

Table 5-4

Surface Water Analytical Results
Golf Course, Parcels 178(7), 83(7), and 141(7)
Fort McClellan, Calhoun County, Alabama

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Parcel Sample Location Sample Number Sample Date					178 REP PPMP-178-SW/SD01 KA2001 27-Jan-99					178 REP PPMP-178-SW/SD02 KA2004 29-Jan-99					178 REP PPMP-178-SW/SD03 KA2005 29-Jan-99				
Parameter	Units	BKG ^a	SSSL ^b	ESV ^b	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
ANIONS																			
Chloride	mg/L	NA	NA	NA	1.80E+00					1.80E+00					2.00E+00				
Sulfate	mg/L	NA	NA	NA	6.30E+00					5.70E+00					7.10E+00				
METALS																			
Aluminum	mg/L	5.26E+00	1.53E+01	8.70E-02	5.62E-02	B				6.43E-02	B				8.41E-02	B			
Barium	mg/L	7.53E-02	1.10E+00	3.90E-03	3.93E-02	J			YES	4.25E-02	J			YES	4.32E-02	J			YES
Calcium	mg/L	2.52E+01	NA	1.16E+02	2.11E+01					2.59E+01		YES			2.58E+01		YES		
Iron	mg/L	1.96E+01	4.70E+00	1.00E+00	8.85E-02	J				8.13E-02	J				1.07E-01				
Lead	mg/L	8.60E-03	1.50E-02	1.32E-03	2.50E-03	J			YES	3.00E-03				YES	2.20E-03	J			YES
Magnesium	mg/L	1.10E+01	NA	8.20E+01	3.46E+00	J				3.95E+00	J				4.38E+00	J			
Manganese	mg/L	5.65E-01	6.40E-01	8.00E-02	1.13E-02	J				4.70E-03	J				1.26E-02	J			
Potassium	mg/L	2.56E+00	NA	5.30E+01	1.09E+00	J				1.19E+00	J				1.20E+00	J			
Sodium	mg/L	3.44E+00	NA	6.80E+02	1.33E+00	B				1.21E+00	B				1.41E+00	B			
Thallium	mg/L	2.40E-03	1.01E-03	4.00E-03	5.80E-03	B	YES	YES	YES	ND					ND				

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Fort McClellan, Calhoun County, Alabama

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Parcel Sample Location Sample Number Sample Date					178 REP PPMP-178-SW/SD04 KA2006 29-Jan-99					178 REP PPMP-178-SW/SD05 KA2007 29-Jan-99				
Parameter	Units	BKG ^a	SSSL ^b	ESV ^b	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
ANIONS														
Chloride	mg/L	NA	NA	NA	3.00E+00					2.20E+00				
Sulfate	mg/L	NA	NA	NA	8.30E+00					6.10E+00				
METALS														
Aluminum	mg/L	5.26E+00	1.53E+01	8.70E-02	1.17E-01	B			YES	1.46E-01	B			YES
Barium	mg/L	7.53E-02	1.10E+00	3.90E-03	3.19E-02	J			YES	3.97E-02	J			YES
Calcium	mg/L	2.52E+01	NA	1.16E+02	2.38E+01					2.66E+01		YES		
Iron	mg/L	1.96E+01	4.70E+00	1.00E+00	4.57E-01					2.50E-01				
Lead	mg/L	8.60E-03	1.50E-02	1.32E-03	ND					ND				
Magnesium	mg/L	1.10E+01	NA	8.20E+01	5.55E+00					4.51E+00	J			
Manganese	mg/L	5.65E-01	6.40E-01	8.00E-02	2.82E-01				YES	9.13E-02				YES
Potassium	mg/L	2.56E+00	NA	5.30E+01	8.99E-01	J				7.92E-01	J			
Sodium	mg/L	3.44E+00	NA	6.80E+02	2.43E+00	J				1.79E+00	B			
Thallium	mg/L	2.40E-03	1.01E-03	4.00E-03	ND					ND				

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods, including Update III methods where applicable.

^a Bkg - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in Science Applications International Corporation (1998), *Final Background Metals Survey Report, Fort McClellan, Alabama*, July.

