TABLES

Table 2-1

Sampling Locations and Rationale
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Parcel	Sample Location	Sample Media	Sample Location Rationale
180	CWM -180-DEP01	Depositional soil	A depositional soil sample was collected north (downslope) of Parcel 180(7) in the drainage surrounding Motor Pool Area 3100 to determine if potential site-specific chemicals (PSSC) are present.
	CWM-180-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected near the southwest corner of the parcel to determine if PSSC are present.
	CWM-180-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the central portion of the parcel to determine if PSSC are present.
	CWM-180-MW03	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the central portion of the parcel, downgradient of the burn pit identified by concrete monument "F", to determine if PSSC are present.
	CWM-180-MW04	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected north (downgradient) of the parcel to determine if PSSC are present.
	CWM-180-MW05	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-180-MW04 and groundwater samples were collected to define the vertical extent of contamination in the area.
	CWM-180-MW06	Surface soil, subsurface soil, and groundwater	A residuum monitoring well was installed approximately 150 feet north (downgradient) of the parcel boundary. Soil and groundwater samples were collected to define the horizontal extent of contamination in the area.
	CWM-180-MW07	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-180-MW06 and groundwater samples were collected to define the vertical extent of contamination in the area.
	CWM-180-MW08	Surface soil, subsurface soil, and groundwater	A residuum monitoring well was installed approximately 75 feet northwest (downgradient) of the parcel boundary. Soil and groundwater samples were collected to define the horizontal extent of contamination in the area.
182	CWM-182-DEP01	Depositional soil	A depositional soil sample was collected in a dry stream bed south (upslope) of the parcel to determine if PSSC are present.
	CWM-182-DEP02	Depositional soil	A depositional soil sample was collected in a dry stream bed north (downslope) of the parcel to determine if PSSC are present.
	CWM-182-DEP03	Depositional soil	A depositional soil sample was collected in a dry stream bed near the northwest corner of the parcel to determine if PSSC are present.
	CWM-182-DEP04	Depositional soil	A depositional soil sample was collected in a dry stream bed west (upslope) of the parcel to determine if PSSC are present.
	CWM-182-DEP05	Depositional soil	A depositional soil sample was collected in a dry stream bed in the northern portion of the parcel to determine if PSSC are present.
	CWM -182-DEP06	Depositional soil	A depositional soil sample was collected from a drainage swale in the southern portion of Parcel 182(7) to determine if PSSC are present.
	CWM -182-DEP07	Depositional soil	A depositional soil sample was collected in a manmade surface drainage in the northeastern area of Parcel 182(7) and within Parcel 516(7) to determine if PSSC are present.
	CWM-182-DEP08	Depositional soil	A depositional soil sample was collected approximately 200 feet west of location CWM-182-DEP03 to determine if PSSC are present in the intermittent stream bed located west (upslope) of the parcel.
	CWM-182-DEP09	Depositional soil	A depositional soil sample was collected approximately 200 feet southwest of location CWM-182-DEP04 to determine if PSSC are present in the intermittent stream bed located west (upslope) of the parcel.
	CWM-182-DEP10	Depositional soil	A depositional soil sample was collected approximately 200 feet southwest of location CWM-182-DEP01 to determine if PSSC are present in the intermittent stream bed located south (upslope) of the parcel.
	CWM-182-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected near the western boundary (upgradient) of the parcel to determine if PSSC are present.

Table 2-1

Sampling Locations and Rationale
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Parcel	Sample Location	Sample Media	Sample Location Rationale
182 (con't)	CWM-182-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the southeast area of the parcel to determine if PSSC are present.
	CWM-182-MW03	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the southeastern area of the parcel to determine if PSSC are present.
	CWM-182-MW04	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples collected in the eastern-central area of the parcel to determine if PSSC are present.
	CWM-182-MW05	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the eastern-central area of the parcel to determine if PSSC are present.
	CWM-182-MW06	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northwest area of the parcel to determine if PSSC are present.
	CWM-182-MW07	Groundwater	A deep residuum monitoring well was installed adjacent to residuum well CWM-182-MW02 and groundwater samples were collected to define the horizontal and vertical extent of contamination in the area.
	CWM-182-MW08	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected along the southern boundary of Parcel 182(7) to determine if PSSC are present.
	CWM-182-MW09	Groundwater	A residuum monitoring well was installed approximately 100 feet northeast (downgradient) of CWM-182-MW02 and groundwater samples were collected to determine the horizontal extent of contamination in the area.
	CWM-182-MW10	Groundwater	A deep residuum monitoring well was installed approximately 100 feet northeast (downgradient) of CWM-182-MW02 and groundwater samples were collected to determine the horizontal and vertical extent of contamination in the area.
	CWM-182-MW11	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-182-MW03 to determine the vertical extent of contamination in the area.
	CWM-182-SW/SD01	Surface water and sediment	Surface water and sediment samples were collected from the northerly flowing stream located east (downslope) of the parcel to determine if PSSC are present.
	CWM-182-SW/SD02	Surface water and sediment	Surface water and sediment samples were collected from the northerly flowing stream located east (downslope) of the parcel to determine if PSSC are present.
511	CWM-511-DEP01	Depositional soil	A depositional soil sample was collected in the dry stream bed along the western edge of Parcel 511(7) to determine if PSSC are present.
	CWM-511-DEP02	Depositional soil	A depositional soil sample was collected in the dry stream bed along the western edge of Parcel 511(7) to determine if PSSC are present.
	CWM-511-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the south-central section of the parcel, north (downgradient) of the southern bleachers and possible demonstration area, to determine if PSSC are present.
	CWM-511-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the north-central area of the parcel, northeast of the Fenced Yard, to determine if PSSC are present.
	CWM-511-MW03	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northeast area of Parcel 511(7), northeast of the bleachers and possible demonstration area, to determine if PSSC are present.
	CWM-511-MW04	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northwestern area of the parcel to determine if PSSC are present.

Table 2-1

Sampling Locations and Rationale
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Parcel	Sample Location	Sample Media	Sample Location Rationale
511 (con't)	CWM-511-MW05	Groundwater	Groundwater samples were collected from a bedrock monitoring well installed adjacent to CWM-511-MW04 to determine the vertical extent of contamination in the area.
	CWM-511-MW06	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected west of Parcel 512(7), on the west side of Reggie Avenue, to determine if PSSC are present.
	CWM-511-SW/SD03	Surface water and sediment	Surface water and sediment samples were collected in the northerly flowing intermittent stream downstream of Parcel 511(7) to determine if PSSC are present.
	CWM-511-SW/SD04	Surface water and sediment	Surface water and sediment samples were collected in the manmade drainage located just north of Parcel 511(7) to determine if PSSC are present.
512	CWM-512-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the north-central area of the former Fenced Yard, Parcel 512(7), to determine if PSSC are present.
	CWM-512-MW02	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-512-MW01 and groundwater samples were collected to define the vertical extent of contamination in the area.
	CWM-512-MW03	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil and groundwater samples were collected in the central area of the parcel to determine if PSSC are present.
	CWM-512-SW/SD01	Surface water and sediment	Surface water and sediment samples were collected in the northerly flowing surface drainage along the western edge of Parcel 512(7) to determine if PSSC are present.
513	CWM-513-DEP01	Depositional soil	A depositional soil sample was collected in the intermittent stream outside the eastern boundary of Parcel 513(7) to determine if PSSC are present.
	CWM-513-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected just east (downgradient) of the concrete pads in the Dog Training Area to determine if PSSC are present.
	CWM-513-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northeast area of Parcel 513(7), downgradient of the Dog Training Area, to determine if PSSC are present.
514	CWM-514-DEP01	Depositional soil	A depositional soil sample was collected north of Parcel 514(7), in the surface drainage surrounding Motor Pool Area 3100, to determine if PSSC are present
	CWM-514-DEP02	Depositional soil	A depositional soil sample was collected north of Parcel 514(7), in the surface drainage surrounding Motor Pool Area 3100, to determine if PSSC are present
	CWM-514-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected near the southwest corner of the parcel (upgradient) to determine if PSSC are present.
	CWM-514-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected northeast (downgradient) of the circular pit location to determine if PSSC are present.
	CWM-514-MW03	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northwestern area of the parcel to determine if PSSC are present.
	CWM-514-MW04	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-514-MW03 and groundwater samples were collected to determine the vertical extent of contamination in the area.
	CWM-514-MW05	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected approximately 200 feet northwest (downgradient) of Parcel 514 to determine if PSSC are present

Table 2-1

Sampling Locations and Rationale
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Parcel	Sample Location	Sample Media	Sample Location Rationale
514 (con't)	CWM-514-MW06	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-514-MW05 and groundwater samples were collected to determine the vertical extent of contamination in the area.
	CWM-514-MW07	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected approximately 175 feet north-northeast of Parcel 514(7), within the Motor Pool Area 3100 parking lot, to determine if PSSC are present.
	CWM-514-MW08	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-514-MW07 and groundwater samples were collected to determine the vertical extent of contamination in the area.
	CWM-514-MW09	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected approximately 100 feet northeast (downgradient) of Parcel 514(7), within the Motor Pool Area 3100 parking lot, to determine if PSSC are present.
	CWM-514-MW10	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-514-MW09 and groundwater samples were collected to determine the vertical extent of contamination in the area.
	CWM-514-MW11	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected approximately 60 feet west (upgradient) of Parcel 514(7) to determine if PSSC are present.
	CWM-514-MW12	Groundwater	A bedrock monitoring well was installed adjacent to residuum well CWM-514-MW13 and groundwater samples were collected to determine the vertical extent of VOCs in groundwater.
	CWM-514-MW13	Groundwater	A residuum monitoring well was installed approximately 200 feet downgradient of well pair CWM-514-MW09/MW10, within the paved area of Motor Pool Area 3100, and groundwater samples were collected to further define the horizontal and vertical extent of VOC contamination in groundwater.
	CWM-514-MW14	Groundwater	A residuum monitoring well was installed approximately 150 feet west (upgradient) of residuum monitoring well CWM-514-MW03 and groundwater samples were collected to further define the vertical and horizontal extent of chlorinated VOC contamination detected in the area.
	CWM-514-MW15	Groundwater	A bedrock monitoring well was installed along the eastern parcel boundary, approximately 40 feet east (downgradient) of residuum well CWM-514-MW02, and groundwater samples were collected to further establish the horizontal and vertical extent of contamination in the area.
	CWM-514-MW16	Groundwater	A residuum monitoring well was installed approximately 220 feet east-northeast (downgradient) of well pair CWM-514-MW12/MW13 and groundwater samples were collected to further define the horizontal extent of chlorinated VOC contamination detected in CWM-514-MW13.
516	CWM-516-MW01	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the northeastern area of the Dog Kennel Area, Parcel 516(7) to determine if PSSC are present.
	CWM-516-MW02	Surface soil, subsurface soil, and groundwater	Surface soil, subsurface soil, and groundwater samples were collected in the south-central area of the Dog Kennel Area, Parcel 516(7), to determine if PSSC are present.
232Q-X	HR-232QX-MW04	Groundwater	Groundwater samples were collected from an existing monitoring well at adjacent Parcel 232Q-X to provide additional data to determine extent of contamination.
	HR-232QX-MW05	Groundwater	Groundwater samples were collected from an existing monitoring well at adjacent Parcel 232Q-X to provide additional data to determine extent of contamination.
	HR-232QX-MW10	Groundwater	Groundwater samples were collected from an existing monitoring well at adjacent Parcel 232Q-X to provide additional data to determine extent of contamination.
	HR-232QX-MW18	Groundwater	Groundwater samples were collected from an existing monitoring well at adjacent Parcel 232Q-X to provide additional data to determine extent of contamination.
	HR-232QX-MW19	Groundwater	Groundwater samples were collected from an existing monitoring well at adjacent Parcel 232Q-X to provide additional data to determine extent of contamination.

