TABLES

Table 2-1

Sampling Locations and Rationale
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Media	Sampling Location Rationale
RNG-203-GP01	Surface soil and subsurface soil	Surface soil and subsurface soil samples were collected just outside (south) of the fenced area to help aid in determining a source area.
RNG-203-GP02	Surface soil and subsurface soil	Surface soil and subsurface soil samples were collected in the southern portion of Range K to help aid in determining a source area.
RNG-203-MW01	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW01 was installed near a partially exposed drum just outside the southeastern corner of the fenced area at Range K. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of contamination in soils and groundwater. Five rounds of groundwater samples were collected from this well.
RNG-203-MW02	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW02 was installed within the fenced area in the central portion of Range K. Surface soil, subsurface soil, and groundwater samples were collected to determine if site-specific chemicals were present and to help determine the nature and extent of contamination in soils and groundwater. Three rounds of groundwater samples were collected from this well.
RNG-203-MW03	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW03 was installed within the fenced area in the north-central portion of Range K. Surface soil, subsurface soil, and groundwater samples were collected to determine if site-specific chemicals were present and to help determine the nature and extent of contamination in soils and groundwater. Four rounds of groundwater samples were collected from this well.
RNG-203-MW04	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW04 was installed within the fenced area along the western boundary of Range K. Surface soil, subsurface soil, and groundwater samples were collected to determine if site-specific chemicals were present and to help determine the nature and extent of contamination in soils and groundwater. Five rounds of groundwater samples were collected from this well.
RNG-203-MW05	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW05 was installed just east of Range K, approximately 120 feet north (upgradient) of residuum well RNG-203-MW01. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of soils and groundwater contamination upgradient of well RNG-203-MW01. Three rounds of groundwater samples were collected from this well.
RNG-203-MW06	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW06 was installed approximately 180 feet southwest (downgradient) of monitoring well RNG-203-MW01. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of soils and groundwater contamination. Four rounds of groundwater samples were collected from this well.
RNG-203-MW07	Groundwater	Bedrock monitoring well RNG-203-MW07 was installed adjacent to residuum well RNG-203-MW06. The well location assisted in determining the vertical extent of groundwater contamination. Four rounds of groundwater samples were collected from this well.
RNG-203-MW08	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW08 was installed approximately 250 feet southeast of existing well RNG-203-MW01. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of soils and groundwater contamination. Three rounds of groundwater samples were collected from this well.
RNG-203-MW09	Groundwater	Bedrock monitoring well was installed adjacent to residuum well RNG-203-MW08. The well location assisted in defining the vertical extent of groundwater contamination. Three rounds of groundwater samples were collected from this well.

Table 2-1

Sampling Locations and Rationale
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Media	Sampling Location Rationale
RNG-203-MW10	Surface soil, subsurface soil, and groundwater	Residuum monitoring well was installed approximately 240 feet south of existing well RNG-203-MW01. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of soils and groundwater contamination. Four rounds of groundwater samples were collected from this well.
RNG-203-MW11	Groundwater	Bedrock monitoring well was installed adjacent to residuum well RNG-203-MW10. The well location assisted in defining the horizontal and vertical extent of groundwater contamination downgradient of well RNG-203-MW01. Five rounds of groundwater samples were collected from this well.
RNG-203-MW12	Surface soil, subsurface soil, and groundwater	Residuum monitoring well RNG-203-MW12 was installed approximately 350 feet southwest of existing well RNG-203-MW01. Surface soil, subsurface soil, and groundwater samples were collected to determine the nature and extent of soils and groundwater contamination. Five rounds of groundwater samples were collected from this well.
RNG-203-MW13	Groundwater	Bedrock monitoring well was installed adjacent to residuum well RNG-203-MW12. The well location assisted in defining the horizontal and vertical extent of groundwater contamination downgradient of well RNG-203-MW01. Five rounds of groundwater samples were collected from this well.
RNG-203-MW14	Surface soil, subsurface soil, and groundwater	Residuum monitoring well was installed approximately 270 feet southwest of existing well RNG-203-MW04. The well location assisted in defining the horizontal extent of groundwater contamination. Surface soil, subsurface soil, and groundwater samples were collected for analysis to aid in determining the horizontal extent of contamination. Three rounds of groundwater samples were collected from this well.
RNG-203-MW15	Surface soil, subsurface soil, and groundwater	Residuum monitoring well was installed approximately 180 feet southwest of existing well RNG-203-MW04. The well location assisted in defining the horizontal extent of groundwater contamination. Surface soil, subsurface soil, and groundwater samples were collected to help aid in determining the horizontal extent of contamination. Three rounds of groundwater samples were collected from this well.
RNG-203-MW16	Groundwater	Residuum\bedrock (transition) well was installed approximately 120 feet downgradient of Range K. The well location assisted in defining the western extent of groundwater contamination and in identifying a possible upgradient source inside the fenced area of Range K. Two rounds of groundwater samples were collected from this well.
RNG-203-MW17	Groundwater	Bedrock monitoring well was installed adjacent to residuum\bedrock well RNG-203-MW16. The well location assisted in defining the vertical extent of groundwater contamination downgradient of Range K and in identifying a possible source area inside the fenced area. Two rounds of groundwater samples were collected from this well.

Table 2-1

Sampling Locations and Rationale
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Media	Sampling Location Rationale
RNG-203-MW18	Groundwater	Bedrock monitoring well was installed adjacent to existing well cluster RNG-203-MW12/RNG-203-MW13. The well location assisted in defining the vertical extent of groundwater contamination downgradient of the site. Two rounds of groundwater samples were collected from this well.
RNG-203-MW19	Groundwater	Bedrock monitoring well was installed approximately 200 feet southwest of existing well cluster RNG-203-MW12/MW13. The well location assisted in defining the horizontal and vertical extent of groundwater contamination west of well cluster RNG-203-MW12/RNG-203-MW13. Two rounds of groundwater samples were collected from this well.
RNG-203-MW20	Groundwater	Bedrock monitoring well was installed approximately 240 feet southwest (downgradient) of existing well cluster RNG-203-MW12\MW13 to help define the horizontal and vertical extent of groundwater contamination. Two rounds of groundwater samples were collected from this well.
RNG-203-MW21	Groundwater	Bedrock monitoring well was installed approximately 230 feet southeast of existing well cluster RNG-203-MW12/MW13 to help define the horizontal and vertical extent of groundwater contamination. Two rounds of groundwater samples were collected from this well.
RNG-203-MW22	Groundwater	Bedrock monitoring well was installed adjacent to existing well RNG-203-MW20. Discrete groundwater samples were collected to establish a vertical profile for well screen placement and to determine the vertical extent of groundwater contamination (namely chlorinated VOCs). One round of groundwater samples was collected from this well.
RNG-203-MW23	Groundwater	Bedrock monitoring well was installed approximately 180 feet southeast of existing well RNG-203-MW20. Discrete groundwater samples were collected to establish a vertical profile for well screen placement and to determine the vertical extent of groundwater contamination (namely chlorinated VOCs). One round of groundwater samples was collected from this well.
RNG-203-MW24	Groundwater	Bedrock monitoring well was installed approximately 220 feet south of existing well RNG-203-MW20. Discrete groundwater samples were collected to establish a vertical profile for well screen placement and to determine the vertical extent of groundwater contamination (namely chlorinated VOCs). One round of groundwater samples was collected from this well.
RNG-203-MW25	Groundwater	Bedrock monitoring well was installed approximately 180 feet west-southwest of RNG-203-MW20. Discrete groundwater samples were collected to establish a vertical profile for well screen placement and define the vertical extent of groundwater contamination (namely chlorinated VOCs). One round of groundwater samples was collected from this well.
RNG-203-DR01	Drum	A sample of semi-solid material (sludge) was collected from a partially exposed drum located near the southeastern corner (outside) of the fenced area. The sample was analyzed to determine the drum's contents and whether the drum may have been a source of contamination.

Table 2-2

Soil Sample Designations and Analyical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft bgs)	QA/QC Samples			Analytical Parameters
			Field Duplicates	Field Splits	MS/MSD	
RNG-203-GP01	RNG-203-GP01-SS-RG0026-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-GP01-DS-RG0027-REG	10-12				
RNG-203-GP02	RNG-203-GP02-SS-RG0028-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-GP02-DS-RG0029-REG	8-10				
RNG-203-MW01	RNG-203-MW01-SS-RG0001-REG	0-2				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW01-DS-RG0002-REG	6-8				
RNG-203-MW02	RNG-203-MW02-SS-RG0005-REG	0-2			RNG-203-MW02-SS-RG0005-MS/MSD	VOCs, SVOCs, Metals, Explosives
	RNG-203-MW02-DS-RG0006-REG	6-7				
RNG-203-MW03	RNG-203-MW03-SS-RG0007-REG	0-2				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW03-DS-RG0008-REG	10-12	RNG-203-MW03-DS-RG0003-FD	RNG-203-MW03-DS-RG0004-FS		
RNG-203-MW04	RNG-203-MW04-SS-RG0009-REG	0-2				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW04-DS-RG0010-REG	6-8				
RNG-203-MW05	RNG-203-MW05-SS-RG0011-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW05-DS-RG0012-REG	11-12				
RNG-203-MW06	RNG-203-MW06-SS-RG0013-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW06-DS-RG0014-REG	2-4				

Table 2-2

Soil Sample Designations and Analyical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft bgs)	QA/QC Samples			Analytical Parameters
			Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW08	RNG-203-MW08-SS-RG0015-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW08-DS-RG0016-REG	6-8				
RNG-203-MW10	RNG-203-MW10-SS-RG0017-REG	0-1	RNG-203-MW10-SS-RG0018-FD			VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW10-DS-RG0019-REG	10-12				
RNG-203-MW12	RNG-203-MW12-SS-RG0020-REG	0-1			RNG-203-MW12-SS-RG0020-MS/MSD	VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW12-DS-RG0021-REG	10-12				
RNG-203-MW14	RNG-203-MW14-SS-RG0022-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW14-DS-RG0023-REG	10-12				
RNG-203-MW15	RNG-203-MW15-SS-RG0024-REG	0-1				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs
	RNG-203-MW15-DS-RG0025-REG	10-12				

CWM - Chemical warfare material.
DS - Deep soil.
FD - Field duplicate.
FS - Field split.
ft bgs - Feet below ground surface.
PCB - Polychlorinated biphenyl.
MS/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Regular field sample.
SS - Surface soil.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.

Table 2-3

Drum Sample Designation and Analytical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples			Analytical Parameters
		Field Duplicates	Field Splits	MS/MSD	
RNG-203-DR01	RNG-203-DR01-DR-RG4001-REG				VOCs, SVOCs, Metals, Explosives, Herbicides, Pesticides, CWM Breakdown Products, PCBs

CWM - Chemical warfare material.
DR - Drum sample.
PCB - Polychlorinated biphenyl.
MS/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Regular sample.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.

Table 2-4

Monitoring Well Construction Summary
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Well Location	Northing	Easting	Ground Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	Well Depth (ft bgs)	Screen Length (ft)	Screen Interval (ft bgs)	Well Material
RNG-203-MW01	1178057.76	606622.75	583.95	586.55	12.5	10	2.2 - 12.2	2" ID Sch. 40 PVC
RNG-203-MW02	1178219.91	606436.13	593.90	596.75	22	15	5 - 20	2" ID Sch. 40 PVC
RNG-203-MW03	1178269.19	606493.26	598.26	601.16	33.5	10	23.2 - 33.2	2" ID Sch. 40 PVC
RNG-203-MW04	1178176.62	606330.85	586.73	589.80	26	15	9 - 24	2" ID Sch. 40 PVC
RNG-203-MW05	1178174.77	606658.94	589.00	590.97	29.5	10	19.5 - 29.5	2" ID Sch. 40 PVC
RNG-203-MW06	1177901.70	606516.70	580.02	582.04	24.2	15	9.2 - 24.2	2" ID Sch. 40 PVC
RNG-203-MW07	1177893.44	606532.98	578.87	580.94	60	20	39.6 - 59.6	4" ID Sch. 80 PVC
RNG-203-MW08	1177825.48	606745.92	582.85	584.77	22.6	10	12.6 - 22.6	2" ID Sch. 40 PVC
RNG-203-MW09	1177831.94	606749.02	582.56	584.53	68.4	20	48.4 - 68.4	4" ID Sch. 80 PVC
RNG-203-MW10	1177815.73	606575.23	575.65	577.69	29	20	9 - 29	2" ID Sch. 40 PVC
RNG-203-MW11	1177824.16	606585.70	575.98	577.99	59	10	49 - 59	4" ID Sch. 80 PVC
RNG-203-MW12	1177775.14	606363.76	577.08	578.97	37	15	22 - 37	2" ID Sch. 40 PVC
RNG-203-MW13	1177769.25	606359.91	576.74	578.85	73	20	52.6 - 72.6	4" ID Sch. 80 PVC
RNG-203-MW14	1178043.42	606097.40	582.37	584.55	16.5	10	6.5 - 16.5	2" ID Sch. 40 PVC
RNG-203-MW15	1178035.31	606214.65	582.93	585.04	15.9	10	5.9 - 15.9	2" ID Sch. 40 PVC
RNG-203-MW16	1177961.75	606336.06	589.63	591.56	27	10	17 - 27	2" ID Sch. 40 PVC
RNG-203-MW17	1177955.87	606326.06	589.01	590.85	50.2	10	40.2 - 50.2	4" ID Sch. 80 PVC
RNG-203-MW18	1177756.36	606375.16	574.69	576.80	90.3	15	75.3 - 90.3	4" ID Sch. 80 PVC
RNG-203-MW19	1177714.96	606181.89	576.22	576.43	105.8	15	90.8 - 105.8	4" ID Sch. 80 PVC
RNG-203-MW20	1177551.02	606285.51	569.53	571.77	103.9	20	83.5 - 103.5	4" ID Sch. 80 PVC
RNG-203-MW21	1177624.75	606553.98	578.92	581.14	100.1	20	80.1 - 100.1	4" ID Sch. 80 PVC
RNG-203-MW22	1177566.19	606282.47	569.74	572.05	207	20	187 - 207	2.5" ID Sch. 80 PVC
RNG-203-MW23	1177422.41	606414.62	576.91	579.68	240.4	20	220 - 240	2.5" ID Sch. 80 PVC
RNG-203-MW24	1177327.87	606258.24	569.43	571.73	238	20	218 - 238	2.5" ID Sch. 80 PVC
RNG-203-MW25	1177501.04	606112.28	568.88	570.74	200	20	180 - 200	2" ID Sch. 40 PVC

Horizontal coordinates referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North American Datum of 1983 (NAD83).
Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).
2" ID Sch. 40 PVC - Two-inch inside diameter Schedule 40 polyvinyl chloride.
4" ID Sch. 80 PVC - Four-inch inside diameter Schedule 80 polyvinyl chloride.
amsl - Above mean sea level.
bgs - Below ground surface.
ft - Feet.

Table 2-5

Groundwater Elevations
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Well Location	Date	Depth to Water (ft btoc)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
RNG-203-MW01	13-Feb-03	3.81	586.55	583.95	582.74
	13-Oct-03	13.28			573.27
RNG-203-MW02	13-Feb-03	9.78	596.75	593.90	586.97
	13-Oct-03	20.00			576.75
RNG-203-MW03	13-Feb-03	14.99	601.16	598.26	586.17
	13-Oct-03	22.87			578.29
RNG-203-MW04	13-Feb-03	3.04	589.80	586.73	586.76
	13-Oct-03	12.48			577.32
RNG-203-MW05	13-Feb-03	3.15	590.97	589.00	587.82
	13-Oct-03	13.35			577.62
RNG-203-MW06	13-Feb-03	3.00	582.04	580.02	579.04
	13-Oct-03	13.87			568.17
RNG-203-MW07	13-Feb-03	4.54	580.94	578.87	576.40
	13-Oct-03	14.00			566.94
RNG-203-MW08	13-Feb-03	2.26	584.77	582.85	582.51
	13-Oct-03	8.90			575.87
RNG-203-MW09	13-Feb-03	3.34	584.53	582.56	581.19
	13-Oct-03	10.18			574.35
RNG-203-MW10	13-Feb-03	2.14	577.69	575.65	575.55
	13-Oct-03	9.70			567.99
RNG-203-MW11	13-Feb-03	1.49	577.99	575.98	576.50
	13-Oct-03	13.01			564.98
RNG-203-MW12	13-Feb-03	3.14	578.97	577.08	575.83
	13-Oct-03	12.28			566.69
RNG-203-MW13	13-Feb-03	3.03	578.85	576.74	575.82
	13-Oct-03	12.17			566.68
RNG-203-MW14	13-Feb-03	3.29	584.55	582.37	581.26
	13-Oct-03	9.34			575.21
RNG-203-MW15	13-Feb-03	3.09	585.04	582.93	581.95
	13-Oct-03	9.24			575.80

Table 2-5

Groundwater Elevations
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Well Location	Date	Depth to Water (ft btoc)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
RNG-203-MW16	13-Feb-03	8.48	591.56	589.63	583.08
	13-Oct-03	16.82			574.74
RNG-203-MW17	13-Feb-03	7.30	590.85	589.01	583.55
	13-Oct-03	15.57			575.28
RNG-203-MW18	13-Feb-03	1.15	576.80	574.69	575.65
	13-Oct-03	10.25			566.55
RNG-203-MW19	13-Feb-03	3.60	578.36	576.22	574.76
	13-Oct-03	7.53			570.83
RNG-203-MW20	13-Feb-03	0.00	571.77	569.53	571.77
	13-Oct-03	5.40			566.37
RNG-203-MW21	13-Feb-03	5.97	581.14	578.92	575.17
	13-Oct-03	22.26			558.88
RNG-203-MW22	13-Oct-03	15.63	572.05	569.74	556.42
RNG-203-MW23	13-Oct-03	23.22	579.68	576.91	556.46
RNG-203-MW24	13-Oct-03	16.53	571.73	569.43	555.20
RNG-203-MW25	13-Oct-03	0.40	570.74	568.88	570.34

Elevations referenced to the North American Vertical Datum of 1988 (NAVD88).
amsl - Above mean sea level.
btoc - Below top of casing.
ft - Feet.

Table 2-6

Groundwater Sample Designations and Analytical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples			Analytical Parameters
		Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW01	RNG-203-MW01-GW-RG3001-REG				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW01-GW-RG3007-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW01-GW-RG3024-REG				VOCs
	RNG-203-MW01-GW-RG3033-REG				
	RNG-203-MW01-GW-SM3001-REG			RNG-203-MW01-GW-SM3001-MS/MSD	
RNG-203-MW02	RNG-203-MW02-GW-RG3004-REG				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW02-GW-RG3034-REG	RNG-203-MW02-GW-RG3035-FD			VOCs
	RNG-203-MW02-GW-SM3002-REG				
RNG-203-MW03	RNG-203-MW03-GW-RG3005-REG	RNG-203-MW03-GW-RG3002-FD	RNG-203-MW03-GW-RG3003-FS	RNG-203-MW03-GW-RG3005-MS/MSD	VOCs, SVOCs, Metals, Explosives
	RNG-203-MW03-GW-RG3009-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW03-GW-RG3036-REG				VOCs
	RNG-203-MW03-GW-SM3003-REG				
RNG-203-MW04	RNG-203-MW04-GW-RG3006-REG				VOCs, SVOCs, Metals, Explosives
	RNG-203-MW04-GW-RG3011-REG	RNG-203-MW04-GW-RG3010-FD			VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW04-GW-RG3025-REG				VOCs
	RNG-203-MW04-GW-RG3037-REG				
	RNG-203-MW04-GW-SM3004-REG	RNG-203-MW04-GW-SM3005-FD			
RNG-203-MW05	RNG-203-MW05-GW-RG3012-REG	RNG-203-MW05-GW-RG3013-FD			VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW05-GW-RG3038-REG			RNG-203-MW05-GW-RG3038-MS/MSD	VOCs
	RNG-203-MW05-GW-SM3006-REG				

Table 2-6

Groundwater Sample Designations and Analytical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples			Analytical Parameters
		Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW06	RNG-203-MW06-GW-RG3014-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW06-GW-RG3026-REG				VOCs
	RNG-203-MW06-GW-RG3039-REG				
	RNG-203-MW06-GW-SM3007-REG				
RNG-203-MW07	RNG-203-MW07-GW-RG3015-REG			RNG-203-MW07-GW-RG3015-MS/MSD	VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW07-GW-RG3027-REG				VOCs
	RNG-203-MW07-GW-RG3040-REG				
	RNG-203-MW07-GW-SM3008-REG				
RNG-203-MW08	RNG-203-MW08-GW-RG3016-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW08-GW-RG3041-REG				VOCs
	RNG-203-MW08-GW-SM3009-REG				
RNG-203-MW09	RNG-203-MW09-GW-RG3017-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW09-GW-RG3042-REG				VOCs
	RNG-203-MW09-GW-SM3010-REG				
RNG-203-MW10	RNG-203-MW10-GW-RG3018-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW10-GW-RG3028-REG				VOCs
	RNG-203-MW10-GW-RG3043-REG				
	RNG-203-MW10-GW-SM3011-REG				

Table 2-6

Groundwater Sample Designations and Analytical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples			Analytical Parameters
		Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW11	RNG-203-MW11-GW-RG3019-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW11-GW-RG3029-REG				VOCs
	RNG-203-MW11-GW-RG3044R-REG*				
	RNG-203-MW11-GW-SM3012-REG				
RNG-203-MW12	RNG-203-MW12-GW-RG3020-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW12-GW-RG3020R-REG				VOCs
	RNG-203-MW12-GW-RG3030-REG	RNG-203-MW12-GW-RG3031-FD			
	RNG-203-MW12-GW-RG3045-REG				
	RNG-203-MW12-GW-SM3013-REG				
RNG-203-MW13	RNG-203-MW13-GW-RG3021-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW13-GW-RG3021R-REG				VOCs
	RNG-203-MW13-GW-RG3032-REG			RNG-203-MW13-GW-RG3032-MS/MSD	
	RNG-203-MW13-GW-RG3046-REG				
	RNG-203-MW13-GW-SM3014-REG				
RNG-203-MW14	RNG-203-MW14-GW-RG3022-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW14-GW-RG3047-REG	RNG-203-MW14-GW-RG3048-FD			VOCs
	RNG-203-MW14-GW-SM3015-REG	RNG-203-MW14-GW-SM3016-FD			

Table 2-6

Groundwater Sample Designations and Analytical Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples			Analytical Parameters
		Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW15	RNG-203-MW15-GW-RG3023-REG				VOCs, SVOCs, Metals, Dissolved Metals, Explosives, Pesticides, Herbicides, PCBs, CWM Breakdown Products, TOC, Nitrate, Nitrite, Sulfate, Sulfite, TDS, TSS, Hardness
	RNG-203-MW15-GW-RG3049-REG				VOCs
	RNG-203-MW15-GW-SM3017-REG				
RNG-203-MW16	RNG-203-MW16-GW-RG3050-REG				VOCs
	RNG-203-MW16-GW-SM3018-REG				
RNG-203-MW17	RNG-203-MW17-GW-RG3051-REG				VOCs
	RNG-203-MW17-GW-SM3019-REG				
RNG-203-MW18	RNG-203-MW18-GW-RG3052-REG				VOCs
	RNG-203-MW18-GW-SM3020-REG			RNG-203-MW18-GW-SM3020-MS/MSD	
RNG-203-MW19	RNG-203-MW19-GW-RG3053-REG				VOCs
	RNG-203-MW19-GW-SM3021-REG				
RNG-203-MW20	RNG-203-MW20-GW-RG3054-REG				VOCs
	RNG-203-MW20-GW-SM3022-REG				
RNG-203-MW21	RNG-203-MW21-GW-RG3055-REG				VOCs
	RNG-203-MW21-GW-SM3023-REG				
RNG-203-MW22	RNG-203-MW22-GW-SM3024-REG				VOCs
RNG-203-MW23	RNG-203-MW23-GW-SM3025-REG	RNG-203-MW23-GW-SM3026-FD			VOCs
RNG-203-MW24	RNG-203-MW24-GW-SM3027-REG				VOCs
RNG-203-MW25	RNG-203-MW25-GW-SM3028-REG				VOCs

*Sample RG3044R is a resample of RG3044. The initial sample containers were broken during shipment.

