101	2.70	<5.00	<5.00	NA	NA
604	DOWN - C(4)	<4.00	6.00	144	<2.00	<5.00	<10.0	NA	NA
8605	DOWN - C(3)	<60.0	11.0	110	<5.00	<5.00	5.10	<50.0	<20.0
8607	DOWN - C(3)	<2.50	<2.00	94.5	<1.50	<5.00	<5.00	NA	NA
8607	DOWN - C(4)	<4.00	<4.00	70.0	<2.00	<5.00	<10.0	NA	NA
8609	DOWN - C(3)	<2.50	<2.00	179	<1.50	<5.00	<5.00	NA	NA
8609	DOWN - C(4)	<4.00	<4.00	183	<2.00	<5.00	<10.0	NA	NA
WNGSEEP	DOWN - D(3)	<15.0	<2.00	170	<1.50	<5.00	<5.00	NA	NA
105	DOWN - D(3)	<5.00	13.8	228	<1.50	<5.00	12.0	NA	NA
106	DOWN - D(3)	<5.00	<2.50	133	<1.50	<5.00	52.5	NA	NA

NA - Not available.

Table E - 14 (continued)
RCRA Hazardous Constituent List and Appendix IX Metals (µg/L) Sampling Results

Location Code	Hydraulic Position	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Tin	Vanadium	Zinc
Sand and Gravel										
301	UP(3)	<1.50	<0.20	366	<2.50	<0.50	<2.50	NA	NA	NA
301	UP(4)	2.00	<0.20	311	<4.00	<0.50	<4.00	NA	NA	NA
401	UP(3)	14.0	<0.20	498	<1.50	<0.50	<2.00	NA	NA	NA
401	UP(4)	18.0	<0.20	512	<4.00	<0.50	<4.00	NA	NA	NA
403	UP(3)	2.00	<0.20	13.5	<1.50	<0.50	<2.00	NA	NA	NA
403	UP(4)	<1.00	<0.20	3230	<1.50	<0.25	<1.50	NA	NA	NA
706	UP(1)	9.00	<0.20	NA	<1.70	<0.17	NA	NA	NA	NA
706	UP(2)	35.0	<0.19	NA	<2.50	<5.00	NA	NA	NA	NA
706	UP(3)	9.00	<0.20	<10.0	<1.50	<0.25	<2.00	NA	NA	NA
706	UP(4)	4.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
NB1S	UP(1)	1.00	<0.20	NA	<1.50	NR	NA	NA	NA	NA
NB1S	UP(2)	17.0	<0.19	NA	24.0	<5.00	NA	NA	NA	NA
201	DOWN - B(3)	1.50	<0.20	232	<1.50	<0.25	<2.00	NA	NA	NA
103	DOWN - C(3)	1.75	0.22	16.0	<1.50	<0.50	<1.50	NA	NA	NA
104	DOWN - C(3)	<3.00	<0.10	<40.0	<5.00	<10.0	<10.0	NA	NA	NA
111	DOWN - C(3)	2.70	<0.10	<40.0	<5.00	10.0	<10.0	<100	<50.0	14.0
205	DOWN - C(3)	18.5	<0.20	83.0	7.00	7.90	3.00	NA	NA	NA
406	DOWN - C(3)	3.00	<0.20	27.5	<1.50	<0.50	<1.50	NA	NA	NA
406	DOWN - C(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
408	DOWN - C(3)	3.40	<0.10	240	<5.00	<10.0	3.00	NA	NA	NA
408	DOWN - C(4)	<3.00	0.10	380	<5.00	<10.0	<10.0	NA	NA	NA
501	DOWN - C(3)	1.40	0.055	33.0	<5.00	5.50	<10.0	NA	NA	NA
502	DOWN - C(3)	1.90	<0.10	81.0	2.80	<10.0	<10.0	NA	7.80	19.0
502	DOWN - C(4)	<3.00	0.071	110	<5.00	<10.0	<10.0	NA	6.15	9.90
602	DOWN - C(3)	2.70	<0.20	11.6	<2.50	<0.50	5.40	NA	NA	NA
602	DOWN - C(4)	34.0	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
604	DOWN - C(3)	1.60	<0.20	<10.0	2.70	<0.50	<2.50	NA	NA	NA
604	DOWN - C(4)	7.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
8605	DOWN - C(3)	2.50	0.054	<40.0	<5.00	<10.0	<10.0	<100	<50.0	21.0
8607	DOWN - C(3)	<1.50	<0.20	<10.0	<1.50	<0.50	<1.50	NA	NA	NA
8607	DOWN - C(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
8609	DOWN - C(3)	<1.50	<0.20	<10.0	<1.50	<0.50	<1.50	NA	NA	NA
8609	DOWN - C(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
WNGSEEP	DOWN - D(3)	<1.00	<0.20	<10.0	<1.50	<0.50	<2.00	NA	NA	NA
105	DOWN - D(3)	<1.50	<0.20	17.0	4.10	<0.50	6.00	NA	NA	NA
106	DOWN - D(3)	5.60	<0.20	76.7	<2.50	<0.50	<2.50	NA	NA	NA