Table 2-2

Soil Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples		Analytical Parameters
			Field Duplicates	MS/MSD	
CWM-180-MW01	CWM-180-MW01-SS-TK0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW01-DS-TK0002-REG	1-2			
CWM-180-MW02	CWM-180-MW02-SS-TK0003-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW02-DS-TK0004-REG	2-3			
CWM-180-MW03	CWM-180-MW03-SS-TK0005-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW03-DS-TK0006-REG	2-3			
CWM-180-MW04	CWM-180-MW04-SS-TK0007-REG	0-1	CWM-180-MW04-SS-TK0008-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW04-DS-TK0010-REG	2-3			
CWM-180-MW06	CWM-180-MW06-SS-TK0011-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW06-DS-TK0012-REG	10-12			
CWM-180-MW08	CWM-180-MW08-SS-TK0013-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW08-DS-TK0014-REG	10-12	CWM-180-MW08-DS-TK0015-FD		
CWM-180-DEP01	CWM-180-DEP01-DEP-TK0016-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-MW01	CWM-182-MW01-SS-TE0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW01-DS-TE0002-REG	3-4		CWM-182-MW01-DS-TE0002-MS/MSD	
CWM-182-MW02	CWM-182-MW02-SS-TE0009-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW02-DS-TE0010-REG	4-5			
CWM-182-MW03	CWM-182-MW03-SS-TE0005-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW03-DS-TE0006-REG	4-5			
CWM-182-MW04	CWM-182-MW04-SS-TE0007-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW04-DS-TE0008-REG	7-8			
CWM-182-MW05	CWM-182-MW05-SS-TE0003-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW05-DS-TE0004-REG	11-12			
CWM-182-MW06	CWM-182-MW06-SS-TE0011-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW06-DS-TE0012-REG	11-12	CWM-182-MW06-DS-TE0013-FD		
CWM-182-MW08	CWM-182-MW08-SS-TE0020-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW08-DS-TE0021-REG	8-9			
CWM-182-MW09	CWM-182-MW09-SS-TE0022-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW09-DS-TE0023-REG	10-11			
CWM-182-DEP01	CWM-182-DEP01-DEP-TE0015-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP02	CWM-182-DEP02-DEP-TE0014-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP03	CWM-182-DEP03-DEP-TE0016-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP04	CWM-182-DEP04-DEP-TE0017-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD

Table 2-2

Soil Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples		Analytical Parameters
			Field Duplicates	MS/MSD	
CWM-182-DEP05	CWM-182-DEP05-DEP-TE0018-REG	0-0.5	CWM-182-DEP05-DEP-TE0019-FD		Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP06	CWM-182-DEP06-DEP-TE0024-REG	0.3-0.8			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP07	CWM-182-DEP07-DEP-TE0025-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP08	CWM-182-DEP08-DEP-TE0026-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP09	CWM-182-DEP09-DEP-TE0027-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-182-DEP10	CWM-182-DEP10-DEP-TE0028-REG	0.3-0.8			Metals, VOCs, SVOCs, CWM BD
CWM-511-MW01	CWM-511-MW01-SS-TP0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW01-DS-TP0002-REG	7-8			
CWM-511-MW02	CWM-511-MW02-SS-TP0003-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW02-DS-TP0004-REG	3-4			
CWM-511-MW03	CWM-511-MW03-SS-TP0005-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW03-DS-TP0006-REG	7-8			
CWM-511-MW04	CWM-511-MW04-SS-TP0009-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW04-DS-TP0010-REG	10-12			
CWM-511-MW06	CWM-511-MW06-SS-TP0011-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW06-DS-TP0012-REG	10-12			
CWM-511-DEP01	CWM-511-DEP01-DEP-TP0007-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-511-DEP02	CWM-511-DEP02-DEP-TP0008-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-512-MW01	CWM-512-MW01-SS-TPP0001-REG	0-1	CWM-512-MW01-SS-TPP0002-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-512-MW01-DS-TPP0003-REG	3-4			
CWM-512-MW03	CWM-512-MW03-SS-TPP0004-REG	0-1	CWM-512-MW03-SS-TPP0005-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-512-MW03-DS-TPP0006-REG	10-12			
CWM-513-MW01	CWM-513-MW01-SS-TR0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-513-MW01-DS-TR0002-REG	11-12			
CWM-513-MW02	CWM-513-MW02-SS-TR0003-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-513-MW02-DS-TR0004-REG	11-12			
CWM-513-DEP01	CWM-513-DEP01-DEP-TR0005-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW01	CWM-514-MW01-SS-TT0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW01-DS-TT0002-REG	11-12			
CWM-514-MW02	CWM-514-MW02-SS-TT0003-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW02-DS-TT0004-REG	9-10			

Table 2-2

Soil Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples		Analytical Parameters
			Field Duplicates	MS/MSD	
CWM-514-MW03	CWM-514-MW03-SS-TT0005-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW03-DS-TT0006-REG	11-12	CWM-514-MW03-DS-TT0007-FD		
CWM-514-MW05	CWM-514-MW05-SS-TT0008-REG	0-1		CWM-514-MW05-SS-TT0008-MS/MSD	Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW05-DS-TT0009-REG	8-10			
CWM-514-MW07	CWM-514-MW07-SS-TT0010-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW07-DS-TT0011-REG	10-12			
CWM-514-MW09	CWM-514-MW09-SS-TT0012-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW09-DS-TT0013-REG	10-12			
CWM-514-MW11	CWM-514-MW11-SS-TT0014-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW11-DS-TT0015-REG	11-12			
CWM-514-DEP01	CWM-514-DEP01-DEP-TT0016-REG	0-0.5			Metals, VOCs, SVOCs, CWM BD
CWM-514-DEP02	CWM-514-DEP02-DEP-TT0017-REG	0-0.3			Metals, VOCs, SVOCs, CWM BD
CWM-516-MW01	CWM-516-MW01-SS-TRR0001-REG	0-1			Metals, VOCs, SVOCs, CWM BD
	CWM-516-MW01-DS-TRR0002-REG	11-12			
CWM-516-MW02	CWM-516-MW02-SS-TRR0003-REG	0-1	CWM-516-MW02-SS-TRR0004-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-516-MW02-DS-TRR0006-REG	10-11			

CWM BD - Chemical warfare material breakdown products.
FD - Field duplicate.
ft - Feet.
MD/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Field sample.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.