CWM - Chemical warfare material.
FD - Field duplicate.
FS - Field split.
GW - Groundwater.
MS/MSD - Matrix spike/matrix spike duplicate.
PCB - Polychlorinated biphenyl.
QA/QC - Quality assurance/quality control.
REG - Regular field sample.
SVOC - Semivolatile organic compound.
TOC - Total organic carbon.
TDS - Total dissolved solids.
TSS - Total suspended solids.
VOC - Volatile organic compound.

Table 2-7

Groundwater Field Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Date	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Temperature (°C)	Turbidity (NTU)	pH (SU)
RNG-203-MW01	1-Jun-00	0.277	1.02	80	19.9	32.3	5.57
	26-Sep-01	0.121	10.94	103	20.3	18.0	4.93
	14-Jan-02	0.054	7.68	31	13.9	19.7	5.16
	8-Oct-02	0.063	0.42	308	22.4	41.0	4.72
	11-Aug-03	0.064	0.17	45.1	22.0	37.8	5.05
RNG-203-MW02	6-Jun-00	0.070	2.62	185	17.0	5.2	4.99
	9-Oct-02	0.121	4.21	312	18.3	17.5	4.43
	14-Aug-03	0.075	1.73	121.9	25.2	13.9	5.16
RNG-203-MW03	1-Jun-00	0.786	0.20	NA	18.5	12.9	7.00
	3-Oct-01	0.741	0.45	-78	18.2	9.0	7.07
	22-Oct-02	0.745	0.26	-11	17.0	15.2	6.91
	25-Jul-03	0.675	0.13	-88.8	17.4	7.3	6.84
RNG-203-MW04	1-Jun-00	0.448	0.29	35	19.7	233	7.32
	1-Oct-01	0.568	0.63	-46	18.9	7.0	7.26
	14-Jan-02	0.514	8.69	-17	15.9	5.8	6.20
	9-Oct-02	0.375	0.38	185	17.3	7.2	5.41
	13-Aug-03	0.480	0.85	-17.8	19.9	5.0	7.04
RNG-203-MW05	2-Oct-01	0.405	1.26	6	18.7	3.4	7.15
	9-Oct-02	0.403	0.49	110	18.2	16.3	7.06
	22-Jul-03	0.386	0.23	-95.5	17.3	2.8	7.02
RNG-203-MW06	17-Oct-01	0.721	0.00	128	16.3	387	7.37
	15-Jan-02	0.486	8.63	-27	15.4	196	6.29
	10-Oct-02	0.389	1.47	164	19.8	18.7	6.98
	11-Sep-03	0.392	3.35	113.5	22.5	195	6.62
RNG-203-MW07	16-Oct-01	0.650	0.00	-110	16.6	1.4	7.28
	16-Jan-02	0.494	9.92	60	15.0	7.6	7.50
	11-Oct-02	0.472	6.66	158	18.2	1.2	7.30
	28-Jul-03	0.452	0.09	-65.6	17.3	1.5	7.57

Table 2-7

Groundwater Field Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Date	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Temperature (°C)	Turbidity (NTU)	pH (SU)
RNG-203-MW08	5-Oct-01	0.880	NR	-18	23.1	9.1	7.13
	14-Oct-02	0.822	1.76	184	19.6	1.0	7.11
	29-Jul-03	0.895	1.27	-55.6	20.4	3.4	7.08
RNG-203-MW09	4-Oct-01	0.502	5.10	51	21.7	3.0	7.41
	16-Oct-02	0.602	6.07	197	16.1	19.0	7.24
	30-Jul-03	0.611	3.40	-54.7	16.9	9.8	7.67
RNG-203-MW10	8-Oct-01	0.624	1.16	-70	18.5	8.5	7.33
	16-Jan-02	0.619	11.44	16	15.2	10.7	7.64
	16-Oct-02	0.554	0.60	74	17.2	8.1	7.10
	28-Jul-03	0.590	0.20	-95.1	17.4	1.6	6.88
RNG-203-MW11	3-Oct-01	0.499	0.00	-146	17.3	9.1	7.34
	21-Jan-02	0.637	2.65	-105	15.7	2.2	7.45
	17-Oct-02	0.556	4.75	33	16.3	1.0	7.41
	23-Oct-02*	0.580	0.14	-77	16.6	13.9	8.05
	29-Jul-03	0.563	0.15	-130.5	16.9	2.5	7.39
RNG-203-MW12	10-Oct-01	0.580	0.00	-60	19.2	9.7	7.35
	20-Dec-01	0.443	0.74	-15	16.1	3.2	7.31
	18-Jan-02	0.505	10.59	99	14.8	10.1	7.70
	21-Oct-02	0.426	1.40	51	17.3	8.9	7.70
	4-Aug-03	0.428	0.23	-38.9	18.3	12.8	7.12
RNG-203-MW13	9-Oct-01	0.655	0.04	-68	17.0	4.1	7.51
	20-Dec-01	0.552	0.00	-65	16.0	0.3	7.28
	17-Jan-02	0.633	10.91	10	15.9	1.8	7.67
	22-Oct-02	0.483	1.96	90	16.8	8.7	7.18
	7-Aug-03	0.453	0.85	-65.6	18.4	1.1	7.46
RNG-203-MW14	23-Oct-01	0.663	3.53	-132	20.8	4.3	7.09
	23-Oct-02	0.519	0.26	-78	18.8	9.3	7.92
	16-Jul-03	0.460	0.20	-111.1	18.9	3.4	7.22

Table 2-7

Groundwater Field Parameters
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Date	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Temperature (°C)	Turbidity (NTU)	pH (SU)
RNG-203-MW15	11-Oct-01	0.930	0.00	-19	22.5	80.0	6.88
	22-Oct-02	0.757	1.12	106	19.7	15.4	7.11
	16-Jul-03	0.634	0.19	-77.6	19.0	10.8	6.84
RNG-203-MW16	24-Oct-02	0.373	0.24	105	17.4	7.9	7.40
	24-Jul-03	0.301	0.13	-80.1	17.8	13.1	7.04
RNG-203-MW17	23-Oct-02	0.432	5.50	160	16.9	4.7	7.48
	5-Aug-03	0.547	0.96	-101.7	22.0	7.1	9.81
RNG-203-MW18	7-Oct-02	0.558	5.05	222	17.9	5.6	7.25
	15-Aug-03	0.502	0.16	-40.8	17.8	2.5	7.28
RNG-203-MW19	26-Oct-02	0.467	2.59	181	17.4	14.7	5.84
	1-Aug-03	0.420	2.46	-37.1	17.0	2.5	7.20
RNG-203-MW20	8-Oct-02	0.493	0.38	77	17.1	1.6	4.85
	11-Sep-03	0.513	0.18	17	17.2	2.0	6.95
RNG-203-MW21	24-Oct-02	0.569	0.16	48	18.8	13.3	7.24
	25-Aug-03	0.613	0.68	67.9	17.9	19.8	6.94
RNG-203-MW22	25-Sep-03	0.511	2.34	-139.6	18.0	11.5	7.34
RNG-203-MW23	10-Oct-03	0.653	0.09	-100.5	19.1	19.0	7.10
RNG-203-MW24	24-Sep-03	0.572	0.05	-164.2	18.3	9.3	7.20
RNG-203-MW25	10-Oct-03	0.512	3.06	-13.1	20.6	12.6	7.38

*Resample of original sample on 17-Oct-02. The initial sample containers were broken during shipment.

°C - Degrees Celsius.
mg/L - Milligrams per liter.
mS/cm - Millisiemens per centimeter.
mV - Millivolt.
NR - Not recorded due to equipment malfunction.
NTU - Nephelometric turbidity unit.
ORP - Oxidation-reduction potential.
SU - Standard unit.

Table 2-8

Variances to the Site-Specific Field Sampling Plans
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Variance to the SFSP	Justification for Variance	Impact to Site Investigation
A groundwater sample was not collected from well RNG-203-MW02 during Phase I of the remedial investigation.	The well was purged dry and allowed to recharge, but did not produce enough water to collect a sample. However, during subsequent sampling events groundwater was present and samples were collected.	Minimal. The wells that were sampled provided sufficient data to determine the presence of site-related chemicals. It should be noted that this well was sampled during subsequent sampling events.
The SFSP proposed installation of a single-cased 4-inch polyvinyl chloride (PVC) well with a 10- to 20-foot section of PVC screen to straddle the residuum/bedrock interface at monitoring well location RNG-203-MW17. However, a permanent 8-inch steel outer casing was installed five feet into competent bedrock and the well screen was placed solely in bedrock.	The SFSP inadvertently proposed screening the residuum/bedrock interface using a 10- to 20-foot screeen at well location RNG-203-MW17.	None. The use of 8-inch steel outer casing allowed for successful installation of the well.

SFSP - Site-specific field sampling plan.

Table 3-1

Horizontal Hydraulic Gradients
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

	Upgradient Well	GW Elevation Feb.13, 2003 (ft above msl)	GW Elevation Oct. 13, 2003 (ft above msl)	Downgradient Well	GW Elevation Feb. 13, 2003 (ft above msl)	GW Elevation Oct. 13, 2003 (ft above msl)	Distance (ft)	Elevation Difference (ft)	Horizontal Gradient (ft/ft)
Residuum	RNG-203-MW04	586.76		RNG-203-MW15	581.95		185	4.81	0.026
	RNG-203-MW16	583.08		RNG-203-MW12	575.83		190	7.25	0.038
	RNG-203-MW05	587.82		RNG-203-MW10	575.55		370	12.27	0.033
	RNG-203-MW08	582.51		RNG-203-MW10	575.55		170	6.96	0.041
	RNG-203-MW05		577.62	RNG-203-MW10		567.99	370	9.63	0.026
	RNG-203-MW16		574.74	RNG-203-MW12		566.69	190	8.05	0.042
	RNG-203-MW04		577.32	RNG-203-MW15		575.80	185	1.52	0.008
	RNG-203-MW08		575.87	RNG-203-MW10		567.99	170	7.88	0.046
								Arithmetic Mean	0.033
Bedrock	RNG-203-MW09	581.19		RNG-203-MW11	576.5		160	4.69	0.029
	RNG-203-MW17	583.55		RNG-203-MW13	575.82		190	7.73	0.041
	RNG-203-MW17	583.55		RNG-203-MW19	574.76		280	8.79	0.031
	RNG-203-MW21	575.17		RNG-203-MW20	571.77		280	3.4	0.012
	RNG-203-MW09		574.35	RNG-203-MW11		564.98	160	9.37	0.059
	RNG-203-MW17		575.28	RNG-203-MW13		566.68	190	8.6	0.045
	RNG-203-MW17		575.28	RNG-203-MW19		570.83	280	4.45	0.016
	RNG-203-MW19		570.83	RNG-203-MW22		556.42	180	14.41	0.080
								Arithmetic Mean	0.039

GW - Groundwater.
ft - Feet.
msl - mean sea level.

Table 3-2

Vertical Hydraulic Gradients
Range K, Former Agent Training Area, Parcel 203(7)
Fort McClellan, Calhoun County , Alabama

Well Cluster ID	Midpoint of Screen Ele. (ft. amsl)	GW Elevation Feb. 13, 2003 (ft amsl)	GW Elevation Oct. 13, 2003 (ft amsl)	dH (Feb. 03) (ft)	dH (Oct. 03) (ft)	dL (ft)	Vertical Gradient (I) Feb. 13, 2003	Vertical Gradient (I) Oct. 13, 2003
Residuum to Bedrock								
RNG-203-MW06	563.32	579.04	568.17	+2.64		34.5	+0.0775	
RNG-203-MW07	529.27	576.4	566.94		+1.23	34.05		+0.036
RNG-203-MW08	565.25	582.51	575.87	+1.32		41.09	+0.032	
RNG-203-MW09	524.16	581.19	574.35		+1.52	41.09		+0.037
RNG-203-MW10	556.65	575.55	567.99	-0.95		34.67	-0.027	
RNG-203-MW11	521.98	576.5	564.98		+3.01	34.67		+0.087
RNG-203-MW12	547.58	575.83	566.69	+0.01		33.44	+0.0003	
RNG-203-MW13	514.14	575.82	566.68		+0.01	33.44		+0.0003
RNG-203-MW12	547.58	575.83	566.69	+0.18		55.69	+0.0032	
RNG-203-MW18	491.89	575.65	566.55		+0.14	55.69		+0.0025
Bedrock to Bedrock								
RNG-203-MW13	514.14	575.82	566.68	+0.17		22.25	+0.008	
RNG-203-MW18	491.89	575.65	566.55		+0.13	22.25		+0.006
RNG-203-MW20*	476.03	571.77	566.37	NA				

* Artesian well. Gradient not calculated for February 2003.
I, Vertical hydraulic gradient = dH / dL , + if downward gradient, - if upward gradient
dH = head shallower well - head deeper well
dL = vertical distance between mid-point screens
ft bgs - feet below ground surface.
ft amsl - feet above mean sea level.
GW - Groundwater.

Table 3-3

Summary of Hydraulic Conductivities
Range K, Former Agent Training Area, Parcel 203 (7)
Fort McClellan, Calhoun County, Alabama

Well No.	Date Tested	Aquifer Response	Saturated Aquifer Thickness (Assumed)	Test Type	Transmissivity T (ft^2/day)	Hydraulic Conductivity K (ft/min)	Hydraulic Conductivity K (cm/sec)	Hydraulic Conductivity K (ft/day)
Residuum								
RNG-203-MW01	11/26/2001	Unconfined	4.70	Rising	2.85E+02	4.21E-02	2.14E-02	6.07E+01
RNG-203-MW04	11/26/2001	Unconfined	14.20	Rising	3.70E+00	1.81E-04	9.19E-05	2.60E-01
Maximum					2.85E+02	4.21E-02	2.14E-02	6.07E+01
Minimum					3.70E+00	1.81E-04	9.19E-05	2.60E-01
Geometric Mean					3.25E+01	2.76E-03	1.40E-03	3.97E+00
Bedrock								
RNG-203-MW07	11/26/2001	Confined	30.00	Falling	1.16E+02	2.70E-03	1.37E-03	3.88E+00
				Rising	1.08E+02	2.51E-03	1.28E-03	3.61E+00
RNG-203-MW13	11/26/2001	Confined	20.00	Falling	8.45E+01	2.93E-03	1.49E-03	4.22E+00
				Rising	9.07E+01	3.15E-03	1.60E-03	4.54E+00
Maximum					1.16E+02	3.15E-03	1.60E-03	4.54E+00
Minimum					8.45E+01	2.51E-03	1.28E-03	3.61E+00
Geometric Mean					9.92E+01	2.81E-03	1.43E-03	4.05E+00

Notes: 1 Saturated Aquifer Thickness
For a confined Aquifer, this is the distance from the base of the upper confining unit to the top of the lower confining unit.
For an unconfined aquifer, this is the distance from the water table to the top of the lower confining unit.
2 Analysis Method
Cooper, Bredehoeft, Papadopulos (1967) method is used for the well with confined aquifers response.
Bouwer and Rice (1976) method is used for the well with unconfined aquifers response.

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-GP01 RG0026 14-Aug-01					RNG-203-GP02 RG0028 14-Aug-01					RNG-203-MW01 RG0001 29-Feb-00				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
METALS																			
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.18E+04			YES	YES	8.43E+03			YES	YES	1.17E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.34E+01			YES	YES	1.02E+01			YES	YES	1.32E+01			YES	YES
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	5.48E+01					7.32E+01					3.26E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	8.27E-01	J	YES			3.62E+00		YES		YES	5.30E-01	B			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					2.26E+00		YES		YES	ND				
Calcium	mg/kg	1.72E+03	NA	NA	2.30E+02	J				1.57E+03	J				6.80E+02	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	3.38E+01	J		YES	YES	2.04E+01	J			YES	3.53E+01	J		YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	1.45E+00	B				3.97E+01		YES		YES	2.80E+00	J			
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.94E+01		YES			2.22E+01		YES			2.39E+01	J	YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	3.18E+04			YES	YES	2.35E+04			YES	YES	3.13E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	8.77E+00					1.19E+01					1.17E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	2.13E+02					2.42E+02					3.04E+02	J			
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.48E+01					1.87E+02				YES	6.72E+01				
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					4.20E-02	J				6.50E-02				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	1.31E+01		YES			6.90E+01		YES		YES	2.39E+01		YES		
Potassium	mg/kg	8.00E+02	NA	NA	6.39E+02	J				5.92E+02	J				5.16E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	1.64E+00	J	YES		YES	ND					2.20E+00		YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	4.77E+01	J				7.73E+01	J				ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					1.00E+00	B		YES	YES
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	5.33E+01			YES	YES	2.34E+01				YES	5.91E+01	J	YES	YES	YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.66E+01	J	YES			2.75E+02	J	YES		YES	1.02E+02	J	YES		YES
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND				
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	3.50E-02					ND					3.00E-02	J			
Cumene	mg/kg	NA	7.77E+02	NA	ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					4.90E-03	B			
Tetrachloroethene	mg/kg	NA	1.21E+01	1.00E-02	ND					6.80E-03	J				ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-GP01 RG0026 14-Aug-01					RNG-203-GP02 RG0028 14-Aug-01					RNG-203-MW01 RG0001 29-Feb-00				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					6.80E-02	B			
PESTICIDES																			
4,4'-DDD	mg/kg	NA	2.54E+00	2.50E-03	ND					ND					NR				
4,4'-DDT	mg/kg	NA	1.79E+00	2.50E-03	ND					ND					NR				
Methoxychlor	mg/kg	NA	3.89E+01	1.99E-02	ND					ND					NR				
EXPLOSIVES																			
1,3,5-Trinitrobenzene	mg/kg	NA	2.32E+02	3.76E-01	ND					ND					ND				
2-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					4.20E-01				
3-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				
p-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					4.20E-01				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location					RNG-203-MW02					RNG-203-MW03					RNG-203-MW04				
Sample Number					RG0005					RG0007					RG0009				
Sample Date					1-Mar-00					1-Mar-00					2-Mar-00				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
METALS																			
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.72E+04		YES	YES	YES	1.50E+04			YES	YES	9.44E+03			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	6.20E-01	J				ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.23E+01			YES	YES	7.00E+00			YES		2.58E+01		YES	YES	YES
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	4.50E+01					3.52E+01					3.84E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	7.10E-01					5.50E-01	J				7.40E-01				
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	3.64E+02	J				1.25E+02	J				3.93E+02	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	3.27E+01	J		YES	YES	1.93E+01	J			YES	3.35E+01	J		YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	7.60E+00					9.50E-01	J				3.50E+00	J			
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	2.23E+01	J	YES			2.82E+01	J	YES			9.70E+00	J			
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	3.68E+04		YES	YES	YES	1.66E+04			YES	YES	2.49E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.18E+01					1.52E+01					2.26E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	3.76E+02	J				2.29E+02	J				2.28E+02	J			
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	4.26E+01					4.90E+00					1.12E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	3.80E-02	J				7.50E-02					4.70E-02				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	1.11E+01		YES			2.70E+00	J				6.30E+00				
Potassium	mg/kg	8.00E+02	NA	NA	6.31E+02	J				7.94E+02					3.40E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	ND					ND					ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	6.60E-01	B		YES		5.40E-01	B		YES		ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	5.65E+01	J		YES	YES	3.29E+01	J			YES	4.70E+01	J			YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.80E+01	J	YES			2.26E+01	J				2.65E+01	J			
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND				
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	1.60E-03	J				ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	1.90E-02	J				7.10E-02	J				ND				
Cumene	mg/kg	NA	7.77E+02	NA	ND					3.90E-03	J				ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	5.40E-03	B				4.20E-03	B				5.10E-03	B			
Tetrachloroethene	mg/kg	NA	1.21E+01	1.00E-02	ND					ND					8.70E-04	J			
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					9.70E-04	J				ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW02 RG0005 1-Mar-00					RNG-203-MW03 RG0007 1-Mar-00					RNG-203-MW04 RG0009 2-Mar-00				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	1.20E-01	B				9.10E-02	B				1.00E-01	B			
PESTICIDES																			
4,4'-DDD	mg/kg	NA	2.54E+00	2.50E-03	NR					NR					NR				
4,4'-DDT	mg/kg	NA	1.79E+00	2.50E-03	NR					NR					NR				
Methoxychlor	mg/kg	NA	3.89E+01	1.99E-02	NR					NR					NR				
EXPLOSIVES																			
1,3,5-Trinitrobenzene	mg/kg	NA	2.32E+02	3.76E-01	ND					ND					ND				
2-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				
3-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				
p-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location					RNG-203-MW05					RNG-203-MW06					RNG-203-MW08				
Sample Number					RG0011					RG0013					RG0015				
Sample Date					13-Aug-01					13-Aug-01					14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
METALS																			
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.13E+04			YES	YES	6.02E+03				YES	1.58E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.50E+01		YES	YES	YES	9.71E+00			YES		6.29E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	4.72E+01					3.75E+01					3.48E+02		YES		YES
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	7.61E-01	J				4.95E-01	J				1.43E+00		YES		YES
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	4.28E+02	J				7.80E+02	J				1.40E+04	J	YES		
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	6.28E+01	J	YES	YES	YES	3.08E+01	J		YES	YES	2.35E+01	J		YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	5.91E+00					4.18E+00					3.21E+01		YES		YES
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.41E+01		YES			9.96E+00					2.79E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	3.30E+04			YES	YES	2.09E+04			YES	YES	3.49E+04		YES	YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.37E+01					8.89E+00					2.03E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	4.30E+02					1.68E+02					3.77E+03		YES		
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	2.94E+02				YES	1.60E+02				YES	3.63E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	8.19E+00					8.85E+00					4.44E+01		YES		YES
Potassium	mg/kg	8.00E+02	NA	NA	5.55E+02	J				2.95E+02	J				6.45E+02				
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	1.72E+00	J	YES		YES	1.21E+00	J	YES		YES	8.59E-01	J	YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	6.13E-01	B	YES			6.94E-01	B	YES			ND				
Sodium	mg/kg	6.34E+02	NA	NA	4.75E+01	J				5.18E+01	J				1.26E+02				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	8.19E+01		YES	YES	YES	4.79E+01				YES	2.56E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.91E+01	J	YES			3.56E+01	J				7.82E+01	J	YES		YES
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					4.90E-02	J				ND				
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	8.90E-02					1.10E-01					3.20E-02				
Cumene	mg/kg	NA	7.77E+02	NA	ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					ND				
Tetrachloroethene	mg/kg	NA	1.21E+01	1.00E-02	ND					4.90E-03	J				ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					1.60E-02				YES	ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW05 RG0011 13-Aug-01					RNG-203-MW06 RG0013 13-Aug-01					RNG-203-MW08 RG0015 14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND				
PESTICIDES																			
4,4'-DDD	mg/kg	NA	2.54E+00	2.50E-03	ND					ND					1.40E-03	J			
4,4'-DDT	mg/kg	NA	1.79E+00	2.50E-03	ND					ND					ND				
Methoxychlor	mg/kg	NA	3.89E+01	1.99E-02	ND					1.60E-02	J				ND				
EXPLOSIVES																			
1,3,5-Trinitrobenzene	mg/kg	NA	2.32E+02	3.76E-01	ND					7.80E-01	J			YES	ND				
2-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				
3-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					7.90E-01	J				ND				
p-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW10 RG0017 14-Aug-01					RNG-203-MW12 RG0020 14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
METALS														
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	6.53E+03				YES	6.79E+03				YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	4.00E+00			YES		7.13E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	4.00E+01					6.26E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	3.37E-01	J				6.34E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	4.60E+02	J				1.39E+03	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.25E+01	J			YES	3.06E+01	J		YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	3.53E+00					1.60E+00	B			
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	7.51E+00					5.04E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.07E+04			YES	YES	2.07E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	8.40E+00					6.86E+00				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	2.04E+02					1.75E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	9.00E+01					3.20E+01				
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	5.47E+00					5.66E+00				
Potassium	mg/kg	8.00E+02	NA	NA	2.63E+02	J				2.69E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	5.08E+01	J				5.29E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	2.18E+01				YES	3.74E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	2.20E+01	J				1.56E+01	J			
VOLATILE ORGANIC COMPOUNDS														
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND				
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	5.20E-02					6.90E-02				
Cumene	mg/kg	NA	7.77E+02	NA	ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND				
Tetrachloroethene	mg/kg	NA	1.21E+01	1.00E-02	ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	4.50E-03	J				ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					1.90E-03	J			

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW10 RG0017 14-Aug-01					RNG-203-MW12 RG0020 14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS														
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND				
PESTICIDES														
4,4'-DDD	mg/kg	NA	2.54E+00	2.50E-03	ND					ND				
4,4'-DDT	mg/kg	NA	1.79E+00	2.50E-03	1.00E-03	J				ND				
Methoxychlor	mg/kg	NA	3.89E+01	1.99E-02	ND					ND				
EXPLOSIVES														
1,3,5-Trinitrobenzene	mg/kg	NA	2.32E+02	3.76E-01	ND					ND				
2-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				
3-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				
p-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW14 RG0022 16-Aug-01					RNG-203-MW15 RG0024 14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
METALS														
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	4.84E+03				YES	5.77E+03				YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	3.77E+00			YES		5.62E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	2.30E+01					4.10E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	2.24E-01	B				5.24E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	3.06E+02	J				4.68E+02	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.94E+01	J			YES	1.99E+01	J			YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	1.38E+00	J				2.77E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	4.49E+00					7.46E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.35E+04			YES	YES	1.61E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	7.27E+00					7.50E+00				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	1.58E+02					1.63E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	6.83E+01					1.72E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	2.55E+00					4.25E+00				
Potassium	mg/kg	8.00E+02	NA	NA	1.66E+02	J				3.15E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					1.12E+00	J	YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	4.17E+01	J				5.48E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	2.08E+01				YES	2.77E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	1.11E+01	J				1.69E+01	J			
VOLATILE ORGANIC COMPOUNDS														
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND				
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	1.00E-01	ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	3.10E-02					8.10E-02				
Cumene	mg/kg	NA	7.77E+02	NA	ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND				
Tetrachloroethene	mg/kg	NA	1.21E+01	1.00E-02	ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	8.70E-03	B				ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND				

Table 4-1

Surface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					RNG-203-MW14 RG0022 16-Aug-01					RNG-203-MW15 RG0024 14-Aug-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	VQ	>BKG	>SSSL	>ESV	Result	VQ	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS														
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND				
PESTICIDES														
4,4'-DDD	mg/kg	NA	2.54E+00	2.50E-03	ND					ND				
4,4'-DDT	mg/kg	NA	1.79E+00	2.50E-03	ND					ND				
Methoxychlor	mg/kg	NA	3.89E+01	1.99E-02	ND					ND				
EXPLOSIVES														
1,3,5-Trinitrobenzene	mg/kg	NA	2.32E+02	3.76E-01	3.50E-01	J				ND				
2-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				
3-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				
p-Nitrotoluene	mg/kg	NA	7.77E+01	NA	ND					ND				

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

[a] Bkg - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC (1998), *Final Background Metals Survey Report, Fort McClellan, Anniston, Alabama* , July.