^b Residential human health site-specific screening level (SSSL) and ecological screening value (ESV) as given in IT Corporation (2000), *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, March.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit (and greater than zero).

J - Result is greater than method detection limit but less than or equal to reporting limit.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 5-5

Sediment Analytical Results
Golf Course, Parcels 178(7), 83(7), and 141(7)
Fort McClellan, Calhoun County, Alabama

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Parcel Sample Location Sample Number Sample Date Sample Depth (Feet)					PPMP-178-SW/SD01 178 REP KA1001 27-Jan-99 0-1					PPMP-178-SW/SD02 178 REP KA1003 29-Jan-99 0-.5					PPMP-178-SW/SD03 178 REP KA1004 29-Jan-99 0-.5				
Parameter	Units	BKG ^a	SSSL ^b	ESV ^b	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
ANIONS																			
Sulfate	mg/kg	NA	NA	NA	1.88E+02					ND					3.23E+01				
PESTICIDES																			
4,4'-DDD	mg/kg	NA	2.35E+02	3.30E-03	ND					ND					ND				
4,4'-DDE	mg/kg	NA	1.66E+02	3.30E-03	4.40E-03	J			YES	ND					ND				
4,4'-DDT	mg/kg	NA	1.66E+02	3.30E-03	2.20E-03	J				ND					ND				
beta-BHC	mg/kg	NA	4.05E+01	5.00E-03	2.10E-03	J				ND					ND				
delta-BHC	mg/kg	NA	3.13E+02	7.15E+01	1.40E-03	J				ND					ND				
METALS																			
Aluminum	mg/kg	8.59E+03	1.15E+06	NA	6.04E+03					2.91E+03					3.37E+03				
Arsenic	mg/kg	1.13E+01	5.58E+01	7.24E+00	2.90E+00					4.50E+00					3.30E+00				
Barium	mg/kg	9.89E+01	8.36E+04	NA	4.11E+01					4.30E+01					3.23E+01				
Beryllium	mg/kg	9.70E-01	1.50E+02	NA	5.70E-01	J				5.40E-01	J				4.50E-01	J			
Calcium	mg/kg	1.11E+03	NA	NA	2.05E+03		YES			1.49E+03		YES			3.70E+03		YES		
Chromium	mg/kg	3.12E+01	2.79E+03	5.23E+01	9.90E+00					1.28E+01					1.10E+01				
Cobalt	mg/kg	1.10E+01	6.72E+04	5.00E+01	5.10E+00	J				4.70E+00	J				3.40E+00	J			
Copper	mg/kg	1.71E+01	4.74E+04	1.87E+01	3.81E+01		YES		YES	1.88E+01		YES		YES	7.60E+00				
Iron	mg/kg	3.53E+04	3.59E+05	NA	1.49E+04					1.72E+04					1.06E+04				
Lead	mg/kg	3.78E+01	4.00E+02	3.02E+01	1.59E+02		YES		YES	9.16E+01		YES		YES	2.06E+01				
Magnesium	mg/kg	9.06E+02	NA	NA	2.05E+03		YES			1.22E+03		YES			2.73E+03		YES		
Manganese	mg/kg	7.12E+02	4.38E+04	NA	8.31E+01					3.61E+02					2.37E+02				
Mercury	mg/kg	1.10E-01	2.99E+02	1.30E-01	5.20E-02	J				2.40E-02	J				2.30E-02	J			
Nickel	mg/kg	1.30E+01	1.76E+04	1.59E+01	9.50E+00					6.40E+00					5.00E+00	J			
Potassium	mg/kg	1.01E+03	NA	NA	6.75E+02	J				4.35E+02	J				2.71E+02	J			
Selenium	mg/kg	7.20E-01	5.96E+03	NA	1.20E+00	B	YES			1.20E+00	B	YES			6.80E-01	B			
Sodium	mg/kg	6.92E+02	NA	NA	1.27E+02	B				8.61E+01	B				8.35E+01	B			
Vanadium	mg/kg	4.09E+01	4.83E+03	NA	1.36E+01					1.13E+01					9.80E+00				
Zinc	mg/kg	5.27E+01	3.44E+05	1.24E+02	5.93E+01		YES			4.01E+01					2.39E+01				
WET CHEMISTRY																			
Total Organic Carbon	mg/kg	NA	NA	NA	1.09E+04					2.68E+03					3.16E+03				