NA - Not available.

NR - Not reported. These results have not been reported because the data validation process indicated the data were not reliable.

Table E - 14 (continued)
RCRA Hazardous Constituent List and Appendix IX Metals ($\mu\text{g/L}$) Sampling Results

Location Code	Hydraulic Position	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper
Sand and Gravel									
116	DOWN - D(3)	18.0	<2.50	178	<1.50	<5.00	1920	NA	NA
605	DOWN - D(3)	48.9	<2.50	191	<1.50	<5.00	2940	NA	NA
605	DOWN - D(4)	<4.00	<4.00	142	<2.00	<5.00	1580	NA	NA
801	DOWN - D(3)	<60.0	3.90	210	<5.00	<5.00	25.0	NA	NA
802	DOWN - D(3)	<5.00	<2.50	508	<1.50	<5.00	7.00	NA	NA
803	DOWN - D(3)	<2.50	2.50	276	<1.50	<5.00	8.50	<15.0	5.50
804	DOWN - D(3)	<2.50	2.00	132	<1.50	<5.00	25.0	NA	NA
905	DOWN - D(3)	<15.0	3.25	<15.0	<1.50	<5.00	<5.00	NA	NA
905	DOWN - D(4)	<4.00	<4.00	<20.0	<2.00	<5.00	<10.0	NA	NA
8603	DOWN - D(3)	<2.50	<2.00	224	<1.50	<5.00	<5.00	NA	NA
8604	DOWN - D(3)	<60.0	<5.00	305	<5.00	<5.00	<10.0	NA	NA
8612	DOWN - D(3)	<15.0	<2.00	198	<1.50	<5.00	<5.00	<15.0	5.00
Till-Sand									
302	UP(3)	<5.00	<2.50	586	<1.50	<5.00	6.75	NA	NA
302	UP(4)	<4.00	<4.00	567	<2.00	<5.00	<10.0	NA	NA

NA - Not available.

Table E - 14 (continued)
RCRA Hazardous Constituent List and Appendix IX Metals (µg/L) Sampling Results

Location Code	Hydraulic Position	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Tin	Vanadium	Zinc
Sand and Gravel										
116	DOWN - D(3)	5.20	<0.20	101	<2.50	<0.50	<2.50	NA	NA	NA
605	DOWN - D(3)	6.20	<0.20	2370	<2.50	<0.50	<2.50	NA	NA	NA
605	DOWN - D(4)	4.00	<0.20	1100	<4.00	<0.50	<4.00	NA	NA	NA
801	DOWN - D(3)	6.80	0.069	18.0	<5.00	7.30	<10.0	NA	NA	NA
802	DOWN - D(3)	<1.50	<0.20	36.7	2.50	<0.50	<2.50	NA	NA	NA
803	DOWN - D(3)	2.00	<0.20	34.5	<1.50	<0.50	<2.00	<1250	<5.00	29.0
804	DOWN - D(3)	3.00	<0.20	26.0	<1.50	<0.50	<1.50	NA	NA	NA
905	DOWN - D(3)	1.00	<0.20	11.0	1.50	<0.50	<2.00	NA	NA	NA
905	DOWN - D(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
8603	DOWN - D(3)	<1.50	<0.20	<10.0	<1.50	<0.50	<1.50	NA	NA	NA
8604	DOWN - D(3)	<3.00	0.084	<40.0	<5.00	7.95	<10.0	NA	NA	NA
8612	DOWN - D(3)	3.50	<0.20	<10.0	<1.50	<0.50	<1.50	<1250	<5.00	12.0
Till-Sand										
302	UP(3)	<1.50	<0.20	<10.0	<2.50	<0.50	<2.50	NA	NA	NA
302	UP(4)	6.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA

NA - Not available.