[b] Residential human health site-specific screening level (SSSL) and ecological screening value (ESV) as given in IT (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.

J - Compound was positively identified; reported value is an estimated concentration.

mg/kg - Milligrams per kilogram.

NA - Not available.

ND - Not detected.

NR - Not requested.

VQ - Data validation qualifier.

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-GP01				RNG-203-GP02				RNG-203-MW01				RNG-203-MW02			
Sample Number				RG0027				RG0029				RG0002				RG0006			
Sample Date				14-Aug-01				14-Aug-01				29-Feb-00				1-Mar-00			
Sample Depth (Feet)				10 - 12				8 - 10				6 - 8				6 - 7			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/kg	1.36E+04	7.80E+03	1.17E+04			YES	9.40E+03			YES	1.01E+04			YES	1.53E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				6.90E-01	J			8.40E-01	J		
Arsenic	mg/kg	1.83E+01	4.26E-01	2.08E+01		YES	YES	1.41E+01			YES	4.24E+01		YES	YES	1.71E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	5.04E+01				6.01E+01				3.59E+01				3.84E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	1.37E+00		YES		1.71E+00		YES		8.20E-01				8.90E-01		YES	
Cadmium	mg/kg	2.20E-01	6.25E+00	ND				ND				ND				ND			
Calcium	mg/kg	6.37E+02	NA	2.23E+02	J			4.54E+01	J			3.43E+02	J			ND			
Chromium	mg/kg	3.83E+01	2.32E+01	4.21E+01	J	YES	YES	1.73E+01	J			2.62E+01	J		YES	2.73E+01	J		YES
Cobalt	mg/kg	1.75E+01	4.68E+02	6.95E+00				1.88E+00	J			3.90E+00	J			5.00E+00	J		
Copper	mg/kg	1.94E+01	3.13E+02	2.40E+01		YES		4.83E+01		YES		3.90E+01	J	YES		2.57E+01	J	YES	
Iron	mg/kg	4.48E+04	2.34E+03	4.61E+04		YES	YES	2.63E+04			YES	2.81E+04			YES	3.46E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	9.36E+00				1.09E+01				1.99E+01				9.50E+00			
Magnesium	mg/kg	7.66E+02	NA	2.02E+02				3.65E+02				2.38E+02	J			2.16E+02	J		
Manganese	mg/kg	1.36E+03	3.63E+02	5.76E+01				1.15E+01				6.23E+01				5.12E+01			
Mercury	mg/kg	7.00E-02	2.33E+00	3.30E-02	J			8.20E-02	J	YES		6.80E-02				7.50E-02		YES	
Nickel	mg/kg	1.29E+01	1.54E+02	3.57E+01		YES		6.33E+00				4.23E+01		YES		3.25E+01		YES	
Potassium	mg/kg	7.11E+02	NA	5.58E+02	J			7.22E+02		YES		5.28E+02	J			5.47E+02	J		
Selenium	mg/kg	4.70E-01	3.91E+01	2.12E+00	J	YES		8.14E+00	J	YES		1.30E+00		YES		ND			
Sodium	mg/kg	7.02E+02	NA	4.24E+01	J			6.31E+01	J			ND				ND			
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				1.10E+00	B		YES	9.60E-01	B		YES
Vanadium	mg/kg	6.49E+01	5.31E+01	5.96E+01			YES	3.78E+01				4.66E+01	J			2.80E+01	J		
Zinc	mg/kg	3.49E+01	2.34E+03	1.04E+02	J	YES		3.40E+01	J			1.48E+02	J	YES		1.07E+02	J	YES	

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-GP01				RNG-203-GP02				RNG-203-MW01				RNG-203-MW02			
Sample Number				RG0027				RG0029				RG0002				RG0006			
Sample Date				14-Aug-01				14-Aug-01				29-Feb-00				1-Mar-00			
Sample Depth (Feet)				10 - 12				8 - 10				6 - 8				6 - 7			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				2.20E-03	J			ND			
1,2-Dimethylbenzene	mg/kg	NA	1.55E+04	ND				ND				5.90E-03	J			ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				1.80E-03	J			ND			
Acetone	mg/kg	NA	7.76E+02	2.40E-02	J			5.80E-03	J			1.10E-02	B			1.20E-02	B		
Benzene	mg/kg	NA	2.17E+01	ND				ND				1.20E-03	J			ND			
Chlorobenzene	mg/kg	NA	1.55E+02	ND				ND				4.10E-03	J			ND			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				5.60E-01	J			ND			
Cumene	mg/kg	NA	7.77E+02	ND				ND				8.80E-04	J			ND			
Ethylbenzene	mg/kg	NA	7.77E+02	ND				ND				2.80E-03	J			ND			
Methylene chloride	mg/kg	NA	8.41E+01	ND				ND				7.00E-03	B			6.10E-03	B		
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				1.40E-03	J			ND			
Tetrachloroethene	mg/kg	NA	1.21E+01	ND				ND				ND				ND			
Toluene	mg/kg	NA	1.55E+03	ND				ND				1.10E-02				ND			
Trans-1,2-Dichloroethene	mg/kg	NA	1.55E+02	ND				ND				1.20E-01				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				1.70E-03	J			ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	2.70E-03	B			ND				ND				ND			
Vinyl chloride	mg/kg	NA	3.32E-01	ND				ND				3.00E-03	J			ND			
m,p-Xylenes	mg/kg	NA	1.55E+04	ND				ND				9.90E-03				ND			
o-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				4.60E-02	J			ND			
p-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				1.50E-02	J			ND			
p-Cymene	mg/kg	NA	1.55E+03	ND				ND				6.50E-03	J			ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				7.80E-02	B			1.20E-01	B		
PESTICIDES																			
beta-BHC	mg/kg	NA	3.50E-01	ND				ND				NR				NR			

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW03				RNG-203-MW04				RNG-203-MW05				RNG-203-MW06			
Sample Number				RG0008				RG0010				RG0012				RG0014			
Sample Date				1-Mar-00				2-Mar-00				13-Aug-01				13-Aug-01			
Sample Depth (Feet)				10 - 12				6 - 8				11 - 12				2 - 4			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/kg	1.36E+04	7.80E+03	1.45E+04		YES	YES	1.24E+04			YES	1.20E+04			YES	8.79E+03			YES
Antimony	mg/kg	1.31E+00	3.11E+00	9.80E-01	J			6.00E-01	J			ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	1.98E+01		YES	YES	1.57E+01			YES	1.31E+01			YES	2.57E+01		YES	YES
Barium	mg/kg	2.34E+02	5.47E+02	8.49E+01				7.00E+01				4.98E+01				6.41E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	3.00E+00		YES		1.00E+00		YES		9.38E-01	J	YES		2.35E+00		YES	
Cadmium	mg/kg	2.20E-01	6.25E+00	ND				ND				ND				2.63E-01	J	YES	
Calcium	mg/kg	6.37E+02	NA	8.47E+02	J	YES		3.67E+03	J	YES		2.68E+03	J	YES		1.40E+03	J	YES	
Chromium	mg/kg	3.83E+01	2.32E+01	1.78E+01	J			3.17E+01	J		YES	2.27E+01	J			1.84E+01	J		
Cobalt	mg/kg	1.75E+01	4.68E+02	1.79E+01		YES		5.00E+00	J			4.75E+00				6.95E+00			
Copper	mg/kg	1.94E+01	3.13E+02	5.73E+01	J	YES		1.78E+01	J			2.58E+01		YES		3.41E+01		YES	
Iron	mg/kg	4.48E+04	2.34E+03	6.93E+04		YES	YES	3.16E+04			YES	2.89E+04			YES	3.83E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.25E+01				9.10E+00				9.89E+00				1.20E+01			
Magnesium	mg/kg	7.66E+02	NA	9.19E+02	J	YES		2.63E+02	J			2.76E+02				1.75E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	2.30E+02				3.98E+01				6.42E+01				1.00E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	4.60E-02				6.70E-02				6.20E-02	J			3.60E-02	J		
Nickel	mg/kg	1.29E+01	1.54E+02	6.29E+01		YES		2.22E+01		YES		3.68E+01		YES		1.66E+01		YES	
Potassium	mg/kg	7.11E+02	NA	7.24E+02		YES		4.62E+02	J			6.94E+02				7.03E+02			
Selenium	mg/kg	4.70E-01	3.91E+01	1.40E+00		YES		ND				ND				4.04E+00	J	YES	
Sodium	mg/kg	7.02E+02	NA	7.69E+01	J			ND				7.95E+01	J			7.03E+01	J		
Thallium	mg/kg	1.40E+00	5.08E-01	1.70E+00	B	YES	YES	1.10E+00	B		YES	ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	5.30E+01	J			4.36E+01	J			3.90E+01				6.55E+01		YES	YES
Zinc	mg/kg	3.49E+01	2.34E+03	2.34E+02	J	YES		6.18E+01	J	YES		8.93E+01	J	YES		9.85E+01	J	YES	

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW03				RNG-203-MW04				RNG-203-MW05				RNG-203-MW06			
Sample Number				RG0008				RG0010				RG0012				RG0014			
Sample Date				1-Mar-00				2-Mar-00				13-Aug-01				13-Aug-01			
Sample Depth (Feet)				10 - 12				6 - 8				11 - 12				2 - 4			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				3.60E-02	J		
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	ND				ND				ND				1.80E-03	J		
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/kg	NA	1.55E+04	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	ND				ND				ND				ND			
Benzene	mg/kg	NA	2.17E+01	ND				ND				ND				ND			
Chlorobenzene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				6.90E-03			
Cumene	mg/kg	NA	7.77E+02	ND				ND				ND				ND			
Ethylbenzene	mg/kg	NA	7.77E+02	ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	6.00E-03	B			6.40E-03	B			ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
Tetrachloroethene	mg/kg	NA	1.21E+01	ND				1.40E-03	J			ND				ND			
Toluene	mg/kg	NA	1.55E+03	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				1.20E-02			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND			
Vinyl chloride	mg/kg	NA	3.32E-01	ND				ND				ND				ND			
m,p-Xylenes	mg/kg	NA	1.55E+04	ND				ND				ND				ND			
o-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
p-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
p-Cymene	mg/kg	NA	1.55E+03	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	8.00E-02	B			1.40E-01	B			ND				ND			
PESTICIDES																			
beta-BHC	mg/kg	NA	3.50E-01	NR				NR				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				RNG-203-MW08 RG0016 14-Aug-01 6 - 8				RNG-203-MW10 RG0019 14-Aug-01 10 - 12				RNG-203-MW12 RG0021 14-Aug-01 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS															
Aluminum	mg/kg	1.36E+04	7.80E+03	1.55E+04		YES	YES	7.15E+03				6.17E+03			
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	5.14E+00			YES	2.06E+01		YES	YES	1.18E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	4.56E+02		YES		3.37E+01				1.67E+02			
Beryllium	mg/kg	8.60E-01	9.60E+00	1.16E+00		YES		1.86E+00		YES		2.92E+00		YES	
Cadmium	mg/kg	2.20E-01	6.25E+00	7.40E-01		YES		ND				1.88E+00		YES	
Calcium	mg/kg	6.37E+02	NA	1.11E+04	J	YES		2.01E+03	J	YES		1.52E+03	J	YES	
Chromium	mg/kg	3.83E+01	2.32E+01	2.21E+01	J			1.55E+01	J			8.50E+00	J		
Cobalt	mg/kg	1.75E+01	4.68E+02	1.29E+01				1.13E+01				1.70E+01			
Copper	mg/kg	1.94E+01	3.13E+02	3.17E+01		YES		2.35E+01		YES		2.40E+01		YES	
Iron	mg/kg	4.48E+04	2.34E+03	3.29E+04			YES	4.19E+04			YES	1.95E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.39E+01				9.12E+00				9.53E+00			
Magnesium	mg/kg	7.66E+02	NA	4.62E+03		YES		2.52E+02				1.54E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	5.85E+02			YES	5.42E+01				2.79E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	ND				ND				ND			
Nickel	mg/kg	1.29E+01	1.54E+02	3.84E+01		YES		2.78E+01		YES		5.33E+01		YES	
Potassium	mg/kg	7.11E+02	NA	5.14E+02	J			3.76E+02	J			5.94E+02	J		
Selenium	mg/kg	4.70E-01	3.91E+01	ND				ND				6.95E-01	J	YES	
Sodium	mg/kg	7.02E+02	NA	7.08E+01	J			6.77E+01	J			6.82E+01	J		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	2.05E+01				2.23E+01				1.23E+01			
Zinc	mg/kg	3.49E+01	2.34E+03	9.69E+01	J	YES		1.10E+02	J	YES		2.33E+02	J	YES	

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				RNG-203-MW08 RG0016 14-Aug-01 6 - 8				RNG-203-MW10 RG0019 14-Aug-01 10 - 12				RNG-203-MW12 RG0021 14-Aug-01 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS															
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND			
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND			
1,2-Dimethylbenzene	mg/kg	NA	1.55E+04	ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	5.60E-03	J			ND				ND			
Benzene	mg/kg	NA	2.17E+01	ND				ND				ND			
Chlorobenzene	mg/kg	NA	1.55E+02	ND				ND				ND			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND			
Cumene	mg/kg	NA	7.77E+02	ND				ND				ND			
Ethylbenzene	mg/kg	NA	7.77E+02	ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	ND				ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND			
Tetrachloroethene	mg/kg	NA	1.21E+01	ND				ND				ND			
Toluene	mg/kg	NA	1.55E+03	ND				ND				ND			
Trans-1,2-Dichloroethene	mg/kg	NA	1.55E+02	ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				3.70E-03	J			ND			
Vinyl chloride	mg/kg	NA	3.32E-01	ND				ND				ND			
m,p-Xylenes	mg/kg	NA	1.55E+04	ND				ND				ND			
o-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				ND			
p-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND				ND			
p-Cymene	mg/kg	NA	1.55E+03	ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS															
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND			
PESTICIDES															
beta-BHC	mg/kg	NA	3.50E-01	ND				1.10E-03	J			ND			

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				RNG-203-MW14 RG0023 16-Aug-01 10 - 12				RNG-203-MW15 RG0025 14-Aug-01 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS											
Aluminum	mg/kg	1.36E+04	7.80E+03	9.29E+03			YES	1.09E+04			YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	3.93E+00			YES	1.10E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	1.09E+02				8.78E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	1.55E+00		YES		1.81E+00		YES	
Cadmium	mg/kg	2.20E-01	6.25E+00	3.76E+00		YES		2.57E+00		YES	
Calcium	mg/kg	6.37E+02	NA	3.51E+03	J	YES		4.54E+03	J	YES	
Chromium	mg/kg	3.83E+01	2.32E+01	1.95E+01	J			4.28E+01	J	YES	YES
Cobalt	mg/kg	1.75E+01	4.68E+02	1.66E+01				1.42E+01			
Copper	mg/kg	1.94E+01	3.13E+02	2.40E+01		YES		1.61E+01			
Iron	mg/kg	4.48E+04	2.34E+03	3.37E+04			YES	3.41E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.33E+01				1.45E+01			
Magnesium	mg/kg	7.66E+02	NA	5.22E+02				3.32E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	5.26E+02			YES	3.27E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	ND				7.20E-02	J	YES	
Nickel	mg/kg	1.29E+01	1.54E+02	5.32E+01		YES		3.07E+01		YES	
Potassium	mg/kg	7.11E+02	NA	4.45E+02	J			3.36E+02	J		
Selenium	mg/kg	4.70E-01	3.91E+01	ND				ND			
Sodium	mg/kg	7.02E+02	NA	7.55E+01	J			7.60E+01	J		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	2.19E+01				3.31E+01			
Zinc	mg/kg	3.49E+01	2.34E+03	1.40E+02	J	YES		1.48E+02	J	YES	

Table 4-2

Subsurface Soil Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				RNG-203-MW14 RG0023 16-Aug-01 10 - 12				RNG-203-MW15 RG0025 14-Aug-01 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS											
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND			
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND			
1,2-Dimethylbenzene	mg/kg	NA	1.55E+04	ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND			
Acetone	mg/kg	NA	7.76E+02	ND				ND			
Benzene	mg/kg	NA	2.17E+01	ND				ND			
Chlorobenzene	mg/kg	NA	1.55E+02	ND				ND			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND			
Cumene	mg/kg	NA	7.77E+02	ND				ND			
Ethylbenzene	mg/kg	NA	7.77E+02	ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND			
Tetrachloroethene	mg/kg	NA	1.21E+01	ND				ND			
Toluene	mg/kg	NA	1.55E+03	ND				ND			
Trans-1,2-Dichloroethene	mg/kg	NA	1.55E+02	ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	8.70E-03	B			ND			
Vinyl chloride	mg/kg	NA	3.32E-01	ND				ND			
m,p-Xylenes	mg/kg	NA	1.55E+04	ND				ND			
o-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND			
p-Chlorotoluene	mg/kg	NA	1.55E+02	ND				ND			
p-Cymene	mg/kg	NA	1.55E+03	ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS											
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND			
PESTICIDES											
beta-BHC	mg/kg	NA	3.50E-01	ND				ND			

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

[a] Bkg - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC (1998), *Final Background Metals Survey Report, Fort McClellan, Anniston, Alabama*, July.

[b] Residential human health site-specific screening level (SSSL) as given in IT (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.

J - Compound was positively identified; reported value is an estimated concentration.

mg/kg - Milligrams per kilogram.

NA - Not available.

ND - Not detected.

VQ - Data validation qualifier.