Table 2-3

Monitoring Well Construction Summary
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Well Location	Well Type	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
CWM-180-MW01	Residuum	1165918.13	668252.71	834.12	836.23	50	15	35 - 50	2" ID Sch. 40 PVC
CWM-180-MW02	Residuum	1165952.89	668312.52	831.06	833.09	42	15	27 - 42	2" ID Sch. 40 PVC
CWM-180-MW03	Residuum	1166007.95	668304.97	828.17	830.30	37	15	22 - 37	2" ID Sch. 40 PVC
CWM-180-MW04	Residuum	1166112.68	668336.49	824.05	826.08	25	15	10 - 25	2" ID Sch. 40 PVC
CWM-180-MW05	Bedrock	1166120.97	668333.80	823.68	826.00	75.5	10	65.5 - 75.5	2" ID Sch. 40 PVC*
CWM-180-MW06	Residuum	1166227.40	668394.44	817.90	817.79	35.8	15	20.8 - 35.8	2" ID Sch. 40 PVC
CWM-180-MW07	Bedrock	1166239.83	668395.61	817.60	817.49	74.75	10	64.75 - 74.75	2" ID Sch. 40 PVC*
CWM-180-MW08	Residuum	1166141.48	668230.99	824.70	827.22	50	20	30 - 50	2" ID Sch. 40 PVC
CWM-182-MW01	Residuum	1164799.06	668140.42	932.93	935.08	69	15	54 - 69	2" ID Sch. 40 PVC
CWM-182-MW02	Residuum	1164598.62	668510.79	842.64	844.72	24	15	9 - 24	2" ID Sch. 40 PVC
CWM-182-MW03	Residuum	1164747.93	668571.39	838.12	840.25	53	20	33 - 53	2" ID Sch. 40 PVC
CWM-182-MW04	Residuum	1164895.94	668512.95	839.46	841.67	34	15	19 - 34	2" ID Sch. 40 PVC
CWM-182-MW05	Residuum	1165124.26	668520.58	833.55	835.72	25	15	10 - 25	2" ID Sch. 40 PVC
CWM-182-MW06	Residuum	1165245.83	668245.89	860.94	862.91	39	15	24 - 39	2" ID Sch. 40 PVC
CWM-182-MW07	Residuum	1164625.59	668484.80	845.09	847.28	90	20	70 - 90	2" ID Sch. 40 PVC
CWM-182-MW08	Residuum	1164504.74	668444.09	848.03	850.28	36	15	21 - 36	2" ID Sch. 40 PVC
CWM-182-MW09	Residuum	1164626.45	668606.59	839.58	841.80	30	15	15 - 30	2" ID Sch. 40 PVC
CWM-182-MW10	Residuum	1164657.32	668596.37	838.17	840.41	90	20	70 - 90	2" ID Sch. 40 PVC
CWM-182-MW11	Bedrock	1164766.04	668561.45	838.29	840.46	77	10	67 - 77	2" ID Sch. 40 PVC
CWM-511-MW01	Residuum	1165923.27	668981.14	810.73	810.49	24.5	15	9.5 - 24.5	2" ID Sch. 40 PVC
CWM-511-MW02	Residuum	1166059.29	669032.56	807.96	807.59	20	15	5 - 20	2" ID Sch. 40 PVC
CWM-511-MW03	Residuum	1166180.93	669110.04	805.20	804.90	20	15	5 - 20	2" ID Sch. 40 PVC
CWM-511-MW04	Residuum	1166227.16	668969.57	806.10	805.92	28.3	15	13.3 - 28.3	2" ID Sch. 40 PVC
CWM-511-MW05	Bedrock	1166221.70	668969.09	806.00	805.72	93.75	10	83.75 - 93.75	2" ID Sch. 40 PVC*
CWM-511-MW06	Residuum	1166001.35	668814.02	812.60	812.40	35	20	15 - 35	2" ID Sch. 40 PVC
CWM-512-MW01	Residuum	1166041.98	668951.96	809.06	808.78	22.5	15	7.5 - 22.5	2" ID Sch. 40 PVC
CWM-512-MW02	Bedrock	1166046.90	668934.43	809.40	809.36	57	10	47 - 57	2" ID Sch. 40 PVC*
CWM-512-MW03	Residuum	1165968.77	668924.17	810.59	810.40	24	10	14 - 24	2" ID Sch. 40 PVC
CWM-513-MW01	Residuum	1165569.42	668653.16	820.65	822.60	32	15	17 - 32	2" ID Sch. 40 PVC
CWM-513-MW02	Residuum	1165613.88	668765.35	817.15	819.35	30	15	15 - 30	2" ID Sch. 40 PVC
CWM-514-MW01	Residuum	1166055.43	667873.38	846.83	848.87	65	10	55 - 65	2" ID Sch. 40 PVC
CWM-514-MW02	Residuum	1166095.19	667893.48	839.32	841.32	68.5	10	58.5 - 68.5	2" ID Sch. 40 PVC
CWM-514-MW03	Residuum	1166145.07	667869.23	837.86	839.85	58	15	43 - 58	2" ID Sch. 40 PVC

Table 2-3

Monitoring Well Construction Summary
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Well Location	Well Type	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
CWM-514-MW04	Bedrock	1166166.86	667866.83	836.49	838.75	105.5	10	95.5 - 105.5	2" ID Sch. 40 PVC*
CWM-514-MW05	Residuum	1166387.11	667787.56	827.27	829.48	31	15	16 - 31	2" ID Sch. 40 PVC
CWM-514-MW06	Bedrock	1166387.23	667798.31	826.91	829.34	75	20	55 - 75	2" ID Sch. 40 PVC
CWM-514-MW07	Residuum	1166313.26	667974.49	823.00	822.88	30	10	20 - 30	2" ID Sch. 40 PVC
CWM-514-MW08	Bedrock	1166319.68	667979.51	823.00	822.79	75	15	60 - 75	4" ID Sch. 80 PVC
CWM-514-MW09	Residuum	1166182.08	668026.18	821.50	821.30	50	20	30 - 50	2" ID Sch. 40 PVC
CWM-514-MW10	Bedrock	1166187.51	668034.83	821.61	821.27	79.5	10	69.5 - 79.5	4" ID Sch. 80 PVC
CWM-514-MW11	Residuum	1166139.91	667815.61	839.45	841.90	35.4	10	25.4 - 35.4	2" ID Sch. 40 PVC
CWM-514-MW12	Bedrock	1166352.69	668207.16	822.20	821.91	105	10	95 - 105	2" ID Sch. 40 PVC
CWM-514-MW13	Residuum	1166362.25	668218.52	822.10	822.10	42	10	32 - 42	2" ID Sch. 40 PVC
CWM-514-MW14	Residuum	1166162.42	667719.33	838.00	840.00	65	15	50 - 65	2" ID Sch. 40 PVC
CWM-514-MW15	Bedrock	1166097.73	667936.28	838.30	840.60	123	10	113 - 123	2" ID Sch. 40 PVC
CWM-514-MW16	Residuum	1166438.54	668405.16	819.50	819.17	61	15	46 - 61	2" ID Sch. 40 PVC
CWM-516-MW01	Residuum	1165476.14	668578.52	827.05	829.14	30	15	15 - 30	2" ID Sch. 40 PVC
CWM-516-MW02	Residuum	1165396.04	668499.45	838.04	839.88	34	15	19 - 34	2" ID Sch. 40 PVC

* Pre-packed well screen installed.

Monitoring wells installed using hollow-stem auger, air rotary, and/or rotosonic drilling methods.

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.
amsl - Above mean sea level.
bgs - Below ground surface.
ft - Feet.

Table 2-4

Groundwater Field Parameters
Training Area T-5 Sites
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)
CWM-180-MW01	18-Dec-01	0.271	6.73	-31	14.1	6.5	6.80
	14-Mar-03	0.220	1.77	107	15.3	22	6.91
	30-Mar-04	0.204	2.60	-142	13.1	20	6.59
CWM-180-MW02	14-Dec-01	0.113	7.14	24	16.3	7.4	7.95
	17-Mar-03	0.079	1.32	86	14.7	7.9	5.86
	29-Mar-04	0.029	1.64	-140	19.4	7.0	5.16
CWM-180-MW03	20-Dec-01	0.138	7.38	10	16.6	5.1	5.97
	18-Mar-03	0.298	9.80	-41	16.9	7.5	6.37
	31-Mar-04	0.115	1.98	-310	14.3	7.6	6.09
CWM-180-MW04	11-Dec-01	0.063	10.56	416	14.8	1.3	5.89
	20-Mar-03	0.099	1.86	26	15.3	6.7	5.89
	5-Apr-04	0.056	1.69	199	16.7	6.2	4.99
CWM-180-MW05	21-Mar-03	0.560	6.74	51	19.2	>1000	9.23
	13-Apr-04	0.522	2.65	46	16.8	27	8.20
CWM-180-MW06	25-Mar-03	0.185	0.97	-35	19.7	12	6.75
	24-Mar-04	0.072	2.10	-201	17.5	15	5.76
CWM-180-MW07	26-Mar-03	0.370	2.68	135	17.1	3.8	7.19
	24-Mar-04	0.313	2.14	-197	17.6	8.9	7.11
CWM-180-MW08	28-Mar-03	0.047	4.41	339	19.3	25	5.43
	6-Apr-04	0.055	1.13	149	17.6	20	5.54
CWM-182-MW01	28-Jan-02	0.037	13.30	200	17.2	8.8	5.41
	18-Mar-03	0.018	7.38	354	18.8	3.6	4.27
CWM-182-MW02	19-Dec-01	0.079	3.41	87	16.1	9.0	5.75
	21-Mar-03	0.036	5.37	324	15.2	8.0	4.15
CWM-182-MW03	30-Jan-02	0.127	11.91	-24	18.4	320	5.74
	20-Mar-03	0.118	8.59	-35	19.7	10	7.34
CWM-182-MW04	19-Dec-01	0.306	7.79	190	16.3	2.0	6.79
	18-Mar-03	0.298	1.78		15.5	2.8	7.03

Table 2-4

Groundwater Field Parameters
Training Area T-5 Sites
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)
CWM-182-MW05	24-Jan-02	0.384	2.30	220	17.0	4.1	7.46
	19-Mar-03	0.305	3.69	208	19.6	8.2	6.95
CWM-182-MW06	25-Jan-02	0.353	9.91	101	14.9	7.2	6.54
	18-Mar-03	0.360	1.02	-180	17.8	2.3	7.95
CWM-182-MW07	31-Mar-03	0.022	19.36	346	15.8	1.8	4.84
CWM-182-MW08	3-Apr-03	0.037	5.02	295	17.0	20	4.50
CWM-182-MW09	29-Mar-03	0.046	7.15	300	15.3	44	5.84
CWM-182-MW10	1-Apr-03	0.031	5.86	273	18.5	9.9	5.18
CWM-182-MW11	4-Apr-03	0.144	1.69	91	16.8	39	6.58
CWM-511-MW01	3-Dec-01	0.339	10.48	-98	22.9	9.7	6.59
	31-Mar-03	0.300	0.61	-34	16.1	6.3	6.65
CWM-511-MW02	30-Nov-01	0.234	9.28	280	19.3	0.4	6.54
	1-Apr-03	0.256	1.33	34	21.0	9.1	6.73
CWM-511-MW03	29-Nov-01	0.278	11.57	68	23.2	3.3	6.82
	2-Apr-03	0.273	0.83	-61	20.2	9.2	6.89
CWM-511-MW04	3-Apr-03	0.290	2.69	148	20.3	9.0	7.30
CWM-511-MW05	4-Apr-03	0.434	0.29	-119	21.4	19	10.97
CWM-511-MW06	7-Apr-03	0.433	0.62	134	19.1	5.1	7.00
CWM-512-MW01	28-Nov-01	0.339	11.64	180	22.7	1.1	7.09
	3-Apr-03	0.443	0.24	-75	19.2	8.3	6.70
CWM-512-MW02	4-Apr-03	0.386	0.85	96	19.1	180	7.19
CWM-512-MW03	2-Apr-03	0.361	1.50	147	17.8	6.4	7.29
CWM-513-MW01	5-Dec-01	0.407	7.99	376	17.8	9.7	6.97
	1-Apr-03	0.308	4.52	136	16.9	9.3	7.04
CWM-513-MW02	6-Dec-01	0.340	0.95	346	19.7	5.9	7.18
	2-Apr-03	0.378	1.76	332	16.9	6.4	7.04
CWM-514-MW01	5-Feb-02	0.597	10.28	-35	8.1	9.8	5.87
	9-Apr-03	0.385	2.99	-146	14.1	4.2	6.65
	31-Mar-04	0.224	4.40	-232	14.8	27	6.54