Table E - 14 (continued)
RCRA Hazardous Constituent List and Appendix IX Metals (µg/L) Sampling Results

Location Code	Hydraulic Position	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper
Unweathered Till									
110	DOWN - B(3)	< 5.00	< 2.50	185	< 1.50	< 5.00	< 5.00	NA	NA
704	DOWN - B(3)	< 15.0	2.00	78.0	< 1.50	< 5.00	< 5.00	NA	NA
707	DOWN - B(3)	< 15.0	135	118	< 1.50	< 5.00	135	NA	NA
707	DOWN - B(4)	< 4.00	< 4.00	220	< 2.00	< 5.00	108	NA	NA
107	DOWN - C(3)	< 5.00	< 2.50	45.4	< 1.50	< 5.00	5.50	NA	NA
108	DOWN - C(3)	< 5.00	< 2.50	61.4	< 1.50	< 5.00	6.00	NA	NA
910	DOWN - C(3)	< 2.50	2.00	16.0	< 1.50	< 5.00	< 5.00	NA	NA
910	DOWN - C(4)	< 4.00	< 4.00	< 20.0	< 2.00	6.00	< 10.0	NA	NA
Kent Recessional Deposits									
901	UP(3)	< 2.50	3.50	585	< 1.50	< 5.00	< 5.00	NA	NA
901	UP(4)	< 4.00	< 4.00	603	< 2.00	< 5.00	< 10.0	NA	NA
1008B	UP(3)	< 2.50	< 2.00	432	< 1.50	< 5.00	< 5.00	NA	NA
1008B	UP(4)	< 4.00	< 4.00	394	< 2.00	< 5.00	< 10.0	NA	NA
903	DOWN - B(3)	< 15.0	2.00	53.5	< 1.50	< 5.00	< 5.00	NA	NA
903	DOWN - B(4)	< 4.00	< 4.00	45.0	< 2.00	< 5.00	< 10.0	NA	NA
8611	DOWN - B(3)	< 2.50	< 2.00	27.5	< 1.50	< 5.00	7.50	NA	NA
8611	DOWN - B(4)	< 4.00	< 4.00	23.0	< 2.00	< 5.00	15.0	NA	NA
Weathered Till									
908	UP(3)	< 15.0	4.50	< 75.0	< 1.50	< 5.00	6.00	NA	NA
908	UP(4)	< 4.00	< 4.00	< 20.0	< 2.00	< 5.00	< 10.0	NA	NA
1005	UP(3)	< 2.50	< 2.00	86.0	< 1.50	< 5.00	5.00	NA	NA
1005	UP(4)	< 4.00	< 4.00	88.0	< 2.00	< 5.00	< 10.0	NA	NA
1008C	UP(3)	< 2.50	3.50	314	< 1.50	< 5.00	< 5.00	NA	NA
1008C	UP(4)	< 4.00	< 4.00	263	< 2.00	< 5.00	< 10.0	NA	NA
906	DOWN - B(3)	< 15.0	2.50	54.5	< 1.50	< 5.00	< 5.00	NA	NA
906	DOWN - B(4)	< 4.00	< 4.00	59.0	< 2.00	< 5.00	< 10.0	NA	NA
1006	DOWN - B(3)	< 2.50	3.00	< 15.0	< 1.50	< 5.00	< 5.00	NA	NA
1006	DOWN - B(4)	< 4.00	< 4.00	< 20.0	< 2.00	< 5.00	< 10.0	NA	NA
WNNDATR	DOWN - C(3)	< 15.0	< 2.50	90.0	< 1.50	< 5.00	< 5.00	< 5.00	6.00
WNNDATR	DOWN - C(4)	< 4.00	< 4.00	85.0	< 2.00	< 5.00	< 10.0	< 30.0	7.50
909	DOWN - C(3)	< 15.0	3.00	129	< 1.50	< 5.00	< 5.00	< 15.0	15.0
909	DOWN - C(4)	< 4.00	< 4.00	84.0	< 2.00	< 5.00	< 10.0	NA	NA

NA - Not available.