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW01 RG3001 1-Jun-00				RNG-203-MW01 RG3007 26-Sep-01				RNG-203-MW01 RG3024 14-Jan-02				RNG-203-MW01 RG3033 8-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	2.66E+00		YES	YES	1.10E+00				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	7.96E-02		YES	YES	9.42E-03	J		YES	NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	4.53E-02	J			2.81E-02				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	1.70E-03	B	YES		ND				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	1.90E-03	J		YES	ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	5.27E+00				5.59E+00				NR				NR			
Chromium	mg/L	NA	4.69E-03	2.80E-03	J			ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	5.60E-02		YES		1.55E-02	J			NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				5.52E-03	J			NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	2.77E+01		YES	YES	1.64E+01		YES	YES	NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	1.90E-03	J			1.45E-03	B			NR				NR			
Magnesium	mg/L	2.13E+01	NA	6.95E-01	J			6.09E-01	J			NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	1.17E+00		YES	YES	6.67E-01		YES	YES	NR				NR			
Mercury	mg/L	NA	4.69E-04	7.20E-05	J			ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	3.82E-02	J		YES	2.50E-02				NR				NR			
Potassium	mg/L	7.20E+00	NA	4.89E-01	J			ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	ND				ND				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	2.20E-03	J			ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	1.24E+01				3.76E+00				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	4.60E-03	J			ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	1.50E-01				1.12E-01				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				7.15E-02	J			NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				4.82E-03	J		YES	NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				2.54E-02				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				6.53E+00				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				4.16E-03	J			NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				9.03E+00		YES	YES	NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				5.75E-01	J			NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				6.64E-01		YES	YES	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				2.42E-02				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				1.73E-03	B			NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				3.25E+00				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				1.64E-01				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW01				RNG-203-MW01				RNG-203-MW01				RNG-203-MW01			
Sample Number				RG3001				RG3007				RG3024				RG3033			
Sample Date				1-Jun-00				26-Sep-01				14-Jan-02				8-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	1.00E-01	J		YES	2.60E-02			YES	2.40E-02			YES	1.40E-02			YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				5.10E-03			YES	2.90E-03			YES	1.70E-03			YES
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				3.90E-04	J			ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				8.20E-03	B		
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	3.80E+00			YES	1.50E-01			YES	2.10E-01			YES	1.30E-01			YES
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	6.50E-02	B		YES	ND				3.40E-04	B			2.50E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				1.30E-03	J		YES	8.10E-04	J			7.00E-04	J		
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	1.20E+00			YES	5.20E-02			YES	5.70E-02			YES	3.80E-02			YES
Trichloroethene	mg/L	NA	4.51E-03	ND				5.40E-03			YES	6.10E-03			YES	3.10E-03			
Vinyl chloride	mg/L	NA	3.20E-05	4.30E-02	J		YES	2.00E-03	J		YES	8.80E-04	J		YES	ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	ND				ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				ND				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				ND				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				ND				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				ND				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				ND				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				ND				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	2.80E-04				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	ND				ND				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	ND				ND				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	ND				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				1.40E-02				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				6.50E-03			YES	NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW01 SM3001 11-Aug-03				RNG-203-MW02 RG3004 6-Jun-00				RNG-203-MW02 RG3034 9-Oct-02				RNG-203-MW02 SM3002 14-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				4.18E-01	B			NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.37E-02	J			NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				6.30E-04	B			NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				9.36E+00				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				8.90E-03	J			NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				2.81E-01				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				1.03E+00	J			NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				8.79E-02			YES	NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				5.30E-03	J			NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				2.99E-01	J			NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				3.47E+00	J			NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				5.80E-03	J			NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW01				RNG-203-MW02				RNG-203-MW02				RNG-203-MW02			
Sample Number				SM3001				RG3004				RG3034				SM3002			
Sample Date				11-Aug-03				6-Jun-00				9-Oct-02				14-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	1.60E-03			YES	ND				3.40E-03			YES	ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	3.50E-04	J			ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	2.20E-04	J			ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				1.40E-04	B			ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				1.80E-04	J			ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	1.00E-01			YES	ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	2.90E-04	B			ND				ND				1.10E-03	B		
Tetrachloroethene	mg/L	NA	1.26E-03	4.00E-04	J			ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	3.20E-02			YES	ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	1.80E-03				ND				4.20E-04	J			ND			
Vinyl chloride	mg/L	NA	3.20E-05	1.90E-03			YES	ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				1.60E-03				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				1.30E-03			YES	NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW03 RG3005 1-Jun-00				RNG-203-MW03 RG3009 3-Oct-01				RNG-203-MW03 RG3036 22-Oct-02				RNG-203-MW03 SM3003 25-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	1.88E-01	B			ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	8.75E-02	J			7.49E-02				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	1.13E+02		YES		1.17E+02		YES		NR				NR			
Chromium	mg/L	NA	4.69E-03	ND				ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	1.66E+00			YES	1.14E+00			YES	NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				NR				NR			
Magnesium	mg/L	2.13E+01	NA	1.46E+01				1.40E+01				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	1.88E-01			YES	1.73E-01			YES	NR				NR			
Mercury	mg/L	NA	4.69E-04	ND				ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	3.10E-03	J			ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	2.64E+00	J			1.00E+00	J			NR				NR			
Selenium	mg/L	NA	7.82E-03	ND				ND				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	ND				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	2.66E+01	J	YES		2.38E+01		YES		NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	5.90E-03	J			ND				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				7.09E-02				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				1.12E+02		YES		NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				1.14E-02	J			NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				7.79E-01	J		YES	NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				1.34E+01				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				1.64E-01			YES	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				1.50E+00	J			NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				2.26E+01		YES		NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW03 RG3005 1-Jun-00				RNG-203-MW03 RG3009 3-Oct-01				RNG-203-MW03 RG3036 22-Oct-02				RNG-203-MW03 SM3003 25-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	1.40E-04	B			ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				5.00E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	ND				ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				ND				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				ND				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				ND				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				ND				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				ND				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				ND				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	ND				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	ND				ND				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	ND				ND				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	ND				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				ND				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW04 RG3006 1-Jun-00				RNG-203-MW04 RG3011 1-Oct-01				RNG-203-MW04 RG3025 14-Jan-02				RNG-203-MW04 RG3037 9-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	1.34E+01		YES	YES	ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	7.90E-03	J		YES	ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	1.33E-01	J	YES	YES	4.28E-02				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	2.70E-03	B	YES		ND				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	1.14E-02		YES	YES	ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	9.17E+01		YES		8.89E+01		YES		NR				NR			
Chromium	mg/L	NA	4.69E-03	4.09E-02			YES	ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	1.06E-02	J			ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	2.44E-02	B			ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	1.47E+01		YES	YES	1.43E-01	J			NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	1.40E-02		YES		ND				NR				NR			
Magnesium	mg/L	2.13E+01	NA	3.24E+00	J			2.51E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	1.26E-01			YES	3.54E-02	J			NR				NR			
Mercury	mg/L	NA	4.69E-04	1.70E-04	J			ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	2.58E-02	J			ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	1.37E+00	J			ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	ND				ND				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	ND				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	4.44E+00	J			3.44E+00				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	4.55E-02	J	YES	YES	ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	1.52E-01				ND				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				2.88E-03	J		YES	NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				4.51E-02				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				9.58E+01		YES		NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				2.34E-01	J			NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				2.67E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				3.58E-02	J			NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				3.44E+00				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW04 RG3006 1-Jun-00				RNG-203-MW04 RG3011 1-Oct-01				RNG-203-MW04 RG3025 14-Jan-02				RNG-203-MW04 RG3037 9-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	9.80E-04	J		YES	8.90E-04	J		YES	1.20E-03			YES	ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	4.30E-03	B			ND				ND				7.40E-03	B		
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	1.80E-04	B			ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				4.80E-04	B			2.40E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	3.10E-04	J			2.10E-04	J			3.80E-04	J			ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	2.90E-04	J			2.40E-04	J			4.90E-04	J			3.40E-04	J		
Vinyl chloride	mg/L	NA	3.20E-05	7.00E-03			YES	5.30E-03			YES	7.30E-03			YES	7.00E-03			YES
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	1.60E-03	J			ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				ND				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				ND				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				ND				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				ND				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				ND				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				ND				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	ND				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	6.50E-04				ND				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	ND				ND				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	7.80E-04				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				1.80E-03	J			NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				1.40E-03	J			NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW04				RNG-203-MW05				RNG-203-MW05				RNG-203-MW05			
Sample Number				SM3004				RG3012				RG3038				SM3006			
Sample Date				13-Aug-03				2-Oct-01				9-Oct-02				22-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.80E-02				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				8.43E+01		YES		NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				1.42E-01	J			NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				1.38E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				1.63E-01			YES	NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				2.05E-03	B			NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				2.10E+00				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.81E-02				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				8.81E+01		YES		NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				1.34E-01	J			NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				1.45E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				1.55E-01			YES	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				2.18E+00				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW04 SM3004 13-Aug-03				RNG-203-MW05 RG3012 2-Oct-01				RNG-203-MW05 RG3038 9-Oct-02				RNG-203-MW05 SM3006 22-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				7.80E-03	B			ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	9.20E-04	B			ND				2.00E-04	B			3.80E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	3.30E-04	J			ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	5.00E-04	J			ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	3.70E-03	J		YES	ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				ND				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				ND				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				ND				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				ND				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				ND				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				ND				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				ND				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				ND				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				ND				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW06 RG3014 17-Oct-01				RNG-203-MW06 RG3026 15-Jan-02				RNG-203-MW06 RG3039 10-Oct-02				RNG-203-MW06 SM3007 11-Sep-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	6.27E-01				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	5.47E-03	J		YES	NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	3.59E-02				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	6.71E+01		YES		NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	ND				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	8.47E-01	J		YES	NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	3.26E+00				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	2.76E-01			YES	NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	ND				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	9.93E-01	J			NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	2.75E-03	B			NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	ND				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	4.34E+01		YES		NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	1.86E-01	J			NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	7.76E-03	B		YES	NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	3.42E-02				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	7.02E+01		YES		NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	2.24E-01	J			NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	3.44E+00				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	3.02E-01			YES	NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	1.01E+00	J			NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	ND				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	4.05E+01		YES		NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW06 RG3014 17-Oct-01				RNG-203-MW06 RG3026 15-Jan-02				RNG-203-MW06 RG3039 10-Oct-02				RNG-203-MW06 SM3007 11-Sep-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	1.80E-02			YES	4.10E-02			YES	5.60E-02			YES	7.30E-02			YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	2.20E-03			YES	4.50E-03			YES	5.30E-03			YES	6.00E-03			YES
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				2.30E-04	J		YES	2.70E-04	J		YES
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	2.40E-04	J			3.70E-04	J			ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	2.80E-04	J			ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	6.10E-04	J			8.90E-04	B			7.30E-04	J			5.70E-04	J		
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	5.30E-03				1.40E-02				2.40E-02			YES	4.50E-02			YES
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	2.40E-04	B			4.30E-04	B			ND				3.90E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	3.60E-04	J			7.60E-04	J			1.80E-03			YES	4.00E-03			YES
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	1.40E-03				3.40E-03				5.70E-03				1.00E-02			
Trichloroethene	mg/L	NA	4.51E-03	3.80E-02			YES	1.10E-01			YES	1.20E-01			YES	1.10E-01			YES
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				6.00E-04	J		YES
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	ND				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	3.50E-05	J			NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	ND				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	1.40E-04	J			NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	ND				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	ND				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	3.50E-05	J			NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	ND				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	ND				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	ND				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	ND				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW07 RG3015 16-Oct-01				RNG-203-MW07 RG3027 16-Jan-02				RNG-203-MW07 RG3040 11-Oct-02				RNG-203-MW07 SM3008 28-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	9.46E-02	J			NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	1.77E-01	J	YES	YES	NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	8.98E+01	J	YES		NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	ND				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	1.09E-01	B			NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	4.26E+00				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	1.61E-01			YES	NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	ND				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	ND				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	2.87E-03	B			NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	ND				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	7.79E+00	J			NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	ND				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	1.70E-01		YES	YES	NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	8.86E+01		YES		NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	7.60E-02	B			NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	4.24E+00				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	1.56E-01			YES	NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	9.98E-01	J			NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	4.68E-03	B			NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	7.05E+00				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW07 RG3015 16-Oct-01				RNG-203-MW07 RG3027 16-Jan-02				RNG-203-MW07 RG3040 11-Oct-02				RNG-203-MW07 SM3008 28-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.00E-04	B			2.30E-04	B			ND				7.20E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	ND				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	ND				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	ND				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	ND				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	ND				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	ND				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	ND				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	ND				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	ND				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	ND				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	ND				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW08 / RG3016 / 5-Oct-01				RNG-203-MW08 / RG3041 / 14-Oct-02				RNG-203-MW08 / SM3009 / 29-Jul-03				RNG-203-MW09 / RG3017 / 4-Oct-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	1.37E-01	B			NR				NR				2.53E-01	B		
Arsenic	mg/L	1.78E-02	4.46E-05	ND				NR				NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	1.10E-01			YES	NR				NR				1.55E-01		YES	YES
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				NR				ND			
Calcium	mg/L	5.65E+01	NA	1.73E+02		YES		NR				NR				1.03E+02		YES	
Chromium	mg/L	NA	4.69E-03	ND				NR				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				1.19E-02	J		
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	3.38E-01	J			NR				NR				2.62E-01	J		
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				NR				ND			
Magnesium	mg/L	2.13E+01	NA	3.13E+01		YES		NR				NR				1.92E+01			
Manganese	mg/L	5.81E-01	7.35E-02	2.90E-01			YES	NR				NR				5.34E-02	J		
Mercury	mg/L	NA	4.69E-04	ND				NR				NR				ND			
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				ND			
Potassium	mg/L	7.20E+00	NA	1.81E+00	J			NR				NR				3.08E+00	J		
Selenium	mg/L	NA	7.82E-03	ND				NR				NR				ND			
Silver	mg/L	4.00E-03	7.82E-03	ND				NR				NR				ND			
Sodium	mg/L	1.48E+01	NA	2.06E+01		YES		NR				NR				1.46E+01			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				NR				NR				5.61E-03	B		
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				ND			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	ND				NR				NR				ND			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				NR				NR				3.43E-03	J		YES
Barium	mg/L	1.27E-01	1.10E-01	8.57E-02				NR				NR				1.39E-01		YES	YES
Calcium	mg/L	5.65E+01	NA	1.44E+02		YES		NR				NR				1.00E+02		YES	
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	1.81E-01	J			NR				NR				1.31E-02	B		
Magnesium	mg/L	2.13E+01	NA	2.55E+01		YES		NR				NR				1.85E+01			
Manganese	mg/L	5.81E-01	7.35E-02	2.33E-01			YES	NR				NR				4.92E-02	J		
Nickel	mg/L	NA	3.13E-02	ND				NR				NR				ND			
Potassium	mg/L	7.20E+00	NA	1.06E+00	J			NR				NR				2.50E+00	J		
Selenium	mg/L	NA	7.82E-03	3.77E-03	J			NR				NR				ND			
Sodium	mg/L	1.48E+01	NA	1.63E+01		YES		NR				NR				1.50E+01		YES	
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				NR				ND			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW08 RG3016 5-Oct-01				RNG-203-MW08 RG3041 14-Oct-02				RNG-203-MW08 SM3009 29-Jul-03				RNG-203-MW09 RG3017 4-Oct-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				3.70E-04	B			ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				NR				ND			
Phenanthrene	mg/L	NA	2.81E-01	ND				NR				NR				ND			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	ND				NR				NR				ND			
Heptachlor	mg/L	NA	1.46E-05	ND				NR				NR				ND			
Methoxychlor	mg/L	NA	7.55E-03	ND				NR				NR				ND			
alpha-Chlordane	mg/L	NA	1.75E-04	ND				NR				NR				ND			
beta-BHC	mg/L	NA	3.61E-05	2.00E-05	J			NR				NR				ND			
delta-BHC	mg/L	NA	4.49E-04	ND				NR				NR				ND			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	ND				NR				NR				ND			
2-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				ND			
Nitrobenzene	mg/L	NA	7.12E-04	ND				NR				NR				ND			
p-Nitrotoluene	mg/L	NA	1.53E-02	ND				NR				NR				ND			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	ND				NR				NR				ND			
1,4-Oxathiane	mg/L	NA	1.56E-03	ND				NR				NR				ND			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW09 / RG3042 / 16-Oct-02				RNG-203-MW09 / SM3010 / 30-Jul-03				RNG-203-MW10 / RG3018 / 8-Oct-01				RNG-203-MW10 / RG3028 / 16-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				2.83E-01	B			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				3.64E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				1.60E-01		YES	YES	NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				1.15E+02		YES		NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				8.21E-01	J		YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				1.00E+01				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				9.21E-01		YES	YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				1.19E+00	J			NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.96E+00				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				ND				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				2.18E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				1.47E-01		YES	YES	NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				1.06E+02		YES		NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				4.78E-01	J		YES	NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				9.28E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				8.44E-01		YES	YES	NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.32E+00				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW09				RNG-203-MW09				RNG-203-MW10				RNG-203-MW10			
Sample Number				RG3042				SM3010				RG3018				RG3028			
Sample Date				16-Oct-02				30-Jul-03				8-Oct-01				16-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.10E-04	B			ND				2.50E-04	B			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				ND				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				ND				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				ND				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				ND				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				ND				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				ND				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				ND				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				ND				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				ND				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				ND				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				ND				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW10 RG3043 16-Oct-02				RNG-203-MW10 SM3011 28-Jul-03				RNG-203-MW11 RG3019 3-Oct-01				RNG-203-MW11 RG3029 21-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				ND				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				3.52E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				4.89E-01		YES	YES	NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				9.77E+01		YES		NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				1.20E+00			YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				7.76E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				2.04E-01			YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				1.77E-03	B			NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.24E+00				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				ND				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				3.61E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				5.02E-01		YES	YES	NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				9.98E+01		YES		NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				1.22E+00			YES	NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				7.89E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				2.10E-01			YES	NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.30E+00				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW10 RG3043 16-Oct-02				RNG-203-MW10 SM3011 28-Jul-03				RNG-203-MW11 RG3019 3-Oct-01				RNG-203-MW11 RG3029 21-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	4.30E-04	B			5.00E-04	B			ND				5.00E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				ND				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				ND				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				ND				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				ND				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				ND				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				ND				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				ND				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				ND				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				ND				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				ND				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				ND				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW11 / RG3044R / 23-Oct-02				RNG-203-MW11 / SM3012 / 29-Jul-03				RNG-203-MW12 / RG3020 / 10-Oct-01				RNG-203-MW12 / RG3020R / 20-Dec-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				1.05E-01	B			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				6.91E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				2.32E-01		YES	YES	NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				9.33E+01		YES		NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				2.72E-01	J			NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				3.82E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				2.08E-01			YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				5.31E+00				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				ND				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				5.94E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				1.98E-01		YES	YES	NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				7.83E+01		YES		NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				1.03E-01	B			NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				3.20E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				1.71E-01			YES	NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				4.69E+00				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW11 RG3044R 23-Oct-02				RNG-203-MW11 SM3012 29-Jul-03				RNG-203-MW12 RG3020 10-Oct-01				RNG-203-MW12 RG3020R 20-Dec-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				2.80E-04	B			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				ND				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				ND				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				ND				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				ND				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				ND				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				ND				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				ND				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				ND				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				ND				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				ND				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				ND				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW12 / RG3030 / 18-Jan-02				RNG-203-MW12 / RG3045 / 21-Oct-02				RNG-203-MW12 / SM3013 / 4-Aug-03				RNG-203-MW13 / RG3021 / 9-Oct-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				ND			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				2.23E-01		YES	YES
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				ND			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				1.08E+02		YES	
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				1.56E-01	B		
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				ND			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				5.02E+00			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				3.33E-02	J		
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				ND			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				ND			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				ND			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				ND			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				NR				ND			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				6.29E+00			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				ND			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				ND			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				ND			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				2.09E-01		YES	YES
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				9.94E+01		YES	
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				1.32E-01	B		
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				4.71E+00			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				3.14E-02	J		
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				ND			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				8.47E-01	J		
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				ND			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				5.90E+00			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				ND			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW12				RNG-203-MW12				RNG-203-MW12				RNG-203-MW13			
Sample Number				RG3030				RG3045				SM3013				RG3021			
Sample Date				18-Jan-02				21-Oct-02				4-Aug-03				9-Oct-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				6.10E-03			YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				2.80E-04	J		
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				8.20E-04	B		
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				2.90E-04	J		
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	5.50E-04	B			ND				ND				3.80E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				5.90E-02			YES
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				1.30E-02	J		YES
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				NR				ND			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				ND			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				ND			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				ND			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				ND			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				ND			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				ND			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				NR				ND			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				9.00E-04			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				NR				ND			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				ND			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				ND			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				ND			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW13 RG3021R 20-Dec-01				RNG-203-MW13 RG3032 17-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS											
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR			
DISSOLVED METALS											
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW13 RG3021R 20-Dec-01				RNG-203-MW13 RG3032 17-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS											
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				4.30E-03			YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				3.80E-04	J		
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				2.10E-04	J		YES
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				2.70E-04	J		
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				1.30E-03	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				5.40E-02			YES
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS											
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR			
PESTICIDES											
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR			
EXPLOSIVES											
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR			
CWM BREAKDOWN PRODUCTS											
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW13 RG3046 22-Oct-02				RNG-203-MW13 SM3014 7-Aug-03				RNG-203-MW14 RG3022 23-Oct-01				RNG-203-MW14 RG3047 23-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				8.92E-02	B			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				4.58E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				5.41E-02				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				1.02E+02		YES		NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				2.56E+00			YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				3.10E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				3.08E-01			YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.22E+00				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				5.28E-02	B			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				3.69E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				5.47E-02				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				1.09E+02		YES		NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				1.19E+00			YES	NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				3.27E+00				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				1.86E-01			YES	NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				7.75E+00				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW13 RG3046 22-Oct-02				RNG-203-MW13 SM3014 7-Aug-03				RNG-203-MW14 RG3022 23-Oct-01				RNG-203-MW14 RG3047 23-Oct-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	5.40E-03			YES	ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				2.50E-03	J			ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				2.20E-04	J			ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	6.20E-04	J			ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	2.50E-04	J			ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				3.20E-04	B			ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	4.60E-02			YES	4.20E-03				2.00E-04	B			ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				4.60E-04	J			ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				ND				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				ND				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				ND				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				ND				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				ND				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				ND				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				ND				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				1.60E-05	J			NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				ND				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				3.80E-04	J			NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				ND				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				ND				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				ND				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW14 SM3015 16-Jul-03				RNG-203-MW15 RG3023 11-Oct-01				RNG-203-MW15 RG3049 22-Oct-02				RNG-203-MW15 SM3017 16-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				6.85E-01				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.04E-01				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				1.39E+02		YES		NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				4.69E-01	J			NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				4.63E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				3.34E-01			YES	NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				8.88E+00				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				9.15E-02				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				1.25E+02		YES		NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				2.58E-02	J			NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				4.13E+00				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				3.26E-01			YES	NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				ND				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				5.79E+00				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW14 SM3015 16-Jul-03				RNG-203-MW15 RG3023 11-Oct-01				RNG-203-MW15 RG3049 22-Oct-02				RNG-203-MW15 SM3017 16-Jul-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	2.20E-04	B			ND				ND				2.60E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				ND				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				ND				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				3.20E-05	J		YES	NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				ND				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				3.70E-05	J			NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				2.10E-04	J		YES	NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				ND				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				ND				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				ND				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				ND				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				ND				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				ND				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW16 RG3050 24-Oct-02				RNG-203-MW16 SM3018 24-Jul-03				RNG-203-MW17 RG3051 23-Oct-02				RNG-203-MW17 SM3019 6-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW16 RG3050 24-Oct-02				RNG-203-MW16 SM3018 24-Jul-03				RNG-203-MW17 RG3051 23-Oct-02				RNG-203-MW17 SM3019 6-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				4.80E-04	B			ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW18 RG3052 7-Oct-02				RNG-203-MW18 SM3020 15-Aug-03				RNG-203-MW19 RG3053 26-Oct-02				RNG-203-MW19 SM3021 1-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				RNG-203-MW18 RG3052 7-Oct-02				RNG-203-MW18 SM3020 15-Aug-03				RNG-203-MW19 RG3053 26-Oct-02				RNG-203-MW19 SM3021 1-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	2.60E-01			YES	1.70E-01			YES	ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	1.10E-03			YES	8.60E-04	J		YES	ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	3.00E-04	J		YES	ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	8.10E-04	J		YES	ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	3.10E-02			YES	1.30E-02			YES	ND				ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	1.00E-03	J			7.50E-04	J			ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	4.80E-04	B			1.50E-03	B			ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	7.50E-03			YES	3.30E-03			YES	ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	2.50E-04	J			ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	4.70E-01			YES	2.90E-01	J		YES	ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW20 RG3054 8-Oct-02				RNG-203-MW20 SM3022 11-Sep-03				RNG-203-MW21 RG3055 24-Oct-02				RNG-203-MW21 SM3023 25-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location				RNG-203-MW20				RNG-203-MW20				RNG-203-MW21				RNG-203-MW21			
Sample Number				RG3054				SM3022				RG3055				SM3023			
Sample Date				8-Oct-02				11-Sep-03				24-Oct-02				25-Aug-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	2.10E-01			YES	3.10E-01			YES	ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	7.10E-04	J			7.40E-04	J		YES	ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	3.70E-04	J		YES	2.20E-04	J		YES	ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				4.30E-04	J			ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	1.90E-02			YES	1.30E-02			YES	ND				6.00E-03			YES
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	1.20E-03				8.30E-04	J			ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	2.60E-04	B			4.60E-04	B			ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	4.10E-03			YES	3.30E-03			YES	ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	2.80E-04	J			2.00E-04	J			ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	3.80E-01			YES	3.00E-01			YES	ND				ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW22 SM3024 25-Sep-03				RNG-203-MW23 SM3025 10-Oct-03				RNG-203-MW24 SM3027 24-Sep-03				RNG-203-MW25 SM3028 10-Oct-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Silver	mg/L	4.00E-03	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			
DISSOLVED METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				RNG-203-MW22 SM3024 25-Sep-03				RNG-203-MW23 SM3025 10-Oct-03				RNG-203-MW24 SM3027 24-Sep-03				RNG-203-MW25 SM3028 10-Oct-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL	Result	VQ	>BKG	>SSSL
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	3.40E-03			YES	ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	3.10E-04	J			ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	5.60E-04	J			ND				ND				ND			
1,3,5-Trimethylbenzene	mg/L	NA	6.00E-03	2.80E-04	J			ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Benzene	mg/L	NA	1.41E-03	1.90E-03			YES	ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				6.20E-04	J			5.10E-04	J			ND			
Chloroform	mg/L	NA	1.15E-03	7.10E-04	J			ND				2.20E-04	J			ND			
Chloromethane	mg/L	NA	3.93E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Ethylbenzene	mg/L	NA	1.40E-01	4.40E-04	J			ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.10E-04	B			ND				2.70E-04	B			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	1.30E-03				ND				6.60E-04	J			ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	1.10E-02			YES	ND				2.40E-04	J			ND			
Vinyl chloride	mg/L	NA	3.20E-05	ND				ND				ND				ND			
m,p-Xylenes	mg/L	NA	2.80E+00	2.50E-03				ND				4.20E-04	J			ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				NR			
Phenanthrene	mg/L	NA	2.81E-01	NR				NR				NR				NR			
PESTICIDES																			
Endrin aldehyde	mg/L	NA	3.75E-05	NR				NR				NR				NR			
Heptachlor	mg/L	NA	1.46E-05	NR				NR				NR				NR			
Methoxychlor	mg/L	NA	7.55E-03	NR				NR				NR				NR			
alpha-Chlordane	mg/L	NA	1.75E-04	NR				NR				NR				NR			
beta-BHC	mg/L	NA	3.61E-05	NR				NR				NR				NR			
delta-BHC	mg/L	NA	4.49E-04	NR				NR				NR				NR			
EXPLOSIVES																			
2,4,6-Trinitrotoluene	mg/L	NA	2.23E-03	NR				NR				NR				NR			
2-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
Nitrobenzene	mg/L	NA	7.12E-04	NR				NR				NR				NR			
p-Nitrotoluene	mg/L	NA	1.53E-02	NR				NR				NR				NR			
CWM BREAKDOWN PRODUCTS																			
1,4-Dithiane	mg/L	NA	1.56E-02	NR				NR				NR				NR			
1,4-Oxathiane	mg/L	NA	1.56E-03	NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

[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) as given in IT (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.
J - Compound was positively identified; reported value is an estimated concentration.
mg/L - Milligrams per liter.
NA - Not available.
ND - Not detected.
NR - Not requested.
VQ - Data validation qualifier.