Table 2-4

Groundwater Field Parameters
Training Area T-5 Sites
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)
CWM-514-MW02	8-Feb-02	0.566	1.75	356	12.9	3.1	7.18
	11-Apr-03	0.337	7.03	81	13.7	3.4	7.18
	14-Apr-04	0.319	1.70	52	18.8	3.0	6.57
CWM-514-MW03	7-Feb-02	0.044	2.21	517	7.4	1.1	5.29
	14-Apr-03	0.060	1.83	3	21.6	2.4	5.56
	15-Apr-04	0.021	0.75	131	17.6	2.3	5.14
CWM-514-MW04	11-Apr-03	1.298	1.50	769	16.2	1.5	10.96
	19-Apr-04	2.015	0.59	-268	17.6	0.9	7.08
CWM-514-MW05	7-Apr-03	0.056	4.44	243	16.8	1.9	4.50
	16-Mar-04	0.046	1.59	184	17.1	2.5	4.63
CWM-514-MW06	8-Apr-03	0.127	0.77	-1	16.4	4.6	5.80
	18-Mar-04	0.115	0.21	15	16.7	4.6	6.00
CWM-514-MW07	8-Apr-03	0.062	0.18	147	18.3	4.9	5.04
	16-Mar-04	0.061	0.26	151	20.1	5.9	5.18
CWM-514-MW08	9-Apr-03	0.186	3.78	-36	17.1	3.8	6.48
	17-Mar-04	0.185	0.27	10	18.9	1.3	6.49
CWM-514-MW09	11-Apr-03	0.257	3.59	264	13.6	130	6.42
	13-Apr-04	0.224	2.06	146	12.8	14	5.74
CWM-514-MW10	8-Apr-03	0.332	1.47	171	17.1	9.3	7.44
	13-Apr-04	0.109	2.00	52	17.3	15	8.17
CWM-514-MW11	10-Apr-03	0.027	11.31	279	11.9	41	4.59
	30-Mar-04	0.017	6.19	-76	18.8	1.7	4.18
CWM-514-MW12	12-Apr-04	0.106	0.63	100	21.0	14	5.70
CWM-514-MW13	12-Apr-04	0.370	0.85	71	23.5	5.1	6.44
CWM-514-MW14	5-Aug-04	0.053	5.68	158	20.3	3.4	5.18
CWM-514-MW15	4-Aug-04	0.275	2.84	13	18.4	11	7.68
CWM-514-MW16	9-Aug-04	0.333	0.32	-70	20.9	27	7.71
CWM-516-MW01	11-Dec-01	0.303	0.47	161	17.4	3.2	6.25
	7-Apr-03	0.220	3.70	152	18.6	0.5	5.83

Table 2-4

Groundwater Field Parameters
Training Area T-5 Sites
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)
CWM-516-MW02	7-Dec-01	0.242	3.04	372	19.0	3.1	6.00
	7-Apr-03	0.409	6.45	184	21.3	1.2	6.39
HR-232QX-MW04	17-Apr-01	0.302	7.60	266	15.5	16	7.49
	8-Apr-03	0.303	8.16	52	16.6	7.6	7.48
	8-Apr-04	0.318	1.71	110	16.8	8.2	7.46
HR-232QX-MW05	1-May-01	0.162	2.50	137	24.5	19	6.22
	3-Apr-03	0.178	9.32	136	16.4	23	6.08
	30-Mar-04	0.180	4.74	-143	16.0	11	5.84
HR-232QX-MW10	25-Apr-01	0.041	0.21	170	16.4	5.7	4.88
	2-Apr-03	0.040	0.28	392	18.1	0.6	4.12
	25-Mar-04	0.039	0.45	-164	16.7	4.5	3.79
HR-232QX-MW18	16-Apr-01	0.078	0.69	49	16.7	9.3	5.25
	1-Apr-03	0.072	0.37	149	18.2	36	5.26
HR-232QX-MW19	26-Apr-01	0.195	6.71	212	16.6	9.9	6.78
	7-Apr-03	0.199	9.92	85	18.4	32	6.56
	26-Mar-04	0.195	8.64	-97	17.4	18	6.25

°C - Degrees Celsius.
mg/L - Milligrams per liter.
mS/cm - Millisiemen per centimeter.
mV - Millivolt.
NTU - Nephelometric turbidity unit.
ORP - Oxidation-reduction potential.
SU - Standard unit.

Table 2-5

Groundwater Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Parameters
		Field Duplicates	MS/MSD	
CWM-180-MW01	CWM-180-MW01-GW-TK3001-REG		CWM-180-MW01-GW-TK3001-MS/MSD	Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW01-GW-TK3006-REG			
	CWM-180-MW01-GW-TKC3017-REG			VOCs
CWM-180-MW02	CWM-180-MW02-GW-TK3002-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW02-GW-TK3007-REG			
	CWM-180-MW02-GW-TKC3018-REG			VOCs
CWM-180-MW03	CWM-180-MW03-GW-TK3003-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW03-GW-TK3008-REG			
	CWM-180-MW03-GW-TKC3019-REG			VOCs
CWM-180-MW04	CWM-180-MW04-GW-TK3004-REG	CWM-180-MW04-GW-TK3005-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW04-GW-TK3009-REG			
	CWM-180-MW04-GW-TKC3020-REG			VOCs
CWM-180-MW05	CWM-180-MW05-GW-TK3010-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW05-GW-TKC3021-REG			VOCs
CWM-180-MW06	CWM-180-MW06-GW-TK3011-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW06-GW-TKC3022-REG			VOCs
CWM-180-MW07	CWM-180-MW07-GW-TK3012-REG		CWM-180-MW07-GW-TK3012-MS/MSD	Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW07-GW-TKC3023-REG			VOCs
CWM-180-MW08	CWM-180-MW08-GW-TK3013-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-180-MW08-GW-TKC3024-REG			VOCs
CWM-182-MW01	CWM-182-MW01-GW-TE3001-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW01-GW-TE3007-REG			
CWM-182-MW02	CWM-182-MW02-GW-TE3002-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW02-GW-TE3008-REG		CWM-182-MW02-GW-TE3008-MS/MSD	
CWM-182-MW03	CWM-182-MW03-GW-TE3003-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW03-GW-TE3009-REG			
CWM-182-MW04	CWM-182-MW04-GW-TE3004-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW04-GW-TE3010-REG			

Table 2-5

Groundwater Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Parameters
		Field Duplicates	MS/MSD	
CWM-182-MW05	CWM-182-MW05-GW-TE3005-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW05-GW-TE3011-REG			
CWM-182-MW06	CWM-182-MW06-GW-TE3006-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-182-MW06-GW-TE3012-REG			
CWM-182-MW07	CWM-182-MW07-GW-TE3013-REG	CWM-182-MW07-GW-TE3016-FD		Metals, VOCs, SVOCs, CWM BD
CWM-182-MW08	CWM-182-MW08-GW-TE3014-REG			Metals, VOCs, SVOCs, CWM BD
CWM-182-MW09	CWM-182-MW09-GW-TE3015-REG			Metals, VOCs, SVOCs, CWM BD
CWM-182-MW10	CWM-182-MW10-GW-TE3017-REG			Metals, VOCs, SVOCs, CWM BD
CWM-182-MW11	CWM-182-MW11-GW-TE3018-REG			Metals, VOCs, SVOCs, CWM BD
CWM-511-MW01	CWM-511-MW01-GW-TP3001-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW01-GW-TP3004-REG			
CWM-511-MW02	CWM-511-MW02-GW-TP3002-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW02-GW-TP3005-REG		CWM-511-MW02-GW-TP3005-MS/MSD	
CWM-511-MW03	CWM-511-MW03-GW-TP3003-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-511-MW03-GW-TP3006-REG			
CWM-511-MW04	CWM-511-MW04-GW-TP3007-REG			Metals, VOCs, SVOCs, CWM BD
CWM-511-MW05	CWM-511-MW05-GW-TP3008-REG			Metals, VOCs, SVOCs, CWM BD
CWM-511-MW06	CWM-511-MW06-GW-TP3009-REG			Metals, VOCs, SVOCs, CWM BD
CWM-512-MW01	CWM-512-MW01-GW-TPP3001-REG	CWM-512-MW01-GW-TPP3002-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-512-MW01-GW-TPP3003-REG			
CWM-512-MW02	CWM-512-MW02-GW-TPP3005-REG	CWM-512-MW02-GW-TPP3004-FD		Metals, VOCs, SVOCs, CWM BD
CWM-512-MW03	CWM-512-MW03-GW-TPP3006-REG			Metals, VOCs, SVOCs, CWM BD
CWM-513-MW01	CWM-513-MW01-GW-TR3001-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-513-MW01-GW-TR3003-REG			
CWM-513-MW02	CWM-513-MW02-GW-TR3002-REG		CWM-513-MW02-GW-TR3002-MS/MSD	Metals, VOCs, SVOCs, CWM BD
	CWM-513-MW02-GW-TR3004-REG			

Table 2-5

Groundwater Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Parameters
		Field Duplicates	MS/MSD	
CWM-514-MW01	CWM-514-MW01-GW-TKC3001-REG			VOCs
	CWM-514-MW01-GW-TT3001-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW01-GW-TT3005-REG			
CWM-514-MW02	CWM-514-MW02-GW-TKC3002-REG			VOCs
	CWM-514-MW02-GW-TT3002-REG		CWM-514-MW02-GW-TT3002-MS/MSD	Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW02-GW-TT3006-REG			
CWM-514-MW03	CWM-514-MW03-GW-TKC3003-REG	CWM-514-MW03-GW-TKC3004-FD		VOCs
	CWM-514-MW03-GW-TT3003-REG	CWM-514-MW03-GW-TT3004-FD		Metals, VOCs, SVOCs, CWM BD
	CWM-514-MW03-GW-TT3007-REG	CWM-514-MW03-GW-TT3008-FD		
CWM-514-MW04	CWM-514-MW04-GW-TKC3005-REG	CWM-514-MW04-GW-TKC3006-FD		VOCs
	CWM-514-MW04-GW-TT3009-REG	CWM-514-MW04-GW-TT3015-FD		Metals, VOCs, SVOCs, CWM BD
CWM-514-MW05	CWM-514-MW05-GW-TKC3007-REG		CWM-514-MW05-GW-TKC3007-MS/MSD	VOCs
	CWM-514-MW05-GW-TT3010-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW06	CWM-514-MW06-GW-TKC3008-REG		CWM-514-MW06-GW-TKC3008-MSMSD	VOCs
	CWM-514-MW06-GW-TT3011-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW07	CWM-514-MW07-GW-TKC3009-REG			VOCs
	CWM-514-MW07-GW-TT3012-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW08	CWM-514-MW08-GW-TKC3010-REG			VOCs
	CWM-514-MW08-GW-TT3013-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW09	CWM-514-MW09-GW-TKC3011-REG	CWM-514-MW09-GW-TKC3012-FD		VOCs
	CWM-514-MW09-GW-TT3014-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW10	CWM-514-MW10-GW-TKC3013-REG			VOCs
	CWM-514-MW10-GW-TT3016-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW11	CWM-514-MW11-GW-TKC3014-REG			VOCs
	CWM-514-MW11-GW-TT3017-REG			Metals, VOCs, SVOCs, CWM BD
CWM-514-MW12	CWM-514-MW12-GW-TKC3015-REG			VOCs
CWM-514-MW13	CWM-514-MW13-GW-TKC3016-REG			VOCs
CWM-514-MW14	CWM-514-MW14-GW-TKC3029-REG			VOCs