Table E - 14 (concluded)
RCRA Hazardous Constituent List and Appendix IX Metals (µg/L) Sampling Results

Location Code	Hydraulic Position	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Tin	Vanadium	Zinc
Unweathered Till										
110	DOWN - B(3)	<1.50	<0.20	<10.0	<2.50	<0.50	<2.50	NA	NA	NA
704	DOWN - B(3)	1.00	<0.20	65.5	<1.50	<0.50	<2.00	NA	NA	NA
707	DOWN - B(3)	35.5	<0.20	21.0	44.5	<0.50	115	NA	NA	NA
707	DOWN - B(4)	17.0	<0.20	273	<4.00	<0.50	<4.00	NA	NA	NA
107	DOWN - C(3)	<1.50	<0.20	<10.0	<2.50	<0.50	2.60	NA	NA	NA
108	DOWN - C(3)	1.80	<0.20	<10.0	<2.50	<0.50	<2.50	NA	NA	NA
910	DOWN - C(3)	<1.50	<0.20	<10.0	2.00	<0.50	<1.50	NA	NA	NA
910	DOWN - C(4)	3.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
Kent Recessional Deposits										
901	UP(3)	<1.50	<0.20	12.0	<1.50	<0.50	<1.50	NA	NA	NA
901	UP(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
1008B	UP(3)	2.00	<0.20	<10.0	<1.50	<0.50	<1.50	NA	NA	NA
1008B	UP(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
903	DOWN - B(3)	1.50	<0.20	<10.0	<1.50	<0.50	<2.00	NA	NA	NA
903	DOWN - B(4)	6.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
8611	DOWN - B(3)	4.50	<0.20	15.0	<1.50	<0.50	<1.50	NA	NA	NA
8611	DOWN - B(4)	16.0	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
Weathered Till										
908	UP(3)	4.50	<0.20	14.0	1.50	<0.50	<2.00	NA	NA	NA
908	UP(4)	8.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
1005	UP(3)	<1.50	<0.20	<10.0	<1.50	<0.50	<1.50	NA	NA	NA
1005	UP(4)	2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
1008C	UP(3)	<1.50	<0.20	21.5	<1.50	<0.50	<1.50	NA	NA	NA
1008C	UP(4)	<2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
906	DOWN - B(3)	1.00	0.22	<10.0	3.50	<0.50	<2.00	NA	NA	NA
906	DOWN - B(4)	4.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
1006	DOWN - B(3)	<1.50	<0.20	10.0	<1.50	<0.50	<1.50	NA	NA	NA
1006	DOWN - B(4)	2.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA
WNNDATR	DOWN - C(3)	<1.50	<0.20	<10.0	<2.50	<0.50	<2.50	<1250	<5.00	<5.00
WNNDATR	DOWN - C(4)	4.00	<0.20	<30.0	<4.00	<0.50	<4.00	<1000	<50.0	12.5
909	DOWN - C(3)	<1.50	<0.20	23.5	<1.50	<0.50	<1.50	<1250	<5.00	18.0
909	DOWN - C(4)	3.00	<0.20	<30.0	<4.00	<0.50	<4.00	NA	NA	NA

NA - Not available.

Table E - 15
Alpha- and Beta-emitting Radioisotopic Results ($\mu\text{Ci/mL}$)