Table 5-1

Physical and Chemical Parameters Affecting Environmental Fate and Transport of Selected Organic Chemicals*
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Compound	Molecular Wt. (g/mole)	Water Solubility (mg/L@20°C)	Vapor Pressure (mm Hg@20°C)	Octanol-Water Partition Coeff. (Log K_{ow})	Adsorption Coeff. (Log K_{oc})	K_{oc}-Calc. (mL/g)	K_{oc}-Meas. (mL/g)	Henry's Law Constant (atm-m^3/mol)	Specific Gravity
Volatile Organic Compounds									
Benzene	78.11 [b]	1.78 E+03 [e]	9.52E+01(25C) [b]	2.13 [e]	1.77 [e]	58.9 [e]	61.7 [e]	5.55 E-03 [e]	0.8765 [d]
Chloroform	119.39 [b]	7.95 E+03 [b]	2.46 E+02(25C) [b]	1.92 [e]	1.60 [e]	39.8 [e]	52.5 [e]	3.39 E-03 [d]	1.4832 [d]
Cis-1,2-Dichloroethene	96.94 [b]	3.50 E+03 [e]	2.00 E+02(35C) [b]	1.86 [e]	1.55 [e]	3.55 E+01 [e]	NA	4.08 E-03 [e]	1.2837 [d]
Trans-1,2-Dichloroethene	96.94 [b]	6.30 E+03 [b]	3.40 E+02(25C) [b]	2.06 [b]	1.72 [e]	5.25 E+01 [e]	38 [e]	6.72 E-03 [b]	1.2565 [d]
1,1-Dichloroethane	98.96 [b]	5.06 E+03 [b]	2.27 E+02 (25C) [b]	1.79 [b]	1.50 [e]	3.16 E+01 [e]	53.4 [e]	5.87 E-03 [b]	1.1757 [d]
1,2-Dichloroethane	98.96 [b]	8.52 E+03 [b]	7.87E+01 [b]	1.48 [b]	1.24 [e]	17.4 [e]	38 [e]	9.77E-04 [b]	1.2351 [d]
1,1,2-Trichloroethane	133.42 [b]	4.42 E+03 [b]	3.03 E+01 [b]	2.07 [b] calculated	1.77 [e]	5.01 E+01 [e]	75 [e]	1.2 E-03 [b]	1.4397 [d]
1,1,2,2-Tetrachlorethane	167.86 [b]	2.96 E+03 [b]	6.10 (25C) [b]	2.39 [b]	1.97 [e]	93.3 [e]	79 [e]	4.55 E-04 [b]	1.5953 [d]
Trichloroethene	131.4 [b]	1.10 E+03(25C) [b]	6.9E+01 [b]	2.71 [e]	2.22 [e]	166 [e]	94.3 [e]	1.03 E-02 [b]	1.4642 [d]
Tetrachloroethene	165.82 [b]	1.50 E+02(25C) [b]	1.85E+01(25C) [b]	2.67 [e]	2.19 [e]	155 [e]	265 [e]	1.49 E-02 [b]	1.6227 [d]
Vinyl Chloride	62.5 [b]	2.76 E+03(25C) [e]	2.66E+03(25C) [b]	1.50 [e]	1.27 [e]	18.6 [e]	NA	2.70 E-02 [e]	0.916 [d]
Semivolatile Organic Compounds									
bis(2-ethylhexyl)phthalate	390.54 [a]	3.00 E-01(25C) [a]	6.45 E-06 [a]	7.30 [e]	7.18 [e]	1.51E+07 [e]	1.11E+05 [e]	1.1 E-05 [a]	0.99 [d]
Explosives									
Nitrobenzene	123.11 [g]	1.90 E+03 [g]	1.5 E -01 [g]	1.87 [g]	1.56 [g]	6.46 [e]	1.19 E +02 [e]	1.31 E -05 [g]	1.204 [g]
1,3,5 Trinitrobenzene	213.11 [f]	3.5 E-03(25C) [f]	3.2 E-06 [f]	1.18 [f]	1.88 [f]	75.86 [f]	NA	3.08 E-09 [f]	1.76 [f]
Orthosulfur Compounds									
1,4-Oxathiane	104.2 [h]	1.67 E+05 [h]	3.9 [h]	0.60 [h]	NA	NA	NA	NA	1.114 [h]
Pesticides									
beta BHC	290.83 [d]	7.00 E-01(25C) [d]	1.70 E-01(40C) [d]	3.80 [d]	3.1	1.26 E+03 [e]	2.14 E+03 [e]	2.3 E-07 [d]	1.89 (19C) [d]
Heptachlor	373.32 [d]	5.60 E-02(25C) [d]	3.00 E-04(25C) [d]	4.40 [d]	6.15	1.41 E+06 [e]	9.53 E+03 [e]	1.48 E-03 [d]	1.57 (9C) [d]

* Chemicals identified exceeding SSSLs or ESVs, as presented in Chapter 4.0.

References:

[a] Howard, P.H., 1989.
[b] Howard, P. H., 1990.
[c] U.S. Environmental Protection Agency, 1986.
[d] U.S. Environmental Protection Agency, 1992.
[e] U.S. Environmental Protection Agency, 1996.
[f] ATSDR, 1995.
[g] ATSDR, 1990.
[h] Munro, 1999.

atm-m^3/mol = Atmospheres per cubic meter per mole.
NA= not available.

g/mole = Grams per mole.
mg/L = Milligrams per liter.
°C = Degrees Celsius.
mm Hg = Millimeters of mercury.
K_{ow} = Octanol-water coefficient.
K_{oc} = Organic partitioning coefficient.
mL/g = Milliliters per gram.

Table 5-2

Distribution Coefficient, K_d
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Metal	K_d Geometric Mean	K_d Range	No. Values	Potential Groundwater Mobility
Antimony	45			Medium
Arsenic	200			Low
Arsenic (+3)	3.3	1.0-8.3	19	Medium
Barium	60			Medium-Low
Beryllium	650			Low
Cadmium	6.4	1.26-26.8	28	Medium
Chromium	850			Low
Chromium (+3)	--	--	--	--
Chromium (+6)	37	1.2-1800	18	Medium
Cobalt	47			Medium
Copper	35			Medium
Lead	900			Low
Manganese	65			Medium-Low
Mercury	10			Medium
Nickel	150			Low
Selenium	300			Low
Silver	46	10-1,000	16	Medium
Thallium	1,500			Low
Vanadium	1,000			Low
Zinc	38	0.1-8,000	146	Medium

Units are in milliliters per gram.
"--" - Not available.

References:
Baes and Sharp, 1983.
Baes et al., 1984.

Table 5-3

Contaminant Migration Rates
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Contaminant	f_{oc} (kg/kg)	K_{oc} (mL/g)	K_d	D_b (g/cm^3)	n	k (ft/day)	I (avg)	V (ft/day)	R_d	V_c (ft/day)	V_c (ft/year)	Distance Migrated in 50 Years (ft)
Residuum												
1,1,2,2-Tetrachlorethane	0.006	79	0.4740	1.6	0.4	3.97E+00	0.033	0.4367	2.8960	0.1508	55.0	2750
Trichloroethene	0.006	94.3	0.5658	1.6	0.4	3.97E+00	0.033	0.4367	3.2632	0.1338	48.8	2440
Vinyl Chloride	0.006	18.6	0.1116	1.6	0.4	3.97E+00	0.033	0.4367	1.4464	0.3019	110.2	5510
Bedrock												
1,1,2,2-Tetrachloroethane	0.015	79	1.1850	2.43	0.2	4.05E+00	0.039	1.053	15.3978	0.0684	24.9	1245
Trichloroethene	0.015	94.3	1.4145	2.43	0.2	4.05E+00	0.039	1.053	18.1862	0.0579	21.1	1055
Vinyl Chloride	0.015	18.6	0.2790	2.43	0.2	4.05E+00	0.039	1.053	4.3899	0.2399	87.6	4380

f_{oc}, Organic carbon content in soil and bedrock.

K_d, soil adsorption or distribution coefficient = $(K_{oc})(f_{oc})$; relation valid as long as solute present is at concentrations below about 1/2 of its solubility.

Percentage of organic carbon assumed at 0.6% (f_{oc} = 0.006) EPA default for soils.

Percentage of organic carbon assumed at 1.5% (f_{oc} = 0.015) for sedimentary rocks; Trask and Patnode (1942).

V_c, average velocity of solute = V / R_d.

V, average linear groundwater velocity $= k (I) / n_e$

- I = horizontal hydraulic gradient
- k = hydraulic conductivity
- n_e = effective porosity = n - S, where S is specific retention or storativity.

R_d, retardation coefficient = $1 + (K_d)(D_b/n)$

D_b = bulk density, g/cm^3:

- D_b assumed for limestone @ 2.43 g/cm^3
- D_b assumed for shales @ 2.3 g/cm^3
- D_b assumed for sandstones @ 2.1 g/cm^3.

n = total porosty:

- n assumed @ 40% for silts and clays
- n_e estimated @ 30% for residuum, Walton (1988), Domenico and Schwartz (1990)
- n assumed @ 20% for bedrock
- n_e estimated @ 15% for limestone, Walton (1988), Domenico and Schwartz (1990).

avg = Average.
ft = Feet.
ft/day = Feet per day.
ft/year = Feet per year.
g/cm^3 = Grams per cubic centimeter.
kg/kg = Kilogram per kilogram.
mL/g = Milliliters per gram.

Table 6-1

Receptor Exposure Scenarios
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Source Medium	Transport Model	Exposure Medium	Exposure Route
Current Site Use			
National Guardsperson			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions, volatilization	Air	Inhalation
Recreational Site User			
Surface soil	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
Future Site Use			
National Guardsperson			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions, volatilization	Air	Inhalation
Groundwater[b]	None	Water	Drinking water consumption Dermal contact
	Volatilization	Air	Inhalation
Recreational Site User			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
Groundskeeper			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
Groundwater[b]	None	Water	Drinking water consumption Dermal contact

Table 6-1

Receptor Exposure Scenarios
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Source Medium	Transport Model	Exposure Medium	Exposure Route
Future Site Use (continued)			
Construction Worker			
Total Soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions, volatilization	Air	Inhalation
Groundwater[b]	None	Water	Drinking water consumption Dermal contact
On-Site Resident			
Total Soil[a]	None	Soil	Incidental ingestion Dermal contact
Groundwater[b]	None	Water	Drinking water consumption Dermal contact
	Volatilization	Air	Inhalation

[a]See Section 6.3 for explanation of total soil
[b]It is conservatively assumed that groundwater is developed as a potable source.

Table 6-2

Surface Soil Samples Used in Streamlined Risk Assessment
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (feet)	Chemical Analyses Performed
RNG-203-MW01	RG0001	29-Feb-00	0 - 2	Metals, NITRO, SVOC, VOC
RNG-203-MW02	RG0005	1-Mar-00	0 - 2	Metals, NITRO, SVOC, VOC
RNG-203-MW03	RG0007	1-Mar-00	0 - 2	Metals, NITRO, SVOC, VOC
RNG-203-MW04	RG0009	2-Mar-00	0 - 2	Metals, NITRO, SVOC, VOC
RNG-203-MW05	RG0011	13-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW06	RG0013	13-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW08	RG0015	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW10	RG0017	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW12	RG0020	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW14	RG0022	16-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW15	RG0024	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-GP01	RG0026	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-GP02	RG0028	14-Aug-01	0 - 1	CA BKDN, CL HERB, CL PEST, Metals, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC

CA BKDN - Chemical agent breakdown.
CL HERB - Chlorinated herbicides.
CL PEST - Organochlorine pesticides.
NITRO - Nitroaromatic compounds.
OP PEST - Organophosphate pesticides.
Ortho - Orthosulfur compounds.
PCB - Polychlorinated biphenyls.
SVOC - Semivolatile organic compounds.
VOC - Volatile organic compounds.

Table 6-3

Subsurface Soil Samples Used in Streamlined Risk Assessment
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample depth (feet)	Chemical Analyses Performed
RNG-203-MW01	RG0002	29-Feb-00	6 - 8	Metals, NITRO, SVOC, VOC
RNG-203-MW02	RG0006	1-Mar-00	6 - 7	Metals, NITRO, SVOC, VOC
RNG-203-MW03	RG0008	1-Mar-00	10 - 12	Metals, NITRO, SVOC, VOC
RNG-203-MW04	RG0010	2-Mar-00	6 - 8	Metals, NITRO, SVOC, VOC
RNG-203-MW05	RG0012	13-Aug-01	11 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW06	RG0014	13-Aug-01	2 - 4	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW08	RG0016	14-Aug-01	6 - 8	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW10	RG0019	14-Aug-01	10 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW12	RG0021	14-Aug-01	10 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW14	RG0023	16-Aug-01	10 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-MW15	RG0025	14-Aug-01	10 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-GP01	RG0027	14-Aug-01	10 - 12	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC
RNG-203-GP02	RG0029	14-Aug-01	8 - 10	CA BKDN, CL HERB, CL PEST, M, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC

CA BKDN - Chemical agent breakdown.
CL HERB - Chlorinated herbicides.
CL PEST - Organochlorine pesticides.
M - Metals.
NITRO - Nitroaromatic compounds.
OP PEST - Organophosphate pesticides.
Ortho - Orthosulfur compounds.
PCB - Polychlorinated biphenyls.
SVOC - Semivolatile organic compounds.
VOC - Volatile organic compounds.

Table 6-4

Groundwater Samples Used in Streamlined Risk Assessment
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analysis Performed
RNG-203-MW01	RG3001	1-Jun-00	Metals, NITRO, SVOC, VOC
RNG-203-MW02	RG3004	6-Jun-00	Metals, NITRO, SVOC, VOC
RNG-203-MW03	RG3005	1-Jun-00	Metals, NITRO, SVOC, VOC
RNG-203-MW04	RG3006	1-Jun-00	Metals, NITRO, SVOC, VOC
RNG-203-MW01	RG3007	26-Sep-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW03	RG3009	3-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW04	RG3011	1-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW05	RG3012	2-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW06	RG3014	17-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW07	RG3015	16-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW08	RG3016	5-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW09	RG3017	4-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW10	RG3018	8-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW11	RG3019	3-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW12	RG3020	10-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW12	RG3020R	20-Dec-01	VOC
RNG-203-MW13	RG3021	9-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW13	RG3021R	20-Dec-01	VOC
RNG-203-MW14	RG3022	23-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW15	RG3023	11-Oct-01	CA BKDN, CL HERB, CL PEST, Metals, N/N, NITRO, OP PEST, Ortho, PCBs, SVOC, VOC, Wet Chem
RNG-203-MW01	RG3024	14-Jan-02	VOC
RNG-203-MW04	RG3025	14-Jan-02	VOC
RNG-203-MW06	RG3026	15-Jan-02	VOC
RNG-203-MW07	RG3027	16-Jan-02	VOC
RNG-203-MW10	RG3028	16-Jan-02	VOC
RNG-203-MW11	RG3029	21-Jan-02	VOC
RNG-203-MW12	RG3030	18-Jan-02	VOC
RNG-203-MW13	RG3032	17-Jan-02	VOC
RNG-203-MW01	RG3033	8-Oct-02	VOC
RNG-203-MW02	RG3034	9-Oct-02	VOC

Table 6-4

Groundwater Samples Used in Streamlined Risk Assessment
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analysis Performed
RNG-203-MW03	RG3036	22-Oct-02	VOC
RNG-203-MW04	RG3037	9-Oct-02	VOC
RNG-203-MW05	RG3038	9-Oct-02	VOC
RNG-203-MW06	RG3039	10-Oct-02	VOC
RNG-203-MW07	RG3040	11-Oct-02	VOC
RNG-203-MW08	RG3041	14-Oct-02	VOC
RNG-203-MW09	RG3042	16-Oct-02	VOC
RNG-203-MW10	RG3043	16-Oct-02	VOC
RNG-203-MW11	RG3044R	23-Oct-02	VOC
RNG-203-MW12	RG3045	21-Oct-02	VOC
RNG-203-MW13	RG3046	22-Oct-02	VOC
RNG-203-MW14	RG3047	23-Oct-02	VOC
RNG-203-MW15	RG3049	22-Oct-02	VOC
RNG-203-MW16	RG3050	24-Oct-02	VOC
RNG-203-MW17	RG3051	23-Oct-02	VOC
RNG-203-MW18	RG3052	7-Oct-02	VOC
RNG-203-MW19	RG3053	26-Oct-02	VOC
RNG-203-MW20	RG3054	8-Oct-02	VOC
RNG-203-MW21	RG3055	24-Oct-02	VOC
RNG-203-MW01	SM3001	11-Aug-03	VOC
RNG-203-MW02	SM3002	14-Aug-03	VOC
RNG-203-MW03	SM3003	25-Jul-03	VOC
RNG-203-MW04	SM3004	13-Aug-03	VOC
RNG-203-MW05	SM3006	22-Jul-03	VOC
RNG-203-MW06	SM3007	11-Sep-03	VOC
RNG-203-MW07	SM3008	28-Jul-03	VOC
RNG-203-MW08	SM3009	29-Jul-03	VOC
RNG-203-MW09	SM3010	30-Jul-03	VOC
RNG-203-MW10	SM3011	28-Jul-03	VOC
RNG-203-MW11	SM3012	29-Jul-03	VOC

Table 6-4

Groundwater Samples Used in Streamlined Risk Assessment
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analysis Performed
RNG-203-MW12	SM3013	4-Aug-03	VOC
RNG-203-MW13	SM3014	7-Aug-03	VOC
RNG-203-MW14	SM3015	16-Jul-03	VOC
RNG-203-MW15	SM3017	16-Jul-03	VOC
RNG-203-MW16	SM3018	24-Jul-03	VOC
RNG-203-MW17	SM3019	6-Aug-03	VOC
RNG-203-MW18	SM3020	15-Aug-03	VOC
RNG-203-MW19	SM3021	1-Aug-03	VOC
RNG-203-MW20	SM3022	11-Sep-03	VOC
RNG-203-MW21	SM3023	25-Aug-03	VOC
RNG-203-MW22	SM3024	25-Sep-03	VOC
RNG-203-MW23	SM3025	10-Oct-03	VOC
RNG-203-MW24	SM3027	24-Sep-03	VOC
RNG-203-MW25	SM3028	10-Oct-03	VOC

CA BKDN - Chemical agent breakdown.
CL HERB - Chlorinated herbicides.
CL PEST - Organochlorine pesticides.
NITRO - Nitroaromatic compounds.
N/N - Nitrate/nitrite.
OP PEST - Organophosphate pesticides.
Ortho - Orthosulfur compounds.
PCB - Polychlorinated biphenyl.
SVOC - Semivolatile organic compounds.
VOC - Volatile organic compounds.
Wet Chem - Wet chemistry includes sulfate, sulfite, TDS, TOC, TSS.

Table 6-5

Selection of Site-Related Chemicals for Surface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[b]	Arithmetic Mean (mg/kg)	95% UCL[c] (mg/kg)	Background Screening Criterion[d] (mg/kg)	Site-Related?[e]
Metals											
Aluminum	13 / 13	100	4.84E+03	1.72E+04	3.08E+00	1.20E+01	L	1.00E+04	1.52E+04	1.63E+04	N (c)
Antimony	1 / 13	8	6.20E-01	6.20E-01	5.30E-01	5.01E+00	NP	1.62E+00	2.72E+00	1.99E+00	N (a)
Arsenic	13 / 13	100	3.77E+00	2.58E+01	2.37E-01	4.40E-01	L	1.03E+01	1.76E+01	1.37E+01	N (c)
Barium	13 / 13	100	2.30E+01	3.48E+02	3.96E-02	1.30E-01	NP	6.76E+01	1.73E+02	1.24E+02	N (b)
Beryllium	11 / 11	100	3.37E-01	3.62E+00	1.37E-02	6.70E-02	L	9.66E-01	2.21E+00	8.00E-01	Y
Cadmium	1 / 13	8	2.26E+00	2.26E+00	6.10E-02	2.84E-01	NP	2.58E-01	1.01E+00	2.90E-01	Y
Calcium	13 / 13	100	1.25E+02	1.40E+04	4.89E+00	1.00E+01	NP	1.63E+03	6.27E+03	1.72E+03	N (e)
Chromium	13 / 13	100	1.25E+01	6.28E+01	1.50E-01	5.65E-01	L	2.88E+01	4.44E+01	3.70E+01	N (c)
Cobalt	11 / 11	100	9.50E-01	3.97E+01	1.80E-01	4.61E-01	L	9.49E+00	2.74E+01	1.52E+01	N (b)
Copper	13 / 13	100	4.49E+00	2.82E+01	2.30E-01	9.80E-01	L	1.56E+01	2.64E+01	1.27E+01	N (c)
Iron	13 / 13	100	1.07E+04	3.68E+04	2.21E+00	2.87E+00	N	2.42E+04	2.85E+04	3.42E+04	N (c)
Lead	13 / 13	100	6.86E+00	2.26E+01	1.50E-01	2.49E-01	L	1.19E+01	1.81E+01	4.01E+01	N (a)
Magnesium	13 / 13	100	1.58E+02	3.77E+03	3.40E+00	6.13E+00	NP	5.12E+02	1.73E+03	1.03E+03	N (e)
Manganese	13 / 13	100	4.90E+00	3.63E+02	6.67E-02	2.00E-01	L	1.24E+02	2.59E+02	1.58E+03	N (a)
Mercury	5 / 13	38	3.80E-02	7.50E-02	9.80E-03	3.64E-02	NP	3.01E-02	5.65E-02	8.00E-02	N (a)
Nickel	13 / 13	100	2.55E+00	6.90E+01	3.30E-01	1.18E+00	L	1.58E+01	4.02E+01	1.03E+01	Y
Potassium	13 / 13	100	1.66E+02	7.94E+02	2.47E+01	1.56E+02	N	4.63E+02	5.60E+02	8.00E+02	N (e)
Selenium	6 / 13	46	8.59E-01	2.20E+00	4.35E-01	5.65E-01	NP	8.05E-01	1.68E+00	4.80E-01	N (c)
Sodium	9 / 13	69	4.17E+01	1.26E+02	2.19E+01	6.20E+01	L	5.14E+01	8.40E+01	6.34E+02	N (e)
Vanadium	13 / 13	100	2.08E+01	8.19E+01	1.80E-01	5.25E-01	L	4.12E+01	6.40E+01	5.88E+01	N (c)
Zinc	13 / 13	100	1.11E+01	2.75E+02	4.07E-01	5.28E-01	L	5.76E+01	1.45E+02	4.06E+01	Y
Organochlorine Pesticides and PCBs											
4,4'-DDD	1 / 9	11	1.40E-03	1.40E-03	1.20E-03	1.40E-03	NP	7.06E-04	1.10E-03		Y
4,4'-DDT	1 / 9	11	1.00E-03	1.00E-03	5.70E-04	8.30E-04	NP	4.05E-04	7.42E-04		Y
Methoxychlor	1 / 9	11	1.60E-02	1.60E-02	2.70E-03	5.00E-03	NP	3.51E-03	1.05E-02		Y
Nitroaromatic Compounds											
1,3,5-Trinitrobenzene	2 / 13	15	3.50E-01	7.80E-01	5.70E-02	9.00E-02	NP	1.16E-01	3.86E-01		Y
2-Nitrotoluene	1 / 13	8	4.20E-01	4.20E-01	9.90E-02	1.40E-01	NP	8.27E-02	2.09E-01		Y
3-Nitrotoluene	1 / 13	8	7.90E-01	7.90E-01	1.10E-01	1.40E-01	NP	1.16E-01	3.67E-01		Y
p-Nitrotoluene	1 / 13	8	4.20E-01	4.20E-01	9.00E-02	9.50E-02	NP	7.56E-02	2.04E-01		Y
Volatile Organic Compounds											
1,1,2,2-Tetrachloroethane	1 / 13	8	4.90E-02	4.90E-02	3.20E-04	1.60E-03	NP	4.12E-03	2.08E-02		Y
1,2,4-Trimethylbenzene	1 / 13	8	1.60E-03	1.60E-03	3.10E-04	8.30E-04	NP	3.44E-04	8.25E-04		Y
Acetone	11 / 13	85	1.90E-02	1.10E-01	2.80E-03	8.70E-03	N	4.81E-02	6.47E-02		Y
Cumene	1 / 13	8	3.90E-03	3.90E-03	4.80E-04	7.30E-04	NP	5.76E-04	1.82E-03		Y
p-Cymene	2 / 13	15	9.70E-04	1.90E-03	2.60E-04	8.50E-04	NP	4.13E-04	1.04E-03		Y

Table 6-5

Selection of Site-Related Chemicals for Surface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[b]	Arithmetic Mean (mg/kg)	95% UCL[c] (mg/kg)	Background Screening Criterion[d] (mg/kg)	Site-Related?[e]
Tetrachloroethene	3 / 13	23	8.70E-04	6.80E-03	3.80E-04	6.70E-04	NP	1.16E-03	3.79E-03		Y
Trichloroethene	1 / 13	8	1.60E-02	1.60E-02	3.20E-04	6.70E-04	NP	1.45E-03	6.87E-03		Y
Trichlorofluoromethane	1 / 12	8	4.50E-03	4.50E-03	2.80E-04	6.70E-04	NP	5.80E-04	2.18E-03		Y

mg/kg = milligram per kilogram
N = Chemical is determined not to be site-related ; Y = Chemical is determined to be site-related; NA = not applicable.
[a] Surface soil is defined as soil from 0 to 2 feet below ground surface.
[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution.
[c] 95% Upper Confidence Limit (UCL) calculated for L and NP using Chebychev Method (EPA, 1997, *Technology Support Center Issue: The Lognormal Distribution in Environmental Applications*, Office of Solid Waste and Emergency Response, EPA/600/R-95/128, NTIS No. PB96-963502.).
N distribution UCL calculated using EPA, 1992, *Supplemental Guidance to RAGS: Calculating the Concentration Term,* Office of Solid Waste and Emergency Response, Washington, DC, Publication 9285.7-081.
[d] Background screening criterion for inorganic constituents is 2 times the mean background concentration for surface soil.
(Science Applications International Corporation, 1998, Background Metals Survey Report, Fort McClellan, Anniston, Alabama, July).
[e] Rationale for exclusion of a chemical as site-related:
N (a) = excluded as a site-related chemical based on the Tier 1 statistical site to background evaluation.
N (b) = excluded as a site-related chemical based on the Tier 2 statistical site to background evaluation.
N (c) = excluded as a site-related chemical based on the Tier 3 geochemical evaluation.
N (d) = detected only at concentrations near or below the reporting limit in less than 5 percent of samples.
N (e) = essential nutrient.