Table 2-5

Groundwater Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Parameters
		Field Duplicates	MS/MSD	
CWM-514-MW15	CWM-514-MW15-GW-TKC3030-REG	CWM-514-MW15-GW-TKC3031-FD	CWM-514-MW15-GW-TKC3030-MS/MSD	VOCs
CWM-514-MW16	CWM-514-MW16-GW-TKC3032-REG			VOCs
CWM-516-MW01	CWM-516-MW01-GW-TRR3001-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-516-MW01-GW-TRR3003-REG			
CWM-516-MW02	CWM-516-MW02-GW-TRR3002-REG			Metals, VOCs, SVOCs, CWM BD
	CWM-516-MW02-GW-TRR3004-REG			
HR-232QX-MW04	HR-232QX-MW04-GW-ECC3004-REG			Metals, VOCs, Explosives, Perchlorate
	HR-232QX-MW04-GW-ECC3023-REG	HR-232QX-MW04-GW-ECC3024-FD		Metals, VOCs, SVOCs, CWM BD
	HR-232QX-MW04-GW-TKC3025-REG			VOCs
HR-232QX-MW05	HR-232QX-MW05-GW-ECC3005-REG			Metals, VOCs, Explosives, Perchlorate
	HR-232QX-MW05-GW-ECC3025-REG			Metals, VOCs, SVOCs, CWM BD
	HR-232QX-MW05-GW-TKC3026-REG			VOCs
HR-232QX-MW10	HR-232QX-MW10-GW-ECC3010-REG			Metals, VOCs, Explosives, Perchlorate
	HR-232QX-MW10-GW-ECC3026-REG			Metals, VOCs, SVOCs, CWM BD
	HR-232QX-MW10-GW-TKC3027-REG			VOCs
HR-232QX-MW18	HR-232QX-MW18-GW-ECC3018-REG			Metals, VOCs, Explosives, Perchlorate
	HR-232QX-MW18-GW-ECC3027-REG			Metals, VOCs, SVOCs, CWM BD
HR-232QX-MW19	HR-232QX-MW19-GW-ECC3019-REG	HR-232QX-MW19-GW-ECC3020-FD		Metals, VOCs, Explosives, Perchlorate
	HR-232QX-MW19-GW-ECC3028-REG			Metals, VOCs, SVOCs, CWM BD
	HR-232QX-MW19-GW-TKC3028-REG			VOCs

CWM BD - Chemical warfare material breakdown products.
FD - Field duplicate.
MS/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Field sample.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.

Table 2-6

Residuum Monitoring Well Groundwater Elevations
Training Area T-5 Sites and Vicinity
Fort McClellan, Calhoun County, Alabama

Well Location	Measurement Date	Depth to Water (ft BTOC)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
CWM-180-MW01	24-Jun-03	26.70	836.23	834.12	809.53
	6-May-04	27.47			808.76
	1-Sep-04	33.72			802.51
CWM-180-MW02	24-Jun-03	17.67	833.09	831.06	815.42
	6-May-04	19.39			813.70
	1-Sep-04	24.22			808.87
CWM-180-MW03	24-Jun-03	10.95	830.30	828.17	819.35
	6-May-04	12.61			817.69
	1-Sep-04	26.04			804.26
CWM-180-MW04	24-Jun-03	8.97	826.08	824.05	817.11
	6-May-04	11.40			814.68
	1-Sep-04	16.30			809.78
CWM-180-MW06	24-Jun-03	11.69	817.79	817.90	806.10
	6-May-04	12.70			805.09
	1-Sep-04	21.38			796.41
CWM-180-MW08	24-Jun-03	14.80	827.22	824.70	812.42
	6-May-04	15.90			811.32
	1-Sep-04	21.57			805.65
CWM-182-MW01	24-Jun-03	29.40	935.08	932.93	905.68
	6-May-04	32.90			902.18
	1-Sep-04	34.50			900.58
CWM-182-MW02	24-Jun-03	4.24	844.72	842.64	840.48
	6-May-04	4.97			839.75
	2-Sep-04	9.06			835.66
CWM-182-MW03	24-Jun-03	5.24	840.25	838.12	835.01
	6-May-04	5.71			834.54
	2-Sep-04	9.15			831.10
CWM-182-MW04	24-Jun-03	11.33	841.67	839.46	830.34
	6-May-04	11.19			830.48
	2-Sep-04	13.65			828.02
CWM-182-MW05	24-Jun-03	10.04	835.72	833.55	825.68
	6-May-04	10.47			825.25
	2-Sep-04	10.69			825.03
CWM-182-MW06	24-Jun-03	9.58	862.91	860.94	853.33
	6-May-04	9.96			852.95
	1-Sep-04	11.27			851.64
CWM-182-MW07	24-Jun-03	6.95	847.28	845.09	840.33
	6-May-04	7.64			839.64
	2-Sep-04	11.61			835.67
CWM-182-MW08	24-Jun-03	7.43	850.28	848.03	842.85
	6-May-04	8.14			842.14
	2-Sep-04	13.05			837.23
CWM-182-MW09	24-Jun-03	3.57	841.80	839.58	838.23
	6-May-04	4.84			836.96
	2-Sep-04	9.47			832.33
CWM-182-MW10	24-Jun-03	4.74	840.41	838.17	835.67
	6-May-04	5.40			835.01
	2-Sep-04	8.91			831.50
CWM-511-MW01	24-Jun-03	2.59	810.49	810.73	807.90
	6-May-04	2.72			807.77
	1-Sep-04	5.30			805.19
CWM-511-MW02	24-Jun-03	3.19	807.59	807.96	804.40
	6-May-04	3.66			803.93
	1-Sep-04	5.38			802.21

Table 2-6

Residuum Monitoring Well Groundwater Elevations
Training Area T-5 Sites and Vicinity
Fort McClellan, Calhoun County, Alabama

Well Location	Measurement Date	Depth to Water (ft BTOC)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
CWM-511-MW03	24-Jun-03	3.08	804.90	805.20	801.82
	6-May-04	3.23			801.67
	1-Sep-04	5.12			799.78
CWM-511-MW04	24-Jun-03	6.34	805.92	806.10	799.58
	6-May-04	6.52			799.40
	1-Sep-04	9.63			796.29
CWM-511-MW06	24-Jun-03	5.98	812.40	812.60	806.42
	6-May-04	6.30			806.10
	2-Sep-04	8.56			803.84
CWM-512-MW01	24-Jun-03	3.96	808.78	809.06	804.82
	6-May-04	3.97			804.81
	1-Sep-04	6.36			802.42
CWM-512-MW03	24-Jun-03	1.97	810.40	810.59	808.43
	6-May-04	2.03			808.37
	1-Sep-04	5.88			804.52
CWM-513-MW01	24-Jun-03	5.62	822.60	820.65	816.98
	6.May-04	6.16			816.44
	2-Sep-04	9.43			813.17
CWM-513-MW02	24-Jun-03	6.22	819.35	817.15	813.13
	6-May-04	6.71			812.64
	2-Sep-04	9.71			809.64
CWM-514-MW01	24-Jun-03	46.60	848.87	846.83	802.27
	6.May-04	47.65			801.22
	1-Sep-04	53.43			795.44
CWM-514-MW02	24-Jun-03	40.52	841.32	839.32	800.80
	6-May-04	41.29			800.03
	1-Sep-04	47.36			793.96
CWM-514-MW03	24-Jun-03	18.59	839.85	837.86	821.26
	6-May-04	18.25			821.60
	1-Sep-04	22.02			817.83
CWM-514-MW05	24-Jun-03	11.70	829.48	827.27	817.78
	6-May-04	14.22			815.26
	1-Sep-04	17.55			811.93
CWM-514-MW07	26-Jun-03	7.83	822.88	823.00	815.05
	6.May-04	10.84			812.04
	1-Sep-04	13.94			808.94
CWM-514-MW09	26-Jun-03	3.08	821.30	821.50	818.22
	6-May-04	5.37			815.93
	1-Sep-04	3.94			817.36
CWM-514-MW11	24-Jun-03	15.28	841.90	839.45	826.62
	6-May-04	14.43			827.47
	1-Sep-04	17.87			824.03
CWM-514-MW13	6-May-04	21.30	822.10	822.11	800.80
	1-Sep-04	26.88			795.22
CWM-514-MW14	1-Sep-04	37.81	840.00	838.00	802.19
CWM-514-MW16	1-Sep-04	21.83	819.17	819.50	797.34
CWM-516-MW01	24-Jun-03	8.21	829.14	827.05	820.93
	6-May-04	8.35			820.79
	2-Sep-04	14.68			814.46
CWM-516-MW02	24-Jun-03	8.79	839.88	838.04	831.09
	6-May-04	9.32			830.56
	2-Sep-04	14.09			825.79

Table 2-6

Residuum Monitoring Well Groundwater Elevations
Training Area T-5 Sites and Vicinity
Fort McClellan, Calhoun County, Alabama