Location Code	Hydraulic Position				
		C-14	I-129	Ra-226	
Sand and Gravel					
401	A (3)	-2.45±5.37E-09	1.01±1.36E-09	2.23±0.90E-10	
406	C (3)	-2.83±5.38E-09	4.24±7.43E-10	1.65±1.00E-10	
408	C (3)	-1.33±5.43E-09	0.22±1.15E-09	1.95±0.82E-09	
905	D (3)	2.12±0.60E-08	0.93±1.53E-09	2.60±1.16E-10	
Weathered Till					
WNNDATR	C (3)	4.69±0.66E-08	3.58±9.40E-10	1.15±0.93E-10	
909	C (3)	8.17±5.84E-09	3.35±2.21E-09	3.26±1.32E-10	
		Ra-228	Sr-90	Tc-99	U-232
Sand and Gravel					
401	A (3)	-2.11±0.53E-09	3.23±1.74E-09	-1.06±0.08E-08	0.00±7.07E-11
111	C (3)	NA	3.29±0.04E-06	NA	NA
406	C (3)	-2.22±0.40E-09	5.27±2.40E-09	8.49±1.88E-09	0.00±1.06E-10
408	C (3)	1.87±2.57E-08	2.35±0.00E-04	3.25±0.38E-08	0.00±5.61E-11
501	C (3)	NA	6.55±0.04E-05	NA	NA
502	C (3)	NA	5.42±0.03E-05	NA	NA
602	C (3)	NA	1.22±0.29E-08	NA	NA
8605	C (3)	NA	9.54±0.07E-06	NA	NA
8609	C (3)	NA	1.70±0.10E-07	NA	NA
116	D (3)	NA	7.79±0.51E-08	NA	NA
605	D (3)	NA	2.62±0.41E-08	NA	NA
801	D (3)	NA	1.64±0.03E-06	NA	NA
801	D (4)	NA	2.08±0.03E-06	NA	NA
905	D (3)	1.19±0.47E-09	2.62±2.22E-09	-8.38±0.80E-09	0.34±2.14E-10
8603	D (3)	NA	1.95±0.10E-07	NA	NA
Weathered Till					
WNNDATR	C (3)	-2.73±0.46E-09	2.74±0.40E-08	-7.66±0.93E-09	0.00±2.86E-10
909	C (3)	-3.46±5.21E-10	8.84±0.70E-08	-8.52±1.22E-09	1.84±0.22E-10
		U-233/234	U-235/236	U-238	Total U ($\mu\text{g/mL}$)
Sand and Gravel					
401	A (3)	1.61±0.80E-10	0.92±1.85E-11	1.52±0.78E-10	-6.75±0.13E-05
406	C (3)	2.13±1.05E-10	1.01±3.23E-11	1.02±0.70E-10	8.59±0.18E-05
408	C (3)	4.45±1.03E-10	4.07±3.10E-11	3.12±0.84E-10	0.00±3.04E-03
905	D (3)	4.56±0.57E-09	1.68±0.80E-10	3.38±0.46E-09	9.48±0.12E-03
Weathered Till					
WNNDATR	C (3)	1.99±0.32E-09	7.73±6.01E-11	1.48±0.26E-09	4.94±0.07E-03
909	C (3)	2.24±0.37E-09	8.12±6.76E-11	1.81±0.32E-09	4.86±0.06E-03

NA - Not analyzed.

Sample collection period (rep) noted in parenthesis next to hydraulic position.

Table E - 16
1995 Radiological Concentrations ($\mu\text{Ci/mL}$) at Well Points

Location	Alpha	Beta	H-3	Cs-137	Co-60	K-40
WP-A	2.49 \pm 4.88E-10	3.85 \pm 0.52E-08	1.59 \pm 0.05E-05	0.00 \pm 1.33E-08	0.00 \pm 2.07E-08	0.00 \pm 1.90E-07
WP-C	2.47 \pm 4.84E-10	4.71 \pm 0.56E-08	8.65 \pm 0.26E-05	0.00 \pm 1.72E-08	0.00 \pm 1.80E-08	0.00 \pm 2.17E-07
WP-D	-1.02 \pm 1.48E-09	1.15 \pm 0.02E-06	2.00 \pm 0.84E-07	0.00 \pm 1.54E-08	0.00 \pm 1.84E-08	0.87 \pm 1.03E-07
WP-E	-2.13 \pm 2.56E-09	2.56 \pm 0.01E-05	3.91 \pm 0.87E-07	0.00 \pm 1.72E-08	0.00 \pm 1.70E-08	0.00 \pm 1.98E-07
WP-F	1.38 \pm 1.94E-08	4.09 \pm 0.01E-04	3.15 \pm 0.86E-07	0.00 \pm 3.04E-08	0.00 \pm 2.29E-08	0.00 \pm 2.08E-07
WP-G	-1.42 \pm 2.08E-09	4.80 \pm 0.57E-08	3.12 \pm 0.15E-06	0.00 \pm 9.35E-09	0.00 \pm 1.24E-08	0.00 \pm 1.56E-07
WP-H	-1.14 \pm 5.89E-09	8.92 \pm 0.28E-07	1.28 \pm 0.04E-05	0.00 \pm 1.51E-08	0.00 \pm 1.80E-08	0.00 \pm 2.31E-07