Table 6-6

Selection of Site-Related Chemicals for Subsurface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[b]	Arithmetic Mean (mg/kg)	95% UCL[c] (mg/kg)	Background Screening Criterion[d] (mg/kg)	Site-Related?[e]
Metals											
Aluminum	13 / 13	100	6.17E+03	1.55E+04	3.14E+00	1.30E+01	N	1.10E+04	1.25E+04	1.50E+04	N (c)
Antimony	4 / 13	31	6.00E-01	9.80E-01	5.10E-01	4.87E+00	NP	1.77E+00	2.64E+00	1.66E+00	N (a)
Arsenic	13 / 13	100	3.93E+00	4.24E+01	2.41E-01	4.80E-01	L	1.70E+01	2.92E+01	1.60E+01	N (c)
Barium	13 / 13	100	3.37E+01	4.56E+02	4.03E-02	1.40E-01	L	1.01E+02	2.40E+02	1.76E+02	N (c)
Beryllium	13 / 13	100	8.20E-01	3.00E+00	1.28E-02	7.20E-02	L	1.64E+00	2.56E+00	8.31E-01	Y
Cadmium	5 / 13	38	2.63E-01	3.76E+00	5.90E-02	2.76E-01	L	7.58E-01	2.25E+00	2.51E-01	Y
Calcium	12 / 13	92	4.54E+01	1.11E+04	4.98E+00	1.08E+01	L	2.45E+03	6.17E+03	1.20E+03	N (e)
Chromium	13 / 13	100	8.50E+00	4.28E+01	1.40E-01	5.50E-01	L	2.40E+01	3.64E+01	3.76E+01	N (c)
Cobalt	13 / 13	100	1.88E+00	1.79E+01	1.80E-01	4.49E-01	L	9.56E+00	1.65E+01	1.63E+01	N (c)
Copper	13 / 13	100	1.61E+01	5.73E+01	2.20E-01	9.53E-01	L	3.01E+01	4.49E+01	1.59E+01	N (c)
Iron	13 / 13	100	1.95E+04	6.93E+04	2.25E+00	1.18E+01	L	3.58E+04	5.08E+04	3.92E+04	N (c)
Lead	13 / 13	100	9.10E+00	1.99E+01	1.40E-01	2.42E-01	L	1.18E+01	NA	3.93E+01	N (a)
Magnesium	13 / 13	100	1.54E+02	4.62E+03	3.30E+00	5.96E+00	NP	6.56E+02	2.15E+03	9.06E+02	N (e)
Manganese	13 / 13	100	1.15E+01	5.85E+02	6.80E-02	2.20E-01	L	1.84E+02	4.23E+02	1.47E+03	N (a)
Mercury	9 / 13	69	3.30E-02	8.20E-02	9.40E-03	3.54E-02	N	4.66E-02	5.92E-02	7.04E-02	N (b)
Nickel	13 / 13	100	6.33E+00	6.29E+01	3.20E-01	1.15E+00	N	3.53E+01	4.30E+01	1.16E+01	Y
Potassium	13 / 13	100	3.36E+02	7.24E+02	2.37E+01	1.52E+02	N	5.54E+02	6.18E+02	7.57E+02	N (e)
Selenium	6 / 13	46	6.95E-01	8.14E+00	4.43E-01	5.50E-01	NP	1.50E+00	4.33E+00	4.80E-01	Y
Sodium	10 / 13	77	4.24E+01	7.95E+01	2.23E+01	6.72E+01	NP	6.04E+01	8.37E+01	6.67E+02	N (e)
Vanadium	13 / 13	100	1.23E+01	6.55E+01	1.80E-01	5.11E-01	N	3.72E+01	4.52E+01	6.17E+01	N (b)
Zinc	13 / 13	100	3.40E+01	2.34E+02	4.10E-01	5.14E-01	L	1.23E+02	1.96E+02	3.79E+01	Y
Organochlorine Pesticides											
beta-BHC	1 / 9	11	1.10E-03	1.10E-03	4.30E-04	5.30E-04	NP	3.34E-04	7.62E-04		Y
Volatile Organic Compounds											
1,1,2,2-Tetrachloroethane	1 / 13	8	3.60E-02	3.60E-02	3.30E-04	1.70E-03	NP	3.13E-03	1.54E-02		Y
1,1,2-Trichloroethane	1 / 13	8	1.80E-03	1.80E-03	8.30E-04	1.90E-03	NP	7.11E-04	1.15E-03		Y
1,2,4-Trimethylbenzene	1 / 13	8	2.20E-03	2.20E-03	3.20E-04	9.00E-04	NP	3.90E-04	1.08E-03		Y
1,2-Dimethylbenzene	1 / 13	8	5.90E-03	5.90E-03	2.90E-04	7.20E-04	NP	6.45E-04	2.60E-03		Y
1,3,5-Trimethylbenzene	1 / 13	8	1.80E-03	1.80E-03	4.50E-04	9.20E-04	NP	4.15E-04	9.39E-04		Y
Acetone	3 / 11	27	5.60E-03	2.40E-02	2.90E-03	8.50E-03	NP	4.88E-03	1.37E-02		Y
Benzene	1 / 13	8	1.20E-03	1.20E-03	3.60E-04	7.20E-04	NP	3.12E-04	6.51E-04		Y
Chlorobenzene	1 / 13	8	4.10E-03	4.10E-03	2.60E-04	7.20E-04	NP	4.95E-04	1.84E-03		Y

Table 6-6

Selection of Site-Related Chemicals for Subsurface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[b]	Arithmetic Mean (mg/kg)	95% UCL[c] (mg/kg)	Background Screening Criterion[d] (mg/kg)	Site-Related?[e]
cis-1,2-Dichloroethene	2 / 13	15	6.90E-03	5.60E-01	2.60E-04	7.20E-04	NP	4.38E-02	2.36E-01		Y
Cumene	1 / 13	8	8.80E-04	8.80E-04	4.90E-04	7.60E-04	NP	3.37E-04	5.46E-04		Y
Ethylbenzene	1 / 13	8	2.80E-03	2.80E-03	3.40E-04	7.20E-04	NP	4.27E-04	1.31E-03		Y
m,p-Xylenes	1 / 13	8	9.90E-03	9.90E-03	7.70E-04	1.40E-03	NP	1.22E-03	4.45E-03		Y
Naphthalene	1 / 13	8	1.40E-03	1.40E-03	8.60E-04	5.20E-03	NP	1.54E-03	2.36E-03		Y
o-Chlorotoluene	1 / 13	8	4.60E-02	4.60E-02	5.50E-04	8.60E-04	NP	3.84E-03	1.95E-02		Y
p-Chlorotoluene	1 / 13	8	1.50E-02	1.50E-02	4.30E-04	7.90E-04	NP	1.41E-03	6.47E-03		Y
p-Cymene	1 / 13	8	6.50E-03	6.50E-03	2.60E-04	9.20E-04	NP	7.01E-04	2.87E-03		Y
Tetrachloroethene	1 / 13	8	1.40E-03	1.40E-03	3.90E-04	7.20E-04	NP	3.38E-04	7.40E-04		Y
Toluene	1 / 13	8	1.10E-02	1.10E-02	5.70E-04	8.90E-04	NP	1.15E-03	4.82E-03		Y
trans-1,2-Dichloroethene	1 / 13	8	1.20E-01	1.20E-01	3.50E-04	7.20E-04	NP	9.45E-03	5.06E-02		Y
Trichloroethene	2 / 13	15	1.70E-03	1.20E-02	3.30E-04	7.20E-04	NP	1.25E-03	5.29E-03		Y
Trichlorofluoromethane	1 / 11	9	3.70E-03	3.70E-03	2.80E-04	7.20E-04	NP	5.40E-04	1.96E-03		Y
Vinyl chloride	1 / 13	8	3.00E-03	3.00E-03	6.50E-04	3.80E-03	NP	1.30E-03	2.17E-03		Y

mg/kg = milligram per kilogram
N = Chemical is determined not to be site-related ; Y = Chemical is determined to be site-related; NA = not applicable.
[a] Subsurface soil is defined as soil from 2 to 12 feet below ground surface.
[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution.
[c] 95% Upper Confidence Limit (UCL) calculated for L and NP using Chebychev Method (EPA, 1997, *Technology Support Center Issue: The Lognormal Distribution in Environmental Applications*, Office of Solid Waste and Emergency Response, EPA/600/R-95/128, NTIS No. PB96-963502.).
N distribution UCL calculated using EPA, 1992, *Supplemental Guidance to RAGS: Calculating the Concentration Term,* Office of Solid Waste and and Emergency Response, Washington, DC, Publication 9285.7-081.
[d] Background screening criterion for inorganic constituents is 2 times the mean background concentration for subsurface soil. *(Science Applications International Corporation, 1998, Background Metals Survey Report, Fort McClellan*, Anniston, Alabama, July).
[e] Rationale for exclusion of a chemical as site-related:
N (a) = excluded as a site-related chemical based on the Tier 1 statistical site to background evaluation.
N (b) = excluded as a site-related chemical based on the Tier 2 statistical site to background evaluation.
N (c) = excluded as a site-related chemical based on the Tier 3 geochemical evaluation.
N (d) = detected only at concentrations near or below the reporting limit in less than 5 percent of samples.
N (e) = essential nutrient.

Table 6-7

Selection of Chemicals of Potential Concern for Surface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) National Guardsperson				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident			
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?
Metals																					
Beryllium	3.62E+00	4.42E+01	N	3.42E+01	N	4.08E+02	N	NA	NA	2.39E+01	N	1.70E+01	N	9.60E+00	N	2.13E+02	N	9.60E+00	N	NA	NA
Cadmium	2.26E+00	1.08E+02	N	4.56E+01	N	3.43E+02	N	NA	NA	6.55E+01	N	2.27E+01	N	2.13E+01	N	2.84E+02	N	6.25E+00	N	NA	NA
Nickel	6.90E+01	5.00E+03	N	3.42E+02	N	1.20E+04	N	NA	NA	2.02E+03	N	1.70E+02	N	9.59E+02	N	2.13E+03	N	1.54E+02	N	NA	NA
Zinc	2.75E+02	7.90E+04	N	NA	NA	1.88E+05	N	NA	NA	3.06E+04	N	NA	NA	1.52E+04	N	NA	NA	2.34E+03	N	NA	NA
Organochlorine Pesticides and PCBs																					
4,4'-DDD	1.40E-03	NA	NA	2.64E+01	N	NA	NA	1.72E+02	N	NA	NA	1.17E+01	N	NA	NA	1.37E+02	N	NA	NA	2.54E+00	N
4,4'-DDT	1.00E-03	1.22E+02	N	1.83E+01	N	2.95E+02	N	1.22E+02	N	5.02E+01	N	8.11E+00	N	2.35E+01	N	9.50E+01	N	3.83E+00	N	1.79E+00	N
Methoxychlor	1.60E-02	1.30E+03	N	NA	NA	3.09E+03	N	NA	NA	5.08E+02	N	NA	NA	2.49E+02	N	NA	NA	3.89E+01	N	NA	NA
Nitroaromatic Compounds																					
1,3,5-Trinitrobenzene	7.80E-01	7.65E+03	N	NA	NA	18311.04	N	NA	NA	3.04E+03	N	NA	NA	1.47E+03	N	NA	NA	2.32E+02	N	NA	NA
2-Nitrotoluene	4.20E-01	2.59E+03	N	NA	NA	6.17E+03	N	NA	NA	1.02E+03	N	NA	NA	4.97E+02	N	NA	NA	7.77E+01	N	NA	NA
3-Nitrotoluene	7.90E-01	2.59E+03	N	NA	NA	6.17E+03	N	NA	NA	1.02E+03	N	NA	NA	4.97E+02	N	NA	NA	7.77E+01	N	NA	NA
p-Nitrotoluene	4.20E-01	2.59E+03	N	NA	NA	6.17E+03	N	NA	NA	1.02E+03	N	NA	NA	4.97E+02	N	NA	NA	7.77E+01	N	NA	NA
Volatile Organic Compounds																					
1,1,2,2-Tetrachloroethan	4.90E-02	1.54E+04	N	3.25E+01	N	3.68E+04	N	2.15E+02	N	6.09E+03	N	1.39E+01	N	2.96E+03	N	1.69E+02	N	4.65E+02	N	3.13E+00	N
1,2,4-Trimethylbenzene	1.60E-03	7.65E+03	N	NA	NA	3.08E+04	N	NA	NA	3.20E+03	N	NA	NA	1.58E+03	N	NA	NA	3.88E+02	N	NA	NA
Acetone	1.10E-01	2.58E+04	N	NA	NA	6.16E+04	N	NA	NA	1.02E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Cumene	3.90E-03	2.53E+04	N	NA	NA	6.17E+04	N	NA	NA	9.98E+03	N	NA	NA	4.05E+03	N	NA	NA	7.77E+02	N	NA	NA
p-Cymene	1.90E-03	5.17E+04	N	NA	NA	1.23E+05	N	NA	NA	2.03E+04	N	NA	NA	9.93E+03	N	NA	NA	1.55E+03	N	NA	NA
Tetrachloroethene	6.80E-03	2.59E+03	N	1.29E+02	N	6.19E+03	N	8.33E+02	N	1.02E+03	N	5.47E+01	N	4.97E+02	N	6.70E+02	N	7.77E+01	N	1.21E+01	N
Trichloroethene	1.60E-02	1.55E+03	N	6.02E+02	N	3.70E+03	N	3.93E+03	N	6.10E+02	N	2.56E+02	N	2.98E+02	N	3.13E+03	N	4.66E+01	N	5.72E+01	N
Trichlorofluoromethane	4.50E-03	7.47E+04	N	NA	NA	1.85E+05	N	NA	NA	2.96E+04	N	NA	NA	1.44E+04	N	NA	NA	2.33E+03	N	NA	NA

SSSL = Site-specific screening level developed as described in the *Draft Revision 2 Installation-Wide Work Plan, Fort McClellan, Alabama* , (IT, February 2002).
COPC = Chemical of potential concern; mg/kg = milligram per kilogram.
N = Chemical is determined not to be a COPC ; Y = Chemical is determined to be COPC; NA = Not applicable.
[a] Surface soil is defined as soil from 0 to 2 feet below ground surface.

Table 6-8

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) National Guardsperson				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident			
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?
Metals																					
Beryllium	3.00E+00	4.42E+01	N	3.42E+01	N	4.08E+02	N	NA	NA	2.39E+01	N	1.70E+01	N	9.60E+00	N	2.13E+02	N	9.60E+00	N	NA	NA
Cadmium	3.76E+00	1.08E+02	N	4.56E+01	N	3.43E+02	N	NA	NA	6.55E+01	N	2.27E+01	N	2.13E+01	N	2.84E+02	N	6.25E+00	N	NA	NA
Nickel	6.29E+01	5.00E+03	N	3.42E+02	N	1.20E+04	N	NA	NA	2.02E+03	N	1.70E+02	N	9.59E+02	N	2.13E+03	N	1.54E+02	N	NA	NA
Selenium	8.14E+00	1.33E+03	N	NA	NA	3.15E+03	N	NA	NA	5.11E+02	N	NA	NA	2.55E+02	N	NA	NA	3.91E+01	N	NA	NA
Zinc	2.34E+02	7.90E+04	N	NA	NA	1.88E+05	N	NA	NA	3.06E+04	N	NA	NA	1.52E+04	N	NA	NA	2.34E+03	N	NA	NA
Organochlorine Pesticides																					
beta-BHC	1.10E-03	NA	NA	3.64E+00	N	NA	NA	2.40E+01	N	NA	NA	1.55E+00	N	NA	NA	1.89E+01	N	NA	NA	3.50E-01	N
Volatile Organic Compounds																					
1,1,2,2-Tetrachloroethane	3.60E-02	1.54E+04	N	3.25E+01	N	3.68E+04	N	2.15E+02	N	6.09E+03	N	1.39E+01	N	2.96E+03	N	1.69E+02	N	4.65E+02	N	3.13E+00	N
1,1,2-Trichloroethane	1.80E-03	1.04E+03	N	1.15E+02	N	2.47E+03	N	7.60E+02	N	4.07E+02	N	4.90E+01	N	1.99E+02	N	6.00E+02	N	3.11E+01	N	1.11E+01	N
1,2,4-Trimethylbenzene	2.20E-03	7.65E+03	N	NA	NA	3.08E+04	N	NA	NA	3.20E+03	N	NA	NA	1.58E+03	N	NA	NA	3.88E+02	N	NA	NA
1,2-Dimethylbenzene	5.90E-03	5.19E+05	N	NA	NA	1.24E+06	N	NA	NA	2.03E+05	N	NA	NA	9.96E+04	N	NA	NA	1.55E+04	N	NA	NA
1,3,5-Trimethylbenzene	1.80E-03	7.65E+03	N	NA	NA	3.08E+04	N	NA	NA	3.20E+03	N	NA	NA	1.58E+03	N	NA	NA	3.88E+02	N	NA	NA
Acetone	2.40E-02	2.58E+04	N	NA	NA	6.16E+04	N	NA	NA	1.02E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Benzene	1.20E-03	1.03E+03	N	1.21E+02	N	2.47E+03	N	7.87E+02	N	4.03E+02	N	5.13E+01	N	1.97E+02	N	6.28E+02	N	3.11E+01	N	1.15E+01	N
Chlorobenzene	4.10E-03	4.79E+03	N	NA	NA	1.24E+04	N	NA	NA	1.90E+03	N	NA	NA	9.32E+02	N	NA	NA	1.55E+02	N	NA	NA
cis-1,2-Dichloroethene	5.60E-01	2.59E+03	N	NA	NA	6.19E+03	N	NA	NA	1.02E+03	N	NA	NA	4.98E+02	N	NA	NA	7.77E+01	N	NA	NA
Cumene	8.80E-04	2.53E+04	N	NA	NA	6.17E+04	N	NA	NA	9.98E+03	N	NA	NA	4.05E+03	N	NA	NA	7.77E+02	N	NA	NA
Ethylbenzene	2.80E-03	2.57E+04	N	NA	NA	6.18E+04	N	NA	NA	1.01E+04	N	NA	NA	4.94E+03	N	NA	NA	7.77E+02	N	NA	NA
m,p-Xylenes	9.90E-03	5.19E+05	N	NA	NA	1.24E+06	N	NA	NA	2.03E+05	N	NA	NA	9.96E+04	N	NA	NA	1.55E+04	N	NA	NA
Naphthalene	1.40E-03	3.36E+03	N	NA	NA	1.24E+04	N	NA	NA	1.39E+03	N	NA	NA	6.85E+02	N	NA	NA	1.55E+02	N	NA	NA
o-Chlorotoluene	4.60E-02	5.19E+03	N	NA	NA	1.24E+04	N	NA	NA	2.03E+03	N	NA	NA	9.96E+02	N	NA	NA	1.55E+02	N	NA	NA
p-Chlorotoluene	1.50E-02	5.19E+03	N	NA	NA	1.24E+04	N	NA	NA	2.03E+03	N	NA	NA	9.96E+02	N	NA	NA	1.55E+02	N	NA	NA
p-Cymene	6.50E-03	5.17E+04	N	NA	NA	1.23E+05	N	NA	NA	2.03E+04	N	NA	NA	9.93E+03	N	NA	NA	1.55E+03	N	NA	NA
Tetrachloroethene	1.40E-03	2.59E+03	N	1.29E+02	N	6.19E+03	N	8.33E+02	N	1.02E+03	N	5.47E+01	N	4.97E+02	N	6.70E+02	N	7.77E+01	N	1.21E+01	N
Toluene	1.10E-02	4.98E+04	N	NA	NA	1.24E+05	N	NA	NA	1.96E+04	N	NA	NA	9.62E+03	N	NA	NA	1.55E+03	N	NA	NA
trans-1,2-Dichloroethene	1.20E-01	5.19E+03	N	NA	NA	1.24E+04	N	NA	NA	2.03E+03	N	NA	NA	9.96E+02	N	NA	NA	1.55E+02	N	NA	NA
Trichloroethene	1.20E-02	1.55E+03	N	6.02E+02	N	3.70E+03	N	3.93E+03	N	6.10E+02	N	2.56E+02	N	2.98E+02	N	3.13E+03	N	4.66E+01	N	5.72E+01	N
Trichlorofluoromethane	3.70E-03	7.47E+04	N	NA	NA	1.85E+05	N	NA	NA	2.96E+04	N	NA	NA	1.44E+04	N	NA	NA	2.33E+03	N	NA	NA
Vinyl chloride	3.00E-03	7.76E+02	N	9.33E+00	N	1.86E+03	N	6.02E+01	N	3.04E+02	N	3.95E+00	N	1.49E+02	N	4.84E+01	N	2.33E+01	N	4.20E-01	N

SSSL = Site-specific screening level developed as described in the *Draft Revision 2 Installation-Wide Work Plan, Fort McClellan, Alabama* (IT, February 2002).
COPC = Chemical of potential concern; mg/kg = milligram per kilogram.
N = Chemical is determined not to be a COPC ; Y = Chemical is determined to be COPC; NA = Not applicable.
[a] Subsurface soil is defined as soil from 2 to 12 feet below ground surface.

