Table 3 Groundwater analytical results from the reactive barrier sites

Sample No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)		Pathway 1 (GW-837)			
Collection date	8/20/96				8/14/96		8/19/96			
	Filtered		Unfiltered		Filtered	Unfiltered	Filtered		Unfiltered	
Analysis	Rep I	Rep 2	Rep I	Rep 2	Rep I	Rep I	Rep I	Rep 2	Rep I	Rep 2
Bicarbonate, mg/L			443			426			434	
Mercury, mg/L	0.0002		<0.0002			0.00049	0.00039		0.0012	
Aluminum, ug/L	2760	2670	9860	8210	1220	4550	4690	4630	27900	25500
Boron, ug/L	102	< 100	114	< 100	108	108	23.1	< 100	39.9	< 100
Barium, ug/L	>23200	23800	23700	24300	83.5	95.2	483	489	578	587
Calcium, ug/L	> 1000000	2629000	>1000000	2662000	163000	163000	> 1000000	1647000	>1000000	1681000
Cadmium, ug/L	411	391	427	404	<20	<20	199	184	204	196
Cobalt, ug/L	216	212	222	211	<20	<20	257	250	265	265
Chromium, ug/L	<20	< 100	<20	< 100	<20	<20	<20	< 100	<20	< 100
Copper, ug/L	65.2	< 200	70.5	<200	<30	<30	58.6	< 200	77.2	< 200
Iron, ug/L	362	<800	5810	5700	712	4580	207	< 800	14300	14300
Potassium. ug/L	29000	26500	32000	28200	6380	7300	43200	38800	47900	42400
Magnesium, ug/L	335000	322000	343000	327000	26000	26400	152000	146000	158000	151000
Manganese, ug/L	>100000	145000	>100000	147000	1120	1160	100000	157000	> 100000	159000
Molybdenum, ug/L	<40	<200	<40	< 200	<40	<40	<40	< 200	<40	< 200
Sodium, ug/L	506000	494000	516000	500000	17400	17300	695000	677000	705000	688000
Nickel, ug/L	1660	1710	1710	1750	<40	<40	2130	2130	2140	2210
Lead, ug/L	< 200	< 800	< 200	< 800	<200	< 200	< 200	< 800	< 200	< 800
Thallium, ug/L	136	< 500	139	< 500	< 100	<100	143	< 500	169	< 500
Vanadium. ug/L	<10	<50	<10	<50	<10	<10	<10	<50	<10	<50

Table 3 (continued)

Sample No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)		Pathway 1 (GW-837)			
Collection date	8/20/96				8/14/96		8/19/96			
	Filtered		Unfiltered		Filtered	Unfiltered	Filtered		Unfiltered	
Analysis	Rep I	Rep 2	Rep I	Rep 2	Rep I	Rep I	Rep I	Rep 2	Rep I	Rep 2
Zinc, ug/L	33.5	< 100	44.8	< 100	<20	<20	97.6	< 100	119	105
Selenium, ug/L	< 500	< 3000	<500	< 3000	< 500	<500	<500	<3000	< 500	<3000
Silver, ug/L	<20	<80	<20	<80	<20	<20	<20	<80	<20	<80
Arsenic, ug/L	< 100	< 500	< 100	< 500	< 100	< 100	< 100	< 500	< 100	< 500
Beryllium, ug/L	2	< 5.0	2.5	<5.0	< 1.0	< 1.0	2.9	< 5.0	4.5	<5
Antimony, ug/L	< 100	< 500	100	< 500	< 100	<100	< 100	< 500	< 100	< 500
Lithium, ug/L	41.8	<50	50.5	<50	30.6	32.4	119	93.8	143	124
Phosphorous ,ug/L	547	<2000	668	< 2000	< 300	< 300	562	< 2000	724	< 2000
Titanium, ug/L	<20	<80	189	96.2	<20	124	<20	<80	244	161
Strontium, ug/L	660	6770	6670	6850	488	490	2390	2440	2450	2500
Alkalinity, mg/L			420			310.1			410	
Alpha activity, pC/L			210			370			790	
Beta activity, pC/L			9000			280			4300	
Tritium, pC/L			1500			46			1100	
Fluoride, mg/L			4.8			0.4			4.9	
Chloride. mg/L			260			28			320	
Nitrite as Nitrogen, mg/L			8.3			0.2			7.3	
Bromide, mg/L			NA			NA			NA	
Nitrate as Nitrogen, mg/L			2300			29			1400	

Table 3 (continued)

Simple No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)		Pathway 1 (GW-837)			
Collection date	9/20/96				8/14/96		8/19/96			
	Filtered		Unfiltered		Filtered	Unfiltered	Filtered		Unfiltered	
Analysis	Rep I	Rep	Rep I	Rep 2	Rep I	Rep I	Rep I	Rep2	Rep I	Rep 2
Ortho-Phosphate as Phosphorus. mg/L			< 5.0			<0.12			< 5.0	
Sulfate, mg/L			14			150			390	
22-Sodium Activity, pC/L			1.1			1.5			-1.5	
40-Potassium Activity, pC/L			52			50			42	
51-Chromium Activity, pC/L			-1.2			8.1			9.7	
54-Manganese Activity, pC/L			0.85			1.6			-0.095	
57-Cobalt Activity, pC/L			-0.57			0.84			0.3	
58-Cobalt Activity, pC/L			-1.2			-1.4			0.49	
59-Iron Activity, pC/L			0.9			-0.7			3	
60-Cobalt Activity. pC/L			2.3			-1.7			2.9	
65-Zinc Activity. pC/L			-0.63			-0.55			1	
95-Niobium Activity, pClL			3.6			-0.5			2.7	
95-Zirconium Activity, pC/L			-1.9			-3.3			-1.6	
106-Ruthenium Activity, pC/L			-2.2			13			3.9	
125-Antimony Activity, pC/L			-0.78			-2.9			2.4	