Well Location	Measurement Date	Depth to Water (ft BTOC)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
Wells at Adjacent Parcels					
FTA-146-GP05	6-May-04	13.31	822.16	820.95	808.85
	1-Sep-04	15.71			806.45
FTA-146-GP06	6-May-04	12.24	819.91	820.18	807.67
	1-Sep-04	14.80			805.11
FTA-146-GP07	6-May-04	14.53	823.74	821.22	809.21
	1-Sep-04	17.10			806.64
FTA-146-GP09	6-May-04	11.02	824.45	823.35	813.43
	1-Sep-04	13.67			810.78
FTA-146-GP10	6-May-04	10.69	822.87	821.25	810.56
	1-Sep-04	13.78			809.09
FTA-146-MW01	6-May-04	9.12	821.73	822.07	812.61
	1-Sep-04	11.63			810.10
FTA-146-MW02	6-May-04	9.40	822.48	822.88	813.08
	1-Sep-04	11.80			810.68
FTA-146-MW03	6-May-04	9.06	822.64	822.89	813.58
	1-Sep-04	11.51			811.13
FTA-146-MW04	6-May-04	9.90	823.07	823.29	813.17
	1-Sep-04	12.22			810.85
FTA-146-MW05	6-May-04	10.47	826.05	826.29	815.58
	1-Sep-04	14.90			811.15
FTA-146-MW06	6-May-04	5.20	817.30	817.49	812.10
	1-Sep-04	7.65			809.65
FTA-146-MW07	6-May-04	10.52	821.07	821.62	810.55
	1-Sep-04	12.97			808.10
FTA-146-MW08	6-May-04	9.60	823.16	823.47	813.56
	1-Sep-04	12.03			811.13
HR-232QX-MW04	24-Jun-03	11.32	869.93	868.14	858.61
	6-May-04	12.94			856.99
	1-Sep-04	19.90			850.03
HR-232QX-MW05	24-Jun-03	45.42	859.79	857.85	814.37
	6-May-04	51.00			808.79
	1-Sep-04	54.06			805.73
HR-232QX-MW10	24-Jun-03	15.23	832.97	830.63	817.74
	6-May-04	17.73			815.24
	1-Sep-04	21.22			811.75
HR-232QX-MW18	24-Jun-03	19.97	826.20	824.03	806.23
	6-May-04	21.06			805.14
	1-Sep-04	23.86			802.34
HR-232QX-MW19	24-Jun-03	48.72	859.67	857.29	810.95
	6-May-04	51.61			808.06
	1-Sep-04	56.39			803.28

amsl - Above mean sea level.
BTOC - Below top of casing.
ft - feet

Table 2-7

Bedrock Monitoring Well Groundwater Elevations
Training Area T-5 Sites and Vicinity
Fort McClellan, Calhoun County, Alabama

Well Location	Measurement Date	Depth to Water (ft BTOC)	Top of Casing Elevation (ft amsl)	Ground Elevation (ft amsl)	Groundwater Elevation (ft amsl)
CWM-180-MW05	24-Jun-03	24.60	826.00	823.68	801.40
	6-May-04	25.42			800.58
	1-Sep-04	31.38			794.62
CWM-180-MW07	24-Jun-03	13.83	817.49	817.60	803.66
	6-May-04	14.78			802.71
	1-Sep-04	23.45			794.04
CWM-182-MW11	24-Jun-03	6.07	840.46	838.29	834.39
	6-May-04	6.60			833.86
	2-Sep-04	9.63			830.83
CWM-511-MW05	24-Jun-03	6.54	805.72	806.00	799.18
	6-May-04	6.73			798.99
	1-Sep-04	9.85			795.87
CWM-512-MW02	24-Jun-03	6.31	809.36	809.40	803.05
	6-May-04	6.60			802.76
	1-Sep-04	10.00			799.36
CWM-514-MW04	24-Jun-03	38.03	838.75	836.49	800.72
	6-May-04	38.91			799.84
	1-Sep-04	44.90			793.85
CWM-514-MW06	24-Jun-03	11.89	829.34	826.91	817.45
	6-May-04	14.42			814.92
	1-Sep-04	17.75			811.59
CWM-514-MW08	24-Jun-03	6.26	822.79	823.00	816.53
	6-May-04	9.00			813.79
	1-Sep-04	11.84			810.95
CWM-514-MW10	26-Jun-03	21.63	821.27	821.61	799.64
	6-May-04	21.20			800.07
	1-Sep-04	27.32			793.95
CWM-514-MW12	6-May-04	21.38	821.91	822.20	800.53
	1-Sep-04	27.22			794.69
CWM-514-MW15	1-Sep-04	46.78	840.60	838.32	793.82
Well at Adjacent Parcel					
FTA-146-MW09	6-May-04	9.39	822.28	822.49	812.89
	1-Sep-04	12.11			810.17

amsl - Above mean sea level.
BTOC - Below top of casing.
ft - Feet.

Table 2-8

Surface Water Field Parameters
Training Area T-5 Sites
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)
CWM-182-SW/SD01	20-Feb-02	0.044	9.68	135	11.9	14	5.43
CWM-182-SW/SD02	20-Jan-03	0.020	8.90	NR	9.0	0.0	4.80
CWM-511-SW/SD03	18-Feb-02	0.092	11.14	NR	12.4	4.9	6.01
CWM-511-SW/SD04	27-Jan-03	0.045	13.06	178	4.4	4.6	7.54
CWM-512-SW/SD01	23-Jan-03	0.072	9.65	NR	6.3	10.0	4.82

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

Table 2-9

Surface Water and Sediment Sample Designations and Analytical Parameters
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	QA/QC Samples		Analytical Parameters
		Field Duplicates	MS/MSD	
CWM-182-SW/SD01	CWM-182-SW/SD01-SW-TE2001-REG		CWM-182-SW/SD01-SW-TE2001-MS/MSD	Metals, VOCs, SVOCs, CWM BD, TOC[a], and Grain Size[a]
	CWM-182-SW/SD01-SD-TE1001-REG		CWM-182-SW/SD01-SD-TE1001-MS/MSD	
CWM-182-SW/SD02	CWM-182-SW/SD02-SW-TE2002-REG			Metals, VOCs, SVOCs, CWM BD, TOC[a], and Grain Size[a]
	CWM-182-SW/SD02-SD-TE1002-REG			
CWM-511-SW/SD03	CWM-511-SW/SD03-SW-TP2003-REG			Metals, VOCs, SVOCs, CWM BD, TOC[a], and Grain Size[a]
	CWM-511-SW/SD03-SD-TP1003-REG			
CWM-511-SW/SD04	CWM-511-SW/SD04-SW-TP2004-REG		CWM-511-SW/SD04-SW-TP2004-MS/MSD	Metals, VOCs, SVOCs, CWM BD, TOC[a], and Grain Size[a]
	CWM-511-SW/SD04-SD-TP1004-REG		CWM-511-SW/SD04-SD-TP1004-MS/MSD	
CWM-512-SW/SD01	CWM-512-SW/SD01-SW-TPP2001-REG			Metals, VOCs, SVOCs, CWM BD, TOC[a], and Grain Size[a]
	CWM-512-SW/SD01-SD-TPP1001-REG			

[a] Sediment sample only, excluding QA/QC samples.

CWM BD - CWM breakdown products.
MS/MSD - Matrix spike/matrix spike duplicate.
QA/QC - Quality assurance/quality control.
REG - Field sample.
SD - Sediment.
SVOC - Semivolatile organic compound.
SW - Surface water.
TOC - Total organic carbon.
VOC - Volatile organic compound.

Table 2-10

Variances to the Site-Specific Work Plans
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Variance	Justification for Variance	Impact to Investigation
Surface water and sediment samples were not collected at proposed SI locations CWM-511-SW/SD01 and CWM-511-SW/SD02. Depositional soil samples CWM-511-DEP01 and CWM-511-DEP02 were collected at these locations.	Surface water was not present in the drainage ditch/creek at the time of sample collection.	None. Data from the depositional soil samples were used to characterize the site.
Monitoring well CWM-182-MW01 was installed using air-rotary drilling rather than hollow-stem augers as proposed in the SI work plan.	Hollow-stem auger refusal was encountered prior to reaching groundwater.	None. The use of air-rotary drilling allowed for successful well installation and subsequent sample collection.
Sample location CWM-511-SW/SD01 was moved approximately 140 feet north of it's proposed location and location CWM-513-SW/SD02 was eliminated because of their close proximity to a third sample location (CWM-513-SW/SD01).	Adjusting the number and location of the surface water/sediment samples allowed for better site coverage to determine the presence or absence of contamination. Depositional samples were collected because surface water was not present in the stream at the time of sample collection.	None. Data from the depositional soil samples were used to characterize the site.
Sample location CWM-182-DEP07 was moved approximately 200 feet northeast of it's proposed location within a man-made ditch. The sample was collected from a topographical low area in the northeastern portion of the parcel where runoff would most likely accummulate.	Soil was not present in the man-made ditch at the time of sample collection.	None. Moving the sample location enabled the sampling objective in the SFSP to be accomplished.

Table 3-1

Horizontal Hydraulic Gradients
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

	Upgradient Well (Transect)	GW Elevation May 2004 (ft amsl)	GW Elevation Sept 2004 (ft amsl)	Downgradient Well or Contour	GW Elevation May 2004 (ft amsl)	GW Elevation Sept 2004 (ft amsl)	Horizontal Distance (ft)	Elevation Difference (ft)	Horizontal Gradient (ft/ft)
Residuum	CWM-182-MW02 (N15E)	839.75		820 Contour	820.00		670	19.75	0.029
	CWM-511-MW01	807.77		CWM-511-MW04	799.40		300	8.37	0.028
	CWM-514-MW03	821.60		CWM-514-MW13	800.80		410	20.80	0.051
	CWM-180-MW03	817.69		CWM-180-MW06	805.09		240	12.60	0.053
	CWM-182-MW02 (N15E)		835.66	820 Contour		820.00	670	15.66	0.023
	CWM-511-MW01		805.19	CWM-511-MW04		796.29	300	8.90	0.030
	CWM-514-MW03		817.83	CWM-514-MW09		817.36	160	0.47	0.003
	CWM-180-MW03		804.26	CWM-180-MW06		796.41	240	7.85	0.033
								Average	**0.031**
Bedrock	CWM-512-MW02	802.76		CWM-511-MW05	798.99		180	3.77	0.021
	CWM-514-MW08	813.79		CWM-514-MW10	800.07		140	13.72	0.098
	CWM-514-MW08	813.79		CWM-514-MW12	800.53		230	13.26	0.058
	CWM-512-MW02		799.36	CWM-511-MW05		795.87	180	3.49	0.019
	CWM-514-MW08		810.95	CWM-514-MW10		793.95	140	17.00	0.121
	CWM-514-MW08		810.95	CWM-514-MW12		794.69	230	16.26	0.071
								Average	**0.065**

amsl - Above mean sea level.
ft - Feet.
GW - Groundwater.