Table 6-9

Selection of Site-Related Chemicals for Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/L)	Background Screening Criterion[b] (mg/L)	Site-Related?[c]
Metals										
Aluminum	6 / 11	55	9.46E-02	1.34E+01	2.20E-02	5.00E-02	NP	1.70E+00	2.34E+00	N (c)
Arsenic	8 / 18	44	3.52E-03	7.96E-02	1.70E-03	2.50E-03	NP	7.30E-03	1.78E-02	N (b)
Barium	18 / 18	100	1.37E-02	4.89E-01	1.00E-03	1.00E-03	L	1.21E-01	1.27E-01	N (c)
Cadmium	2 / 18	11	1.90E-03	1.14E-02	5.00E-04	5.00E-03	NP	2.69E-03	2.51E-03	N (c)
Calcium	18 / 18	100	5.27E+00	1.73E+02	3.77E-02	1.50E-01	NP	8.91E+01	5.65E+01	N (e)
Chromium	2 / 18	11	2.80E-03	4.09E-02	1.20E-03	6.00E-03	NP	4.79E-03		N (c)
Cobalt	5 / 18	28	8.90E-03	5.60E-02	2.30E-03	1.10E-02	NP	9.45E-03	2.34E-02	N (c)
Copper	1 / 17	6	5.52E-03	5.52E-03	1.90E-03	5.00E-03	NP	2.40E-03	2.55E-02	N (a)
Iron	16 / 16	100	1.42E-01	2.77E+01	6.00E-03	3.61E-02	L	4.31E+00	7.04E+00	N (b)
Lead	2 / 17	12	1.90E-03	1.40E-02	1.30E-03	1.70E-03	NP	1.53E-03	8.00E-03	N (b)
Magnesium	18 / 18	100	6.09E-01	3.13E+01	2.18E-02	8.12E-02	L	7.25E+00	2.13E+01	N (e)
Manganese	18 / 18	100	3.33E-02	1.17E+00	1.50E-03	3.00E-03	L	3.00E-01	5.81E-01	N (c)
Mercury	2 / 18	11	7.20E-05	1.70E-04	6.00E-05	1.18E-04	NP	6.27E-05		N (b)
Nickel	5 / 18	28	3.10E-03	3.82E-02	1.90E-03	1.50E-02	NP	1.08E-02		N (c)
Potassium	9 / 18	50	2.99E-01	3.08E+00	1.58E-01	1.97E+00	NP	9.36E-01	7.20E+00	N (e)
Silver	1 / 18	6	2.20E-03	2.20E-03	1.90E-03	1.00E-02	NP	4.02E-03	4.00E-03	N (a)
Sodium	18 / 18	100	2.10E+00	4.34E+01	7.00E-02	4.17E-01	L	1.16E+01	1.48E+01	N (e)
Vanadium	2 / 17	12	4.60E-03	4.55E-02	1.80E-03	5.00E-03	NP	4.93E-03	1.70E-02	N (c)
Zinc	5 / 18	28	5.80E-03	1.52E-01	2.60E-03	2.70E-02	NP	3.34E-02	2.20E-01	N (a)
Organochlorine Pesticides										
alpha-Chlordane	1 / 14	7	3.70E-05	3.70E-05	4.70E-06	8.90E-06	NP	5.28E-06		Y
beta-BHC	2 / 14	14	2.00E-05	2.10E-04	1.20E-05	1.30E-05	NP	2.17E-05		Y
delta-BHC	2 / 14	14	1.60E-05	3.50E-05	1.10E-05	1.50E-05	NP	8.96E-06		Y
Endrin aldehyde	1 / 14	7	3.50E-05	3.50E-05	9.40E-06	9.90E-06	NP	6.93E-06		Y
Heptachlor	1 / 14	7	3.20E-05	3.20E-05	7.50E-06	1.80E-05	NP	5.84E-06		Y
Methoxychlor	1 / 14	7	1.40E-04	1.40E-04	5.60E-05	8.20E-05	NP	4.60E-05		Y
Nitroaromatic Compounds										
2,4,6-Trinitrotoluene	1 / 18	6	2.80E-04	2.80E-04	4.50E-05	1.40E-04	NP	7.50E-05		Y
2-Nitrotoluene	4 / 18	22	3.80E-04	1.60E-03	1.40E-04	2.80E-04	NP	2.64E-04		Y

Table 6-9

Selection of Site-Related Chemicals for Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/L)	Background Screening Criterion[b] (mg/L)	Site-Related?[c]
Nitrobenzene	1 / 18	6	1.30E-03	1.30E-03	6.20E-05	1.20E-04	NP	1.20E-04		Y
p-Nitrotoluene	1 / 18	6	7.80E-04	7.80E-04	9.50E-05	2.50E-04	NP	1.51E-04		Y
Orthosulfurs										
1,4-Dithiane	2 / 14	14	1.80E-03	1.40E-02	4.20E-04	4.30E-04	NP	1.31E-03		Y
1,4-Oxathiane	2 / 14	14	1.40E-03	6.50E-03	5.60E-04	5.70E-04	NP	8.08E-04		Y
Semivolatile Organic Compounds										
bis(2-Ethylhexyl)phthalate	1 / 18	6	1.30E-02	1.30E-02	8.00E-04	9.90E-03	NP	4.26E-03		Y
Phenanthrene	1 / 18	6	1.60E-03	1.60E-03	7.20E-04	5.70E-03	NP	2.29E-03		Y
Volatile Organic Compounds										
1,1,2,2-Tetrachloroethane	18 / 74	24	1.60E-03	3.10E-01	2.20E-04	2.80E-02	L	1.80E-02		Y
1,1,2-Trichloroethane	14 / 74	19	2.80E-04	6.00E-03	2.00E-04	2.50E-02	L	6.94E-04		Y
1,1-Dichloroethene	6 / 74	8	2.10E-04	3.70E-04	1.40E-04	1.80E-02	L	2.15E-04		Y
1,2,4-Trimethylbenzene	1 / 74	1	3.10E-04	3.10E-04	1.40E-04	7.20E-02	L	5.72E-04		Y
1,2-Dichloroethane	9 / 74	12	2.20E-04	1.20E-03	1.70E-04	2.20E-02	L	3.02E-04		Y
1,2-Dimethylbenzene	1 / 74	1	5.60E-04	5.60E-04	1.20E-04	2.90E-02	L	2.67E-04		Y
1,3,5-Trimethylbenzene	1 / 74	1	2.80E-04	2.80E-04	1.50E-04	2.10E-02	L	2.23E-04		Y
Acetone	1 / 9	11	2.50E-03	2.50E-03	1.90E-03	1.90E-03	NP	1.12E-03		Y
Benzene	3 / 74	4	2.20E-04	1.90E-03	1.80E-04	3.00E-02	L	3.26E-04		Y
Carbon disulfide	2 / 73	3	5.10E-04	6.20E-04	1.00E-04	1.20E-02	L	1.63E-04		Y
Chloroform	11 / 72	15	2.20E-04	3.10E-02	1.20E-04	3.50E-02	L	1.49E-03		Y
Chloromethane	1 / 72	1	1.80E-04	1.80E-04	1.00E-04	1.20E-02	L	2.91E-04		Y
cis-1,2-Dichloroethene	16 / 74	22	2.50E-04	3.80E+00	1.30E-04	2.40E-02	L	6.06E-02		Y
Ethylbenzene	1 / 74	1	4.40E-04	4.40E-04	1.10E-04	2.40E-02	L	2.26E-04		Y
m,p-Xylenes	2 / 74	3	4.20E-04	2.50E-03	2.40E-04	4.90E-02	L	4.95E-04		Y
p-Cymene	1 / 74	1	4.60E-04	4.60E-04	1.60E-04	2.00E-02	L	2.33E-04		Y
Tetrachloroethene	16 / 74	22	2.10E-04	7.50E-03	1.80E-04	2.40E-02	L	6.31E-04		Y
Toluene	2 / 74	3	6.60E-04	1.30E-03	1.20E-04	3.10E-02	L	2.99E-04		Y
trans-1,2-Dichloroethene	12 / 74	16	2.00E-04	1.20E+00	1.20E-04	1.50E-02	L	1.90E-02		Y
Trichloroethene	24 / 73	33	2.40E-04	4.70E-01	1.50E-04	2.20E-02	L	2.77E-02		Y
Vinyl chloride	10 / 74	14	6.00E-04	4.30E-02	1.00E-04	1.20E-02	L	1.17E-03		Y

Table 6-9

Selection of Site-Related Chemicals for Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/L)	Background Screening Criterion[b] (mg/L)	Site-Related?[c]

mg/L = milligram per liter
N = Chemical is determined not to be site-related ; Y = Chemical is determined to be site-related.
[a] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution.
[b] Background screening criterion for inorganic constituents is 2 times the mean background concentration for groundwater.
(Science Applications International Corporation, 1998, Background Metals Survey Report, Fort McClellan, Anniston, Alabama, July).
[c] Rationale for exclusion of a chemical as site-related:
N (a) = excluded as a site-related chemical based on the Tier 1 statistical site to background evaluation.
N (b) = excluded as a site-related chemical based on the Tier 2 statistical site to background evaluation.
N (c) = excluded as a site-related chemical based on the Tier 3 geochemical evaluation.
N (d) = detected only at concentrations near or below the reporting limit in less than 5 percent of samples.
N (e) = essential nutrient.

Table 6-10

Selection of Chemicals of Potential Concern for Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/L)	Applicable SSSL (mg/L) National Guardsperson				Applicable SSSL (mg/L) Groundskeeper				Applicable SSSL (mg/L) Construction Worker				Applicable SSSL (mg/L) On Site Resident				Source-Term Concentration [a] (mg/L)	MCL[b] (mg/L)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?		
Organochlorine Pesticides																			
alpha-Chlordane	3.70E-05	8.85E-03	N	1.31E-03	N	4.14E-03	N	6.62E-04	N	4.14E-03	N	1.65E-02	N	7.22E-04	N	1.75E-04	N		2.00E-03
beta-BHC	2.10E-04	NA	NA	2.67E-04	N	NA	NA	1.48E-04	Y	NA	NA	3.69E-03	N	NA	NA	3.61E-05	Y	2.10E-04	NA
delta-BHC	3.50E-05	5.49E-03	N	NA	NA	2.73E-03	N	NA	NA	2.73E-03	N	NA	NA	4.49E-04	N	NA	NA		NA
Endrin aldehyde	3.50E-05	4.67E-04	N	NA	NA	1.80E-04	N	NA	NA	1.80E-04	N	NA	NA	3.75E-05	N	NA	NA		2.00E-3 [c]
Heptachlor	3.20E-05	9.34E-03	N	1.08E-04	N	4.85E-03	N	6.03E-05	N	4.85E-03	N	1.51E-03	N	7.67E-04	N	1.46E-05	Y	3.20E-05	4.00E-04
Methoxychlor	1.40E-04	9.21E-02	N	NA	NA	4.65E-02	N	NA	NA	4.65E-02	N	NA	NA	7.55E-03	N	NA	NA		4.00E-02
Nitroaromatic Compounds																			
2,4,6-Trinitrotoluene	2.80E-04	9.48E-03	N	1.64E-02	N	5.07E-03	N	9.47E-03	N	5.07E-03	N	2.37E-01	N	7.80E-04	N	2.23E-03	N		NA
2-Nitrotoluene	1.60E-03	1.90E-01	N	NA	NA	9.69E-02	N	NA	NA	9.69E-02	N	NA	NA	1.53E-02	N	NA	NA		NA
Nitrobenzene	1.30E-03	5.96E-03	N	NA	NA	4.00E-03	N	NA	NA	4.00E-03	N	NA	NA	7.12E-04	Y	NA	NA	1.30E-03	NA
p-Nitrotoluene	7.80E-04	1.90E-01	N	NA	NA	9.63E-02	N	NA	NA	9.63E-02	N	NA	NA	1.53E-02	N	NA	NA		NA
Orthosulfurs																			
1,4-Dithiane	1.40E-02	1.90E-01	N	NA	NA	1.02E-01	N	NA	NA	1.02E-01	N	NA	NA	1.56E-02	N	NA	NA		NA
1,4-Oxathiane	6.50E-03	1.90E-02	N	NA	NA	1.02E-02	N	NA	NA	1.02E-02	N	NA	NA	1.56E-03	Y	NA	NA	6.50E-03	NA
Semivolatile Organic Compounds																			
bis(2-Ethylhexyl)phthalate	1.30E-02	3.50E-01	N	3.24E-02	N	1.61E-01	N	1.61E-02	N	1.61E-01	N	4.02E-01	N	2.85E-02	N	4.31E-03	Y	1.30E-02	6.00E-03
Phenanthrene	1.60E-03	3.57E+00	N	NA	NA	1.06E+00	N	NA	NA	1.06E+00	N	NA	NA	2.81E-01	N	NA	NA		NA
Volatile Organic Compounds																			
1,1,2,2-Tetrachloroethane	3.10E-01	1.14E+00	N	1.44E-03	Y	5.82E-01	N	1.36E-03	Y	5.82E-01	N	3.40E-02	Y	9.21E-02	Y	2.04E-04	Y	2.40E-01	NA
1,1,2-Trichloroethane	6.00E-03	7.60E-02	N	5.04E-03	Y	3.95E-02	N	4.85E-03	Y	3.95E-02	N	1.21E-01	N	6.18E-03	N	7.15E-04	Y	6.00E-03	5.00E-03
1,1-Dichloroethene	3.70E-04	1.71E-01	N	6.76E-04	N	8.63E-02	N	4.48E-04	N	8.63E-02	N	1.12E-02	N	1.38E-02	N	9.36E-05	Y	2.70E-04	7.00E-03
1,2,4-Trimethylbenzene	3.10E-04	4.32E-02	N	NA	NA	2.86E-01	N	NA	NA	2.86E-01	N	NA	NA	6.00E-03	N	NA	NA		NA
1,2-Dichloroethane	1.20E-03	3.50E-02	N	3.16E-03	N	3.00E-01	N	3.08E-03	N	3.00E-01	N	7.69E-02	N	4.88E-03	N	4.48E-04	Y	4.30E-04	5.00E-03
1,2-Dimethylbenzene	5.60E-04	3.80E+01	N	NA	NA	1.54E+01	N	NA	NA	1.54E+01	N	NA	NA	2.80E+00	N	NA	NA		NA
1,3,5-Trimethylbenzene	2.80E-04	4.32E-02	N	NA	NA	3.22E-01	N	NA	NA	3.22E-01	N	NA	NA	6.00E-03	N	NA	NA		NA
Acetone	2.50E-03	1.90E+00	N	NA	NA	1.02E+00	N	NA	NA	1.02E+00	N	NA	NA	1.56E-01	N	NA	NA		NA
Benzene	1.90E-03	5.71E-02	N	6.63E-03	N	3.76E-02	N	4.79E-03	N	3.76E-02	N	1.20E-01	N	6.07E-03	N	9.26E-04	Y	1.90E-03	5.00E-03
Carbon disulfide	6.20E-04	1.40E+00	N	NA	NA	9.21E-01	N	NA	NA	9.21E-01	N	NA	NA	1.51E-01	N	NA	NA		NA
Chloroform	3.10E-02	1.26E-01	N	NA	NA	9.86E-02	N	NA	NA	9.86E-02	N	NA	NA	1.54E-02	Y	NA	NA	1.07E-02	8.00E-02 [d]
Chloromethane	1.80E-04	7.36E-02	N	2.82E-02	N	4.02E-02	N	2.16E-02	N	4.02E-02	N	5.41E-01	N	6.22E-03	N	3.93E-03	N		NA
cis-1,2-Dichloroethene	3.80E+00	1.90E-01	Y	NA	NA	9.91E-02	Y	NA	NA	9.91E-02	Y	NA	NA	1.55E-02	Y	NA	NA	7.25E-02	7.00E-02
Ethylbenzene	4.40E-04	1.53E+00	N	NA	NA	7.69E-01	N	NA	NA	7.69E-01	N	NA	NA	1.40E-01	N	NA	NA		7.00E-01
m,p-Xylenes	2.50E-03	3.80E+01	N	NA	NA	1.54E+01	N	NA	NA	1.54E+01	N	NA	NA	2.80E+00	N	NA	NA		1.00E+01
p-Cymene	4.60E-04	3.80E+00	N	NA	NA	9.85E-01	N	NA	NA	9.85E-01	N	NA	NA	2.26E-01	N	NA	NA		NA
Tetrachloroethene	7.50E-03	1.82E-01	N	9.22E-03	N	8.54E-02	N	4.60E-03	Y	8.54E-02	N	1.15E-01	N	1.46E-02	N	1.26E-03	Y	4.00E-03	5.00E-03
Toluene	1.30E-03	1.65E+00	N	NA	NA	1.73E+00	N	NA	NA	1.73E+00	N	NA	NA	2.59E-01	N	NA	NA		1.00E+00
trans-1,2-Dichloroethene	1.20E+00	3.80E-01	Y	NA	NA	1.95E-01	Y	NA	NA	1.95E-01	Y	NA	NA	3.07E-02	Y	NA	NA	2.10E-02	1.00E-01
Trichloroethene	4.70E-01	1.14E-01	Y	3.22E-02	Y	5.72E-02	Y	2.42E-02	Y	5.72E-02	Y	6.06E-01	N	9.15E-03	Y	4.51E-03	Y	2.33E-01	5.00E-03
Vinyl chloride	4.30E-02	5.31E-02	N	6.74E-04	Y	2.98E-02	Y	3.86E-04	Y	2.98E-02	Y	9.65E-03	Y	4.64E-03	Y	4.41E-05	Y	3.70E-03	2.00E-03

SSSL = Site-specific screening level developed as described in the *Draft Revision 2 Installation-Wide Work Plan, Fort McClellan, Alabama* , (IT, February 2002).
COPC = Chemical of potential concern; mg/L = milligram per liter; MCL = maximum contaminant level.
N = Chemical is determined not to be a COPC ; Y = Chemical is determined to be COPC; NA = Not applicable or not available.
[a] See text; section 6.2.2.
[b] EPA, 2002, *2002 Edition of the Drinking Water Standards and Health Advisories*, Office of Water, Washington, DC, EPA 822-R-02-038, Summer.
[c] MCL for endrin.
[d] MCL for total trihalomethanes.

Table 6-11

Groundwater COPC Concentrations by Sample Location and Sample Date
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

COPC and Well Identifications	Year Sampled							
	2000 (Jan - June)	2000 (July - Dec)	2001 (Jan - June)	2001 (July - Dec)	2002 (Jan - June)	2002 (July - Dec)	2003 (Jan - June)	2003 (July - Dec)
1,1,2,2-Tetrachloroethane (18/74)								
Residential SSSL (mg/L) = 9.20E-02 (nc), 2.04E-04 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	1.00E-01	NR	2.60E-02	NR	2.40E-01	1.40E-02	NR	1.60E-03
MW 02 (R)	2.20E-04 U	NR	NR	NR	NR	3.40E-03	NR	2.80E-04 U
MW 06 (R)	NR	NR	NR	1.80E-02	4.10E-02	5.60E-02	NR	7.30E-02
MW 13 (B)	NR	NR	NR	6.10E-03, 2.80E-04 U	4.30E-03	5.40E-03	NR	2.80E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	2.60E-01	NR	1.70E-01
MW 20 (B)	NR	NR	NR	NR	NR	2.10E-01	NR	3.10E-01
MW 22 (R)	NR	NR	NR	NR	NR	NR	NR	3.40E-03
1,1,2-Trichloroethane (14/74)								
Residential SSSL (mg/L) = 7.15E-04 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	2.50E-02 U	NR	NR	5.10E-03	2.90E-03	1.70E-03	NR	3.50E-04
MW 06 (R)	NR	NR	NR	2.20E-03	4.50E-03	5.30E-03	NR	6.00E-03
MW 13 (B)	NR	NR	NR	2.80E-04, 2.30E-04 U	3.80E-04	2.30E-04 U	NR	2.30E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	1.10E-03	NR	8.60E-04
MW 20 (B)	NR	NR	NR	NR	NR	7.10E-04	NR	7.40E-04
1,1-Dichloroethene (6/74)								
Residential SSSL (mg/L) = 9.36E-05 (c)	Concentrations[a] (mg/L)							
MW 06 (R)	NR	NR	NR	1.50E-04 U	1.50E-04 U	2.30E-04	NR	2.70E-04
MW 13 (B)	NR	NR	NR	1.50E-04 U, 1.50E-04 U	2.10E-04	1.50E-04 U	NR	1.50E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	3.00E-04	NR	1.50E-04 U
MW 20 (B)	NR	NR	NR	NR	NR	3.70E-04	NR	2.20E-04
1,2-Dichloroethane (9/74)								
Residential SSSL (mg/L) = 4.48E-04 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	2.20E-2 U	NR	NR	8.60E-04 U	3.90E-04	1.70E-04 U	NR	2.20E-04
MW 04 (R)	9.80E-04	NR	NR	8.90E-04	1.20E-03	1.70E-04 U	NR	1.70E-04 U
MW 06 (R)	NR	NR	NR	2.40E-04	3.70E-04	1.70E-04 U	NR	1.70E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	8.10E-04	NR	1.70E-04 U
MW 20 (B)	NR	NR	NR	NR	NR	1.70E-04 U	NR	4.30E-04
Chloroform (11/74)								
Residential SSSL (mg/L) = 1.52E-02 (nc)/1.15E-03 (c)	Concentrations[a] (mg/L)							
MW 06 (R)	NR	NR	NR	6.10E-04	NR	7.30E-04	NR	5.70E-04
MW 13 (B)	NR	NR	NR	1.20E-04 U	1.20E-04 U	6.20E-04	NR	1.20E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	3.10E-02	NR	1.30E-02
MW 20 (B)	NR	NR	NR	NR	NR	1.90E-02	NR	1.30E-02
MW 21 (B)	NR	NR	NR	NR	NR	1.20E-04 U	NR	6.00E-03
MW 22 (R)	NR	NR	NR	NR	NR	NR	NR	7.10E-04
MW 24 (R)	NR	NR	NR	NR	NR	NR	NR	2.20E-04

Table 6-11

Groundwater COPC Concentrations by Sample Location and Sample Date
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

COPC and Well Identifications	Year Sampled							
	2000 (Jan - June)	2000 (July - Dec)	2001 (Jan - June)	2001 (July - Dec)	2002 (Jan - June)	2002 (July - Dec)	2003 (Jan - June)	2003 (July - Dec)
cis-1,2-Dichloroethene (16/74)								
Residential SSSL (mg/L) = 1.55E-02 (nc)	Concentrations[a] (mg/L)							
MW 01 (R)	3.80E+00	NR	NR	1.50E-01	2.10E-01	1.30E-01	NR	1.00E-01
MW 06 (R)	NR	NR	NR	5.30E-03	1.40E-02	2.40E-02	NR	4.50E-02
MW 13 (B)	NR	NR	NR	2.90E-04, 1.30E-04 U	2.70E-04	2.50E-04	NR	1.30E-04 U
MW 18 (B)	NR	NR	NR	NR	NR	1.00E-03	NR	7.50E-04
MW 20 (B)	NR	NR	NR	NR	NR	1.20E-03	NR	8.30E-04
Tetrachloroethene (16/74)								
Residential SSSL (mg/L) = 1.26E-03 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	2.40E-2 U	NR	NR	1.30E-03	8.10E-04	7.00E-04	NR	4.00E-04
MW 04 (R)	3.10E-04	NR	NR	2.10E-04	3.80E-04	1.80E-04 U	NR	3.30E-04
MW 06 (R)	NR	NR	NR	3.60E-04	7.60E-04	1.80E-03	NR	4.00E-03
MW 18 (B)	NR	NR	NR	NR	NR	7.50E-03	NR	3.30E-03
MW 20 (B)	NR	NR	NR	NR	NR	4.10E-03	NR	3.30E-03
trans-1,2-Dichloroethene (12/74)								
Residential SSSL (mg/L) = 3.07E-02 (nc)	Concentrations[a] (mg/L)							
MW 01 (R)	1.20E+00	NR	NR	5.20E-02	5.70E-02	3.80E-02	NR	3.20E-02
MW 06 (R)	NR	NR	NR	1.40E-03	3.40E-03	5.70E-03	NR	1.00E-02
MW 18 (B)	NR	NR	NR	NR	NR	2.50E-04	NR	1.50E-04 U
MW 20 (B)	NR	NR	NR	NR	NR	2.80E-04	NR	2.00E-04
Trichloroethene (24/73)								
Residential SSSL (mg/L) = 9.15E-03 (nc), 4.51E-03 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	2.20E-02 U	NR	NR	5.40E-03	6.10E-03	3.10E-03	NR	1.80E-03
MW 02 (R)	1.80E-04 U	NR	NR	NR	NR	4.20E-04	NR	1.50E-04 U
MW 04 (R)	2.90E-04	NR	NR	2.40E-04	4.90E-04	3.40E-04	NR	5.00E-04
MW 06 (R)	NR	NR	NR	3.80E-02	1.10E-01	1.20E-01	NR	1.10E-01
MW 13 (B)	NR	NR	NR	5.90E-02, 1.50E-04 U	5.40E-02	4.60E-02	NR	4.20E-03
MW 18 (B)	NR	NR	NR	NR	NR	4.70E-01	NR	2.90E-01
MW 20 (B)	NR	NR	NR	NR	NR	3.80E-01	NR	3.00E-01
MW 22 (R)	NR	NR	NR	NR	NR	NR	NR	1.10E-02
MW 24 (R)	NR	NR	NR	NR	NR	NR	NR	2.40E-04
Vinyl chloride (10/74)								
Residential SSSL (mg/L) = 3.20E-05 (c)	Concentrations[a] (mg/L)							
MW 01 (R)	4.30E-02	NR	NR	2.00E-03	8.80E-04	2.50E-4 U	NR	1.90E-03
MW 04 (R)	7.00E-03	NR	NR	5.30E-03	7.30E-03	7.00E-03	NR	3.70E-03
MW 06 (R)	NR	NR	NR	2.50E-4 U	2.50E-4 U	2.50E-4 U	NR	6.00E-04

COPC = Chemical of potential concern; NR - no result
SSSL = Site-specific screening level developed as described in the *Draft Revision 2 Installation-Wide Work Plan, Fort McClellan, Alabama*, (IT, February 2002).
Frequency of detection is shown next to chemical name in parentheses. (nc) = noncancer; (c) = cancer
(B) designates the well as a bedrock well; (R) designates the well as a residuum well.
[a] Value presented is detected concentration unless value is followed by "U" qualifier, in which case the sample was a nondetect and the value presented is the method detection limit.