Table 3 (continued)

Sample No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)		Pathway 1 (GW-837)			
Collection date	9/20/96				8/14196		8/19196			
	Filleted		Unfiltered		Filtered	Unfiltered	Filtered		Unfiltered	
Analysis	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 1	Rep 1	Rep 2	Rep 1	Rep 2
134-Cesium Activity, pC/L			-1.2			-0.52			1.2	
137-Cesium Activity. pC/L			-0.77			-0.064			-2.4	
144-Cerium Activity, pC/L			1.3			-3.5			-2.1	
208-Thallium Activity, pC/L			4.5			3.4			3.1	
212-Bismuth Activity. pC/L			13			13			1.8	
212-Lead Activity. pC/L			18			6.4			12	
235 Uranium Activity, pC/L			7.8			5			20	
Technetium-99, pC/L			22000			150			10000	
Total Dissolved Solids, mg/L						690			11000	
Total Strontium, pC/L			-2.4			0.4			360	
Total Suspended Solids, mg/L			190			9				
Uranium, mg/g			0.0037			1.7			2.6	
Unknown, ug/L			65						60	
Acetaldoxime, ug/L			6							
1,2-Ethanediol, Dinitrate, ug/L			16							

Table 3 (continued)

Sample No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)				Pathway 1 (GW-837)			
Collection date	8/20/96				8/14196				8/19/96			
	Filtered		Unfiltered		Filtered		Unfiltered		Filtered		Unfiltered	
Analysis	Rep 1	Rep 2	Rep 1	Rep 2	Rep 1	Rep 1	Rep 1	Rep 2	Rep 1	Rep 2		
1,5-Pentanediol, Dinitrate, ug/L			10									
Chloromethane, ug/L			10 U			10 U			3 J			
Bromomethane, ug/L			4 J			10 U			2 J			
Vinyl chloride, ug/L			10 U			10 U			10 U			
Chloroethane, ug/L			10 U			10 U			10 U			
Trichlorofluoromethane, ug/L			10 U			10 U			10 U			
Methylene chloride, ug/L			14			10 U			18			
Acetone, ug/L			12			9 BJ			43			
1,1,2-Trichloro			10 U			5 J			3 J			
1,2,2-trifluoroethane, ug/L												
Carbon disulfide, ug/L			10 U			10 U			10 U			
1.1-Dichloroethene, ug/L			10 U			10 U			10 U			
1, 1 -Dichloroethane, ug/L			10 U			10 U			10 U			
cis-1,2-Dichloroethene, ug/L			6 J			10 U			3 J			
tran-1,2-Dichloroethene, ug/L			10 U			10 U			10 U			
Chloroform, ug/L			9 J			10 U			7 J			
1,2-Dichloroethane, ug/L			10 U			10 U			10 U			
2-Butanone, ug/L			4 BJ			3 BJ			8 BJ			

Table 3 (continued)

Sample No. (location)	Pathway 3 (GW-834				Pathway 2 (GW-835)		Pathway 1 (GW-837)			
Collection date	9/20/96				8/14/96		8/19/96			
	Filtered		Unfiltered		Filtered	Unfiltered	Filtered		Unfiltered	
Analysis	Rep I	Rep 2	Rep I	Rep 2	Rep I	Rep I	Rep I	Rep 2	Rep I	Rep 2
1,1,1-Trichloroethane, ug/L			10 U			10 U			11	
Carbon tetrachloride, ug/L			10 U			10 U			10 U	
Bromodichloromethane, ug/L			10 U			10 U			10 U	
1,2-Dichloropropane, ug/L			10 U			10 U			10 U	
cis-1,3-Dichloropropene, ug/L			10 U			10 U			10 U	
Trichloroethene, ug/L			10 U			10 U			10 U	
Dibromochloromethane, ug/L			10 U			10 U			10 U	
1,1,2-Trichloroethane, ug/L			10 U			10 U			10 U	
Benzene, ug/L			10 U			10 U			10 U	
trans-1,3-Dichloropropane, ug/L			10 U			10 U			10 U	
Bromoform, ug/L			10 U			10 U			10 U	
4-Methyl-2-pentanone, ug/L			10 U			10 U			2 J	
2-Hexanone, ug/L			10 U			10 U			10 U	
Tetrachloroethene, ug/L			2 J			4 J			14	
1,1,2.2-Tetrachloroethane, ug/L			10 U			10 U			10 U	

Table 3 (continued)

Sample No. (location)	Pathway 3 (GW-834)				Pathway 2 (GW-835)				Pathway 1 (GW-837)			
Collection date	8/20/96				8/14/96				8/19/96			
	Filtered		Unfiltered		Filtered		Unfiltered		Filtered		Unfiltered	
Analysis	Rep I	Rep 2	Rep I	Rep 2	Rep I	Rep I	Rep I	Rep 2	Rep I	Rep 2	Rep I	Rep 2
Toluene, ug/L			10 U			10 U				10 U		
Chlorobenzene, ug/L			10 U			10 U				10 U		
Ethylbenzene, ug/L			10 U			10 U				10 U		
Styrene, ug/L			10 U			10 U				10 U		
Xylene, ug/L			10 U			10 U				10 U		
Ethane						4.03						
1,2-Dichloro-1,1,2-tr, ug/L												