Table 3-2

Vertical Hydraulic Gradients
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Well Cluster	Midpoint of Well Screen (ft amsl)	GW Elevation May 2004 (ft amsl)	GW Elevation Sept 2004 (ft amsl)	dH May 2004 (ft)	dH Sept 2004 (ft)	dL (ft)	Vertical Gradient (I) May 2004	Vertical Gradient (I) Sept 2004
Residuum to Bedrock								
CWM-514-MW09	781.50	815.93	817.36	15.86	23.41	34.39	0.461	0.681
CWM-514-MW10	747.11	800.07	793.95					
CWM-514-MW03	787.36	821.60	817.83	21.76	23.98	51.37	0.424	0.467
CWM-514-MW04	735.99	799.84	793.85					
CWM-514-MW13	785.10	800.80	795.22	0.27	0.53	62.90	0.004	0.008
CWM-514-MW12	722.20	800.53	794.69					
CWM-512-MW01	794.06	804.81	802.42	2.05	3.06	36.66	0.056	0.083
CWM-512-MW02	757.40	802.76	799.36					
CWM-511-MW04	785.30	799.40	796.29	0.41	0.42	68.05	0.006	0.006
CWM-511-MW05	717.25	798.99	795.87					
CWM-514-MW05	803.77	815.26	811.93	0.34	0.34	41.86	0.008	0.008
CWM-514-MW06	761.91	814.92	811.59					
CWM-514-MW07	798.00	812.04	808.94	-1.75	-2.01	42.50	-0.041	-0.047
CWM-514-MW08	755.50	813.79	810.95					

I, Vertical hydraulic gradient = dH / dL. Positive values indicate downward gradient; negative values indicate upward gradient
dH = Head shallower well - head deeper well.
dL = Vertical distance between mid-points of the well screens.
ft amsl - feet above mean sea level.
GW - Groundwater.