Table 6-12

Cancer Risk and Noncancer Hazard Estimates Across All Media
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Medium	National Guardsperson		Recreational Site User		Groundskeeper		Construction Worker		Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NE	NE	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater	2.48E-01	1.81E-04	NE	NE	5.04E-01	1.99E-04	5.04E-01	7.45E-06	4.09E+00	1.34E-03
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Total HI / ILCR: Future Site Use	**2.48E-01**	**1.81E-04**	**NA**	**NA**	**5.04E-01**	**1.99E-04**	**5.04E-01**	**7.45E-06**	**4.09E+00**	**1.34E-03**

HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable; no chemicals of potential concern (with the possible exception of lead) were selected for this receptor in this medium.
NE = Not evaluated; the receptor is not evaluated for exposure to this medium.

[a]Current site use involves exposure to surface soil in its present condition.
[b]Future site use involves exposure to total soil, assuming that excavation and grading may be necessary for site development.

Table 6-13

Cancer Risk and Noncancer Hazard Estimates for the National Guardsperson Exposed to Groundwater
Future Site Use
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk National Guardsperson HI	ILCR
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.40E-01	NA	1.67E-04
1,1,2-Trichloroethane	6.00E-03	NA	1.19E-06
cis-1,2-Dichloroethene	7.25E-02	3.81E-02	NA
trans-1,2-Dichloroethene	2.10E-02	5.52E-03	NA
Trichloroethene	2.33E-01	2.04E-01	7.23E-06
Vinyl chloride	3.70E-03	NA	5.49E-06
Total HI / ILCR		**2.48E-01**	**1.81E-04**

mg/L = Milligram per liter.
COPC = Chemical of potential concern.
HI = Hazard index.
ILCR = Incremental lifetime cancer risk.
NA = Not applicable.

Table 6-14

Cancer Risk and Noncancer Hazard Estimates for the Groundskeeper Exposed to Groundwater
Future Site Use
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk Groundskeeper HI	ILCR
Organochlorine Pesticides			
beta-BHC	2.10E-04	NA	1.42E-06
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.40E-01	NA	1.77E-04
1,1,2-Trichloroethane	6.00E-03	NA	1.24E-06
cis-1,2-Dichloroethene	7.25E-02	7.32E-02	NA
Tetrachloroethene	4.00E-03	NA	8.70E-07
trans-1,2-Dichloroethene	2.10E-02	1.08E-02	NA
Trichloroethene	2.33E-01	4.08E-01	9.61E-06
Vinyl chloride	3.70E-03	1.24E-02	9.59E-06
Total HI / ILCR		**5.04E-01**	**1.99E-04**

mg/L = Milligram per liter.
COPC = Chemical of potential concern.
HI = Hazard index.
ILCR = Incremental lifetime cancer risk.
NA = Not applicable.

Table 6-15

Cancer Risk and Noncancer Hazard Estimates for the Construction Worker Exposed to Groundwater
Future Site Use
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk Construction Worker HI	ILCR
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.40E-01	NA	7.06E-06
cis-1,2-Dichloroethene	7.25E-02	7.32E-02	NA
trans-1,2-Dichloroethene	2.10E-02	1.08E-02	NA
Trichloroethene	2.33E-01	4.08E-01	NA
Vinyl chloride	3.70E-03	1.24E-02	3.84E-07
Total HI / ILCR		**5.04E-01**	**7.45E-06**

mg/L = Milligram per liter.
COPC = Chemical of potential concern.
HI = Hazard index.
ILCR = Incremental lifetime cancer risk.
NA = Not applicable.

Table 6-16

Cancer Risk and Noncancer Hazard Estimates for the On-Site Resident Exposed to Groundwater
Future Site Use
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk On-Site Resident HI	ILCR
Organochlorine Pesticides			
beta-BHC	2.10E-04	NA	5.82E-06
Heptachlor	3.20E-05	NA	2.20E-06
Nitroaromatic Compounds			
Nitrobenzene	1.30E-03	1.83E-01	NA
Orthosulfurs			
1,4-Oxathiane	6.50E-03	4.16E-01	NA
Semivolatile Organic Compounds			
bis(2-Ethylhexyl)phthalate	1.30E-02	NA	3.02E-06
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.40E-01	2.61E-01	1.18E-03
1,1,2-Trichloroethane	6.00E-03	NA	8.39E-06
1,1-Dichloroethene	2.70E-04	NA	2.88E-06
1,2-Dichloroethane	4.30E-04	NA	9.59E-07
Benzene	1.90E-03	NA	2.05E-06
Chloroform	1.07E-02	6.93E-02	NA
cis-1,2-Dichloroethene	7.25E-02	4.69E-01	NA
Tetrachloroethene	4.00E-03	NA	3.18E-06
trans-1,2-Dichloroethene	2.10E-02	6.83E-02	NA
Trichloroethene	2.33E-01	2.55E+00	5.17E-05
Vinyl chloride	3.70E-03	7.97E-02	8.40E-05
Total HI / ILCR		**4.09E+00**	**1.34E-03**

mg/L = Milligram per liter.
COPC = Chemical of potential concern.
HI = Hazard index.
ILCR = Incremental lifetime cancer risk.
NA = Not applicable.

Table 6-17

Separation of Noncancer Hazard by Target Organ for the Resident
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

	Target Organ Hazard*			
COPC	Erythrocyte	Liver	Kidney	Nasal Epithelium
Nitroaromatic Compounds				
Nitrobenzene	1.83E-01	1.83E-01	1.83E-01	NA
Orthosulfurs				
1,4-Oxathiane	NA	4.16E-01	4.16E-01	4.16E-01
Volatile Organic Compounds				
1,1,2,2-Tetrachloroethane	NA	2.61E-01	NA	NA
cis-1,2-Dichloroethene	4.69E-01	NA	NA	NA
Trichloroethene	NA	2.55E+00	2.55E+00	NA
HI by Target Organ:	**6.51E-01**	**3.41E+00**	**3.15E+00**	**4.16E-01**

* See Toxicological Profiles for data regarding selection of target organs (IT, 2000, *Human Health and Ecological Screening Values and PAH Background Summary Report,* Final, August).
COPC = Chemical of potential concern.
NA = Not applicable.

Table 7-1

Feeding Guilds and Exposure Pathways
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Trophic Level	Feeding Guild	Exposure Pathways
1	Primary Producers (terrestrial plants)	Direct uptake from soil
2	Terrestrial Invertebrates	Ingestion of soil Direct contact with soil
	Benthic Invertebrates	Ingestion of sediment Direct contact with sediment
	Herbivorous Birds	Ingestion of soil Ingestion of terrestrial plants
	Herbivorous Mammals	Ingestion of soil Ingestion of terrestrial plants
3	Omnivorous Birds	Ingestion of soil Ingestion of terrestrial plants Ingestion of terrestrial invertebrates
	Omnivorous Mammals	Ingestion of soil Ingestion of terrestrial plants Ingestion of terrestrial invertebrates Ingestion of prey
	Invertivorous Birds	Ingestion of soil Ingestion of terrestrial invertebrates
	Invertivorous Mammals	Ingestion of soil Ingestion of terrestrial invertebrates
	Amphibians & Reptiles	Ingestion of soil and sediment Ingestion of terrestrial plants Ingestion of terrestrial invertebrates Ingestion of benthic invertebrates
4	Carnivorous Birds (raptors)	Ingestion of soil Ingestion of prey
	Carnivorous Mammals	Ingestion of soil Ingestion of prey

Table 7-2

Constituents of Potential Ecological Concern in Surface Soil
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

Detected Constituents	Background Threshold Value[a] (mg/kg)	Ecological Screening Value[b] (mg/kg)	Frequency of Detection	Maximum Detected Concentration (mg/kg)	Minimum Detected Concentration (mg/kg)	Mean Detected Concentration (mg/kg)	Maximum Hazard Quotient	Mean Hazard Quotient	Constituent of Potential Ecological Concern
Metals :									
Aluminum	16,300	50	13 of 13	17,200	4,840	10,048	344	201	5
Antimony	1.99	3.5	1 of 13	0.62	0.62	1.618	0.177	0.462	1,3
Arsenic	13.7	10	13 of 13	25.80	3.77	10.263	2.58	1.026	5
Barium	124	165	13 of 13	348	23	67.577	2.109	0.41	4
Beryllium	0.8	1.1	11 of 11	3.62	0.337	0.966	3.291	0.878	**YES** [7]
Cadmium	0.29	1.6	1 of 13	2.26	2.26	0.258	1.413	0.161	**YES** [7]
Calcium	1,723	NA	13 of 13	14,000	125	1,630	ND	ND	2,5
Chromium	37.04	0.4	13 of 13	62.8	12.5	28.808	157	72.019	5
Cobalt	15.15	20	11 of 11	39.7	0.95	9.493	1.985	0.475	4
Copper	12.71	40	13 of 13	28.2	4.49	15.551	0.705	0.389	1,5
Iron	34,154	200	13 of 13	36,800	10,700	24,208	184	121	5
Lead	40.05	50	13 of 13	22.6	6.86	11.915	0.452	0.238	1,3
Magnesium	1,033	440,000	13 of 13	3,770	158	512	0.009	0.0012	1,2,4
Manganese	1,579	100	13 of 13	363	4.9	124	3.63	1.237	3
Mercury	0.08	0.1	5 of 13	0.075	0.038	0.030	0.75	0.301	1,3
Nickel	10.33	30	13 of 13	69	2.55	15.805	2.3	0.527	**YES** [7]
Potassium	799.76	NA	13 of 13	794	166	463	ND	ND	2,3,5
Selenium	0.48	0.81	6 of 13	2.2	0.859	0.805	2.716	0.994	**YES** [7]
Sodium	634.28	NA	9 of 13	126	41.7	51.438	ND	ND	2,3
Vanadium	58.84	2	13 of 13	81.9	20.8	41.177	40.95	20.588	5
Zinc	40.64	50	13 of 13	275	11.1	57.631	5.5	1.153	**YES** [7]
Pesticides and PCBs :									
4,4'-DDD	NA	0.0025	1 of 9	0.0014	0.0014	0.0007	0.56	0.282	1
4,4'-DDT	NA	0.0025	1 of 9	0.0010	0.0010	0.0004	0.4	0.162	1
Methoxychlor	NA	0.0199	1 of 9	0.0160	0.0160	0.0035	0.804	0.176	1
Nitroaromatic Compounds :									
1,3,5-Trinitrobenzene	NA	0.376	2 of 13	0.7800	0.35	0.1161	2.074	0.309	**YES** [7]
2-Nitrotoluene	NA	NA	1 of 13	0.4200	0.42	0.0827	ND	ND	**YES** [7]
3-Nitrotoluene	NA	NA	1 of 13	0.7900	0.79	0.1162	ND	ND	**YES** [7]
p-Nitrotoluene	NA	NA	1 of 13	0.4200	0.42	0.0756	ND	ND	**YES** [7]

Table 7-2

Constituents of Potential Ecological Concern in Surface Soil
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Detected Constituents	Background Threshold Value[a] (mg/kg)	Ecological Screening Value[b] (mg/kg)	Frequency of Detection	Maximum Detected Concentration (mg/kg)	Minimum Detected Concentration (mg/kg)	Mean Detected Concentration (mg/kg)	Maximum Hazard Quotient	Mean Hazard Quotient	Constituent of Potential Ecological Concern
Volatile Organic Compounds :									
1,1,2,2-Tetrachloroethane	NA	0.1	1 of 13	0.0490	0.0490	0.0041	0.49	0.041	1
1,2,4-Trimethylbenzene	NA	0.1	1 of 13	0.0016	0.0016	0.0003	0.016	0.0034	1
Acetone	NA	2.5	11 of 13	0.1100	0.0190	0.0481	0.044	0.019	1
Cumene	NA	NA	1 of 13	0.0039	0.0039	0.0006	ND	ND	6
p-Cymene	NA	NA	2 of 13	0.0019	0.0010	0.0004	ND	ND	6
Tetrachloroethene	NA	0.01	3 of 13	0.0068	0.0009	0.0012	0.68	0.116	1
Trichloroethene	NA	0.001	1 of 13	0.0160	0.0160	0.0015	16	1.451	**YES** [7]
Trichlorofluoromethane	NA	0.1	1 of 12	0.0045	0.0045	0.0006	0.045	0.0058	1

[a] Background threshold value is two times (2x) the arithmetic mean of background metals (SAIC, 1998). For SVOCs, the BTV is the background screening value for soils adjacent to asphalt as given in IT Corporation (IT), 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

[b] Ecological Screening Values (ESV) are presented in *Human Health and Ecological Screening Values and PAH Background Summary Report* (IT, 2000).

NA - Not available. ND - Not determined.

Rationale for exclusion as a COPEC:

1 - Maximum detected concentration is less than ESV
2 - Essential macro-nutrient, only toxic at extremely high concentrations (i.e. 10-times naturally-occurring background concentrations).
3 - Maximum detected concentration is less than the background threshold value (BTV).
4 - Slippage Test and Wilcoxon Rank Sum Test indicate the concentration of this constituent is statistically similar to background concentrations.
5 - Geochemical evaluation of the data indicate that this constituent is naturally occurring.
6 - No ESV available; however, maximum detected concentration of this constituent is less than ESV for similar compounds.
7 - Additional lines of evidence indicate that this constituent may not be a COPEC (see text).

Table 7-3

Constituents of Potential Ecological Concern in Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Detected Constituents	Background Threshold Value[a] (mg/L)	Ecological Screening Value[b] (mg/L)	Frequency of Detection	Maximum Detected Concentration (mg/L)	Minimum Detected Concentration (mg/L)	Mean Detected Concentration (mg/L)	Maximum Hazard Quotient	Mean Hazard Quotient	Constituent of Potential Ecological Concern
Metals :									
Aluminum	2.335	0.087	6 of 11	13.4	0.095	1.699	154.023	19.531	5
Arsenic	0.0178	0.190	8 of 18	0.08	0.0035	0.0073	0.419	0.038	1,4
Barium	0.127	0.0039	18 of 18	0.489	0.014	0.121	125.385	31.101	5
Cadmium	0.00251	0.00066	2 of 18	0.011	0.0019	0.0027	17.273	4.074	5
Calcium	56.493	116	18 of 18	173	5.27	89.057	1.491	0.768	2,5
Chromium	0.011	0.011	2 of 18	0.041	0.0028	0.00479	3.718	0.436	5
Cobalt	0.0234	0.003	5 of 18	0.056	0.0089	0.00945	18.667	3.149	5
Copper	0.0255	0.00654	1 of 17	0.006	0.0055	0.0024	0.844	0.368	1,3
Iron	7.04	1	16 of 16	27.7	0.142	4.308	27.7	4.308	4
Lead	0.008	0.00132	2 of 17	0.014	0.0019	0.0015	10.606	1.161	4
Magnesium	21.282	82	18 of 18	31.3	0.609	7.245	0.382	0.088	1,2,4
Manganese	0.581	0.08	18 of 18	1.17	0.033	0.3	14.625	3.749	5
Mercury	NA	0.000012	2 of 18	0.00017	0.00007	0.00006	14.167	5.222	4
Nickel	0.0225	0.0877	5 of 18	0.038	0.0031	0.011	0.436	0.123	1,5
Potassium	7.195	53	9 of 18	3.08	0.299	0.936	0.058	0.018	1,2,3
Silver	0.004	0.000012	1 of 18	0.0022	0.0022	0.004	183.333	334.722	3
Sodium	14.846	680	18 of 18	43.4	2.1	11.628	0.064	0.017	1,2,5
Vanadium	0.017	0.019	2 of 17	0.046	0.0046	0.0049	2.395	0.259	5
Zinc	0.22	0.0589	5 of 18	0.152	0.0058	0.033	2.581	0.567	3
Pesticides :									
alpha-Chlordane	NA	0.0000043	1 of 14	0.00004	0.00004	0.00001	8.605	1.228	**YES** [7]
beta-BHC	NA	50.000	2 of 14	0.00021	0.00002	0.00002	0.0000042	0.0000004	1
delta-BHC	NA	0.667	2 of 14	0.00004	0.00002	0.00001	0.000052	0.000013	1
Endrin aldehyde	NA	0.00015	1 of 14	0.00004	0.00004	0.00001	0.233	0.046	1
Heptachlor	NA	0.0000038	1 of 14	0.00003	0.00003	0.00001	8.421	1.536	**YES** [7]
Methoxychlor	NA	0.00003	1 of 14	0.00014	0.00014	0.00005	4.667	1.532	**YES** [7]
Nitroaromatic Compounds :									
2,4,6-Trinitrotoluene	NA	0.09	1 of 18	0.00028	0.00028	0.00008	0.0031	0.00083	1
2-Nitrotoluene	NA	NA	4 of 18	0.0016	0.00038	0.00026	ND	ND	6
Nitrobenzene	NA	0.74	1 of 18	0.0013	0.0013	0.00012	0.0018	0.00016	1
p-Nitrotoluene	NA	NA	1 of 18	0.00078	0.00078	0.00015	ND	ND	6
CWM Breakdown Products:									
1,4-Dithiane	NA	NA	2 of 14	0.014	0.0018	0.0013	ND	ND	6
1,4-Oxathiane	NA	NA	2 of 14	0.0065	0.0014	0.0008	ND	ND	6

Table 7-3

Constituents of Potential Ecological Concern in Groundwater
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Detected Constituents	Background Threshold Value[a] (mg/L)	Ecological Screening Value[b] (mg/L)	Frequency of Detection	Maximum Detected Concentration (mg/L)	Minimum Detected Concentration (mg/L)	Mean Detected Concentration (mg/L)	Maximum Hazard Quotient	Mean Hazard Quotient	Constituent of Potential Ecological Concern
Semivolatile Organic Compounds :									
Bis(2-Ethylhexyl)phthalate	NA	0.0003	1 of 18	0.013	0.013	0.0043	43.333	14.194	YES [7]
Phenanthrene	NA	0.0063	1 of 18	0.0016	0.0016	0.0023	0.254	0.364	1
Volatile Organic Compounds :									
1,1,2,2-Tetrachloroethane	NA	0.24	18 of 74	0.31	0.0016	0.018	1.292	0.075	YES [7]
1,1,2-Trichloroethane	NA	0.94	14 of 74	0.006	0.00028	0.00069	0.0064	0.00074	1
1,1-Dichloroethene	NA	0.303	6 of 74	0.00037	0.00021	0.00021	0.0012	0.00071	1
1,2,4-Trimethylbenzene	NA	NA	1 of 74	0.00031	0.00031	0.00057	ND	ND	6
1,2-Dichloroethane	NA	2	9 of 74	0.00120	0.00022	0.0003	0.00060	0.00015	1
1,2-Dimethylbenzene	NA	0.117	1 of 74	0.00056	0.00056	0.00027	0.0048	0.0023	1
1,3,5-Trimethylbenzene	NA	NA	1 of 74	0.00028	0.00028	0.00022	ND	ND	6
Acetone	NA	78	1 of 9	0.002500	0.002500	0.0011	0.000032	0.000014	1
Benzene	NA	0.053	3 of 74	0.0019	0.00022	0.00033	0.036	0.00616	1
Carbon disulfide	NA	0.084	2 of 73	0.00062	0.00051	0.00016	0.0074	0.00194	1
Chloroform	NA	0.289	11 of 72	0.031	0.00022	0.0015	0.107	0.00514	1
Chloromethane	NA	5.5	1 of 72	0.00018	0.00018	0.00029	0.000033	0.000053	1
Cis-1,2-Dichloroethene	NA	11.6	16 of 74	3.8	0.00025	0.061	0.328	0.00523	1
Ethylbenzene	NA	0.453	1 of 74	0.00044	0.00044	0.00023	0.00097	0.00050	1
m,p-Xylenes	NA	0.117	2 of 74	0.0025	0.00042	0.0005	0.021	0.00423	1
p-Cymene	NA	NA	1 of 74	0.00046	0.00046	0.00023	ND	ND	6
Tetrachloroethene	NA	0.084	16 of 74	0.0075	0.00021	0.00063	0.089	0.0075	1
Toluene	NA	0.175	2 of 74	0.0013	0.00066	0.0003	0.0074	0.0017	1
Trans-1,2-Dichloroethene	NA	1.35	12 of 74	1.2	0.0002	0.019	0.889	0.014	1
Trichloroethene	NA	21.9	24 of 73	0.47	0.00024	0.028	0.021	0.0013	1
Vinyl chloride	NA	0.0092	10 of 74	0.043	0.0006	0.0012	4.674	0.127	YES [7]

[a] Background threshold value is two times (2x) the arithmetic mean of background metals (SAIC, 1998).
[b] Ecological Screening Values (ESV) are presented in *Human Health and Ecological Screening Values and PAH Background Summary Report* (IT, 2000).
NA - Not available. ND - Not determined.
Rationale for exclusion as a COPEC:
1 - Maximum detected concentration is less than ESV
2 - Essential macro-nutrient, only toxic at extremely high concentrations (i.e. 10-times naturally-occurring background concentrations).
3 - Maximum detected concentration is less than the background threshold value (BTV).
4 - Slippage Test and Wilcoxon Rank Sum Test indicate the concentration of this constituent is statistically similar to background concentrations.
5 - Geochemical evaluation of the data indicate that this constituent is naturally occurring.
6 - No ESV available; however, maximum detected concentration of this constituent is less than ESV for similar compounds.
7 - Additional lines of evidence indicate that this constituent may not be a COPEC (see text).