Table 5-5

Sediment Analytical Results
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Fort McClellan, Calhoun County, Alabama

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Parcel Sample Location Sample Number Sample Date Sample Depth (Feet)					PPMP-178-SW/SD04 178 REP KA1006 29-Jan-99 0- .5					PPMP-178-SW/SD05 178 REP KA1007 29-Jan-99 0- 1				
Parameter	Units	BKG ^a	SSSL ^b	ESV ^b	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
ANIONS														
Sulfate	mg/kg	NA	NA	NA	4.47E+01					9.83E+01				
PESTICIDES														
4,4'-DDD	mg/kg	NA	2.35E+02	3.30E-03	ND					1.60E-03	J			
4,4'-DDE	mg/kg	NA	1.66E+02	3.30E-03	ND					4.00E-03	J			YES
4,4'-DDT	mg/kg	NA	1.66E+02	3.30E-03	ND					2.70E-03	J			
beta-BHC	mg/kg	NA	4.05E+01	5.00E-03	ND					ND				
delta-BHC	mg/kg	NA	3.13E+02	7.15E+01	ND					1.10E-03	J			
METALS														
Aluminum	mg/kg	8.59E+03	1.15E+06	NA	7.30E+03					5.47E+03				
Arsenic	mg/kg	1.13E+01	5.58E+01	7.24E+00	3.80E+00					6.60E+00				
Barium	mg/kg	9.89E+01	8.36E+04	NA	5.62E+01					5.77E+01				
Beryllium	mg/kg	9.70E-01	1.50E+02	NA	5.30E-01	J				6.50E-01	J			
Calcium	mg/kg	1.11E+03	NA	NA	1.02E+04		YES			2.97E+03		YES		
Chromium	mg/kg	3.12E+01	2.79E+03	5.23E+01	1.08E+01					1.46E+01				
Cobalt	mg/kg	1.10E+01	6.72E+04	5.00E+01	7.40E+00					6.30E+00	J			
Copper	mg/kg	1.71E+01	4.74E+04	1.87E+01	1.81E+01		YES			2.62E+01		YES		YES
Iron	mg/kg	3.53E+04	3.59E+05	NA	1.97E+04					1.62E+04				
Lead	mg/kg	3.78E+01	4.00E+02	3.02E+01	2.61E+01					8.45E+01		YES		YES
Magnesium	mg/kg	9.06E+02	NA	NA	3.24E+03		YES			1.31E+03		YES		
Manganese	mg/kg	7.12E+02	4.38E+04	NA	5.07E+02					2.23E+02				
Mercury	mg/kg	1.10E-01	2.99E+02	1.30E-01	4.60E-02	J				1.00E-01				
Nickel	mg/kg	1.30E+01	1.76E+04	1.59E+01	1.46E+01		YES			9.20E+00				
Potassium	mg/kg	1.01E+03	NA	NA	3.03E+02	J				3.54E+02	J			
Selenium	mg/kg	7.20E-01	5.96E+03	NA	1.20E+00	B	YES			1.40E+00	B	YES		
Sodium	mg/kg	6.92E+02	NA	NA	1.85E+02	B				1.19E+02	B			
Vanadium	mg/kg	4.09E+01	4.83E+03	NA	1.59E+01					1.71E+01				
Zinc	mg/kg	5.27E+01	3.44E+05	1.24E+02	5.86E+01		YES			6.94E+01		YES		
WET CHEMISTRY														
Total Organic Carbon	mg/kg	NA	NA	NA	1.17E+04					2.35E+04				

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods, including Update III methods where applicable.

^a Bkg - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in Science Applications International Corporation (1998), Final Background Metals Survey Report, Fort McClellan, Alabama, July.

^b Residential human health site-specific screening level (SSSL) and ecological screening value (ESV) as given in IT Corporation (2000), *Final Human Health and Ecological Screening Values and PAH Background Summary Report*, Fort McClellan, Calhoun County, Alabama, July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit (and greater than zero).

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mg/kg - Milligrams per kilogram.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.