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date					CWM-180-DEP01 TK0016 27-Jan-03					CWM-180-MW01 TK0001 22-Oct-01					CWM-180-MW02 TK0003 22-Oct-01					CWM-180-MW03 TK0005 22-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	8.46E+03			YES	YES	2.07E+04	J	YES	YES	YES	1.91E+04	J	YES	YES	YES	1.90E+04	J	YES	YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	5.16E+00			YES		1.55E+01		YES	YES	YES	1.09E+01			YES	YES	3.83E+01		YES	YES	YES
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	3.66E+01					9.44E+01					1.30E+02		YES			7.18E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	4.81E-01	J				9.24E-01	B	YES			1.31E+00		YES		YES	ND				
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	2.25E+00		YES		YES	ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	7.94E+02					2.01E+02					5.50E+02					3.89E+02	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.63E+01				YES	1.42E+01				YES	2.02E+01				YES	4.12E+01		YES	YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	5.27E+00					6.25E+00					1.45E+01					3.00E+01		YES		YES
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	2.02E+01		YES			1.09E+01					1.19E+01					1.81E+01	J	YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.74E+04			YES	YES	3.83E+04	J	YES	YES	YES	2.93E+04	J		YES	YES	1.32E+05	J	YES	YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	4.12E+01		YES			3.93E+01					3.43E+01					3.43E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	4.70E+02					8.43E+02					8.28E+02					6.41E+02	J			
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.80E+02				YES	1.08E+03	J		YES	YES	1.11E+03	J		YES	YES	6.69E+02	J		YES	YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	6.32E-02	J				3.10E-02	J				ND					4.70E-02	J			
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	5.67E+00					1.03E+01					1.50E+01		YES			1.89E+01	J	YES		
Potassium	mg/kg	8.00E+02	NA	NA	6.74E+02					6.96E+02					5.75E+02	J				9.59E+02	J	YES		
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	8.50E-01	J	YES		YES	ND					6.37E-01	J	YES			1.25E+00		YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					1.59E+00	B	YES			ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	5.95E+01	B				5.49E+01	B				5.82E+01	B				ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	2.43E+01				YES	4.24E+01				YES	3.38E+01				YES	9.51E+01		YES	YES	YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	6.44E+01		YES		YES	3.08E+01	J				3.53E+01	J				8.27E+01		YES		YES
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	1.40E-02	J				ND					1.20E-02	J				1.30E-02	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	2.10E-01	J				5.80E-02	J				2.30E-01	J				2.10E-01	J			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					ND					1.80E-03	B			
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-180-DEP01					CWM-180-MW01					CWM-180-MW02					CWM-180-MW03				
Sample Number					TK0016					TK0001					TK0003					TK0005				
Sample Date					27-Jan-03					22-Oct-01					22-Oct-01					22-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	9.60E-02	J				ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	6.20E-01					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	6.80E-01			YES	YES	ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	1.20E+00			YES		ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	7.60E-01					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	4.20E-01	J				ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	1.10E-01	J				ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	9.00E-01					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	1.80E-01	J		YES		ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	1.40E+00				YES	ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	7.80E-01					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	7.30E-01				YES	ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	1.50E+00				YES	ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-180-MW04					CWM-180-MW06					CWM-180-MW08					CWM-182-DEP01				
Sample Number					TK0007					TK0011					TK0013					TE0015				
Sample Date					22-Oct-01					25-Nov-02					25-Nov-02					7-Nov-01				
Parameter	Units	BKG[a]	SSSL[c]	ESV[e]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	2.30E+04	J	YES	YES	YES	1.32E+04			YES	YES	1.59E+04			YES	YES	1.37E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.61E+01		YES	YES	YES	7.91E+00			YES		9.75E+00			YES		5.47E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	9.42E+01					4.04E+01					3.39E+01					6.42E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	1.12E+00	B	YES		YES	8.43E-01	J	YES			5.35E-01	J				8.79E-01	J	YES		
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	5.42E+02					1.18E+03					3.18E+02					9.82E+01	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	2.47E+01			YES	YES	1.87E+01				YES	6.36E+01		YES	YES	YES	1.70E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	1.64E+01		YES			3.60E+00					7.68E+00					1.05E+01				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.20E+01					4.35E+01		YES		YES	2.36E+01		YES			1.18E+01				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	3.34E+04	J		YES	YES	3.28E+04			YES	YES	5.34E+04		YES	YES	YES	1.65E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	3.33E+01					1.68E+01					1.70E+01					1.45E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	1.00E+03					8.53E+02					5.03E+02					6.10E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.15E+03	J		YES	YES	7.82E+01					7.95E+01					4.13E+02			YES	YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					3.15E-02	J				4.61E-02	J				ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	1.63E+01		YES			5.28E+00					2.36E+01		YES			6.54E+00	B			
Potassium	mg/kg	8.00E+02	NA	NA	7.21E+02					9.62E+02		YES			6.66E+02					7.24E+02				
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					3.07E+00		YES		YES	3.40E+00		YES		YES	ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	1.52E+00	B	YES			ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	5.32E+01	B				3.71E+01	B				3.84E+01	B				ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					1.28E+00	J		YES	YES	ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	4.42E+01				YES	3.27E+01				YES	5.16E+01				YES	2.48E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.17E+01	J	YES			2.99E+01					1.09E+02		YES		YES	3.92E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	1.50E-02	J				ND					ND					2.10E-02	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	3.40E-01	J				3.60E-02	B				3.90E-02	B				2.50E-01				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	1.40E-03	B				2.40E-03	B				2.20E-03	B				ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-180-MW04					CWM-180-MW06					CWM-180-MW08					CWM-182-DEP01				
Sample Number					TK0007					TK0011					TK0013					TE0015				
Sample Date					22-Oct-01					25-Nov-02					25-Nov-02					7-Nov-01				
Parameter	Units	BKG*	SSSL°	ESV°	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					1.70E-01	J				ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					4.50E-01				YES	ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					3.30E+00		YES	YES		ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					2.80E+00		YES	YES	YES	ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					4.50E+00		YES	YES		ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					1.50E+00		YES			ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					1.50E+00		YES			ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					7.40E-02	J				ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					3.60E+00		YES			ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					4.60E-01			YES		ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					7.70E+00		YES		YES	ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					1.80E+00		YES	YES		ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					1.50E+00		YES		YES	ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					5.50E+00		YES		YES	ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					6.00E-02	J				ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-DEP02					CWM-182-DEP03					CWM-182-DEP04					CWM-182-DEP05				
Sample Number					TE0014					TE0016					TE0017					TE0018				
Sample Date					7-Nov-01					7-Nov-01					7-Nov-01					7-Nov-01				
Parameter	Units	BKG*	SSSL*	ESV*	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	9.64E+03			YES	YES	1.37E+04			YES	YES	1.59E+04			YES	YES	1.31E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	7.45E+00			YES		8.68E+00			YES		1.11E+01			YES	YES	8.70E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	6.56E+01					1.57E+02		YES			2.04E+02		YES		YES	6.62E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	6.53E-01	J				1.58E+00		YES		YES	1.56E+00		YES		YES	ND				
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	2.30E+03		YES			1.81E+03		YES			7.64E+02					1.52E+03				
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.22E+01				YES	1.37E+01				YES	1.81E+01				YES	1.58E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	5.03E+00					1.33E+01					1.59E+01		YES			6.42E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	8.99E+00					1.04E+02		YES		YES	1.99E+02		YES		YES	1.35E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.66E+04			YES	YES	2.33E+04			YES	YES	3.11E+04			YES	YES	1.72E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.41E+01					2.16E+01					6.62E+01		YES		YES	1.54E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	4.82E+02					7.84E+02					1.31E+03		YES			6.76E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	4.90E+02			YES	YES	1.39E+03			YES	YES	4.35E+03		YES	YES	YES	5.00E+02			YES	YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					6.00E-02	J				ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	6.07E+00	B				1.53E+01		YES			2.09E+01		YES			7.56E+00	B			
Potassium	mg/kg	8.00E+02	NA	NA	3.73E+02	J				5.64E+02	J				7.39E+02					7.45E+02				
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					ND					ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					1.32E+00	J	YES			ND				
Sodium	mg/kg	6.34E+02	NA	NA	ND					ND					5.78E+01	B				ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	1.99E+01				YES	2.62E+01				YES	3.09E+01				YES	3.08E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	3.02E+01					1.17E+03		YES		YES	9.11E+01		YES		YES	4.50E+01		YES		
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	4.50E-02					5.10E-02					ND					2.30E-02	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	1.80E-01	J				4.90E-01					6.60E-01	B				4.70E-01	J			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					ND					ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	2.20E-03	J				1.40E-03	J				ND					6.10E-03	J			
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	8.80E-03	J				ND					ND					3.10E-02	J			
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					CWM-182-DEP02 TE0014 7-Nov-01					CWM-182-DEP03 TE0016 7-Nov-01					CWM-182-DEP04 TE0017 7-Nov-01					CWM-182-DEP05 TE0018 7-Nov-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-DEP06					CWM-182-DEP07					CWM-182-DEP08					CWM-182-DEP09				
Sample Number					TE0024					TE0025					TE0026					TE0027				
Sample Date					16-Jan-03					20-Jan-03					21-Jan-03					21-Jan-03				
Parameter	Units	BKG[a]	SSSL[a]	ESV[a]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	8.60E+03			YES	YES	9.49E+03			YES	YES	1.16E+04			YES	YES	1.72E+04		YES	YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	3.49E+00			YES		2.76E+00			YES		1.30E+01			YES	YES	5.55E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	3.95E+01					5.32E+01					1.30E+02		YES			1.92E+02		YES		YES
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	3.84E-01	J				ND					2.41E+00		YES		YES	1.41E+00		YES		YES
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	4.40E+02					2.19E+03		YES			3.61E+03		YES			9.42E+02				
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.39E+01				YES	9.59E+00				YES	1.58E+01				YES	1.24E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	8.83E+00					ND					2.01E+01		YES		YES	1.52E+01		YES		
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	6.08E+00					8.17E+00					2.68E+01		YES			1.32E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	9.97E+03			YES	YES	1.02E+04			YES	YES	2.84E+04			YES	YES	1.12E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.56E+01					1.10E+01					4.38E+01		YES			4.96E+01		YES		
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	5.92E+02					9.14E+02					1.20E+03		YES			8.69E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	4.01E+02			YES	YES	4.55E+01					1.21E+03			YES	YES	5.04E+03		YES	YES	YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	3.77E-02	J				ND					1.07E-01	J	YES		YES	9.20E-02	J	YES		
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	5.73E+00					5.14E+00					2.60E+01		YES			1.75E+01		YES		
Potassium	mg/kg	8.00E+02	NA	NA	3.48E+02	J				3.41E+02	J				8.01E+02		YES			5.26E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					ND					ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	4.85E+01	B				ND					ND					ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	1.67E+01				YES	1.61E+01				YES	2.60E+01				YES	2.20E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	5.68E+01		YES		YES	6.50E+01		YES		YES	9.13E+01		YES		YES	6.00E+01		YES		YES
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					ND					4.20E-02					9.70E-02				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	2.20E-01	B				5.70E-02	B				5.10E-01	J				8.80E-01	J			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	1.90E-03	B				ND					ND					ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					2.10E-03	J			YES	ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					CWM-182-DEP06 TE0024 16-Jan-03					CWM-182-DEP07 TE0025 20-Jan-03					CWM-182-DEP08 TE0026 21-Jan-03					CWM-182-DEP09 TE0027 21-Jan-03				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-DEP10					CWM-182-MW01					CWM-182-MW02					CWM-182-MW03				
Sample Number					TE0028					TE0001					TE0009					TE0005				
Sample Date					16-Jan-03					6-Nov-01					26-Nov-01					26-Nov-01				
Parameter	Units	BKG*	SSSL*	ESV*	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.89E+04		YES	YES	YES	1.13E+04			YES	YES	2.16E+04		YES	YES	YES	1.61E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	8.04E+00			YES		8.56E+00			YES		8.95E+00			YES		6.10E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	6.69E+01					4.73E+01	J				6.59E+01					7.56E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	1.20E+00		YES		YES	ND					4.56E-01	J				5.04E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	1.01E+02					1.71E+02					2.85E+02	B				1.41E+02	B			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	4.10E+01		YES	YES	YES	1.21E+01				YES	2.04E+01				YES	1.24E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	1.33E+01					1.50E+01					8.96E+00					6.19E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.36E+01		YES			1.09E+01					1.66E+01		YES			9.35E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	2.31E+04			YES	YES	8.90E+03			YES	YES	1.98E+04			YES	YES	1.34E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	2.42E+01					8.83E+00	J				1.46E+01					1.15E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	8.33E+02					7.54E+02					1.12E+03		YES			8.43E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.71E+03		YES	YES	YES	4.40E+02	J		YES	YES	1.70E+02				YES	4.13E+02			YES	YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	6.05E-02	J				ND					ND					3.10E-02	J			
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	7.72E+00					1.03E+01					9.45E+00					1.09E+01		YES		
Potassium	mg/kg	8.00E+02	NA	NA	1.02E+03		YES			5.79E+02	J				1.40E+03		YES			8.48E+02		YES		
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					7.24E-01	B	YES			ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	4.54E+01	B				3.24E+01	J				4.86E+01	J				4.84E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	3.73E+01				YES	1.77E+01				YES	3.36E+01				YES	2.27E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.56E+01		YES			3.16E+01					4.43E+01		YES			3.76E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	2.30E-02	J				1.60E-02	J				8.50E-03	J				8.70E-03	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	2.80E-01	J				2.40E-01					2.30E-01					2.40E-01				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					1.90E-03	B				ND					ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					2.10E-03	J				ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					9.60E-04	B			
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					CWM-182-DEP10 TE0028 16-Jan-03					CWM-182-MW01 TE0001 6-Nov-01					CWM-182-MW02 TE0009 26-Nov-01					CWM-182-MW03 TE0005 26-Nov-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-MW04					CWM-182-MW05					CWM-182-MW06					CWM-182-MW08				
Sample Number					TE0007					TE0003					TE0011					TE0020				
Sample Date					8-Nov-01					8-Nov-01					6-Nov-01					26-Nov-02				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.17E+04			YES	YES	1.63E+04			YES	YES	9.04E+03			YES	YES	6.37E+03				YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	9.92E+00			YES		5.85E+00			YES		1.37E+01			YES	YES	9.63E+00	J		YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	8.54E+01					6.83E+01					5.24E+01	J				1.25E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	5.47E-01	J				ND					5.84E-01	B				ND				
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	6.35E+02					6.28E+02					2.43E+02					9.15E+01	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	2.58E+01			YES	YES	1.41E+01				YES	1.29E+01				YES	2.33E+01			YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	1.57E+01		YES			5.61E+00					5.58E+00					1.80E+00	J			
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	6.50E+00					7.37E+00					1.39E+01		YES			1.24E+01				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.56E+04			YES	YES	1.36E+04			YES	YES	2.06E+04			YES	YES	1.59E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.76E+01					9.19E+00					9.58E+00	J				1.08E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	5.05E+02					8.16E+02					4.32E+02					2.54E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.11E+03			YES	YES	1.29E+02				YES	3.20E+02	J			YES	5.02E+01				
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	3.06E+01		YES		YES	7.47E+00	B				8.58E+00					8.24E+00				
Potassium	mg/kg	8.00E+02	NA	NA	3.71E+02	J				5.20E+02	J				4.28E+02	J				4.65E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					7.24E-01	B	YES			8.59E-01	J	YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	ND					ND					3.96E+01	J				3.26E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	3.15E+01				YES	2.69E+01				YES	2.77E+01				YES	2.45E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	2.58E+01					2.75E+01					3.61E+01					3.79E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					3.00E-02	J				1.90E-02	J				ND				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	2.30E-02					4.40E-01	B				4.10E-01	B				5.10E-02	B			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	1.90E-03	B				3.10E-03	B				1.90E-03	B				3.80E-03	B			
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					1.40E-02					7.50E-03					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					1.60E-03	J				ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					2.10E-02					7.90E-03					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					1.30E-03	J				ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					CWM-182-MW04 TE0007 8-Nov-01					CWM-182-MW05 TE0003 8-Nov-01					CWM-182-MW06 TE0011 6-Nov-01					CWM-182-MW08 TE0020 26-Nov-02				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					8.40E-02	J			
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-MW09					CWM-511-DEP01					CWM-511-DEP02					CWM-511-MW01				
Sample Number					TE0022					TP0007					TP0008					TP0001				
Sample Date					4-Jun-03					7-Nov-01					7-Nov-01					22-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.18E+04			YES	YES	7.80E+03				YES	8.36E+03			YES	YES	1.32E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	3.86E+00			YES		7.00E+00			YES		2.89E+00			YES		6.59E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	7.04E+01					3.91E+01					4.94E+01					5.30E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	8.44E-01	J	YES			7.18E-01	J				5.01E-01	J				ND				
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					2.27E+00		YES		YES	2.72E+00		YES		YES	ND				
Calcium	mg/kg	1.72E+03	NA	NA	2.58E+02					5.16E+02					7.05E+02					7.75E+03		YES		
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.22E+01				YES	3.14E+01			YES	YES	1.48E+01				YES	2.69E+01			YES	YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	3.63E+00					6.72E+00					3.59E+00					3.17E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	8.53E+00					1.19E+02		YES		YES	3.23E+01		YES			8.37E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	9.45E+03			YES	YES	2.96E+04			YES	YES	1.08E+04			YES	YES	1.74E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.97E+01					2.49E+01					3.19E+01					9.50E+00				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	7.16E+02					2.81E+02					3.92E+02					4.65E+03		YES		
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	2.26E+02				YES	5.79E+02			YES	YES	1.58E+02				YES	1.28E+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	5.39E+00					5.43E+00					6.10E+00					6.80E+00				
Potassium	mg/kg	8.00E+02	NA	NA	8.43E+02		YES			2.49E+02	J				3.99E+02	J				7.88E+02				
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	8.12E-01	B	YES		YES	ND					ND					ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	8.79E+01	B				4.41E+01	B				4.20E+01	B				5.28E+01	B			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	1.69E+01				YES	4.18E+01				YES	1.94E+01				YES	2.69E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	3.02E+01	J				5.76E+01		YES		YES	1.26E+02		YES		YES	2.67E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	9.20E-03	J				3.80E-02					1.40E-02	J				7.30E-03	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	7.20E-02					3.30E-01					2.10E-01					6.00E-02				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					2.60E-03	J				2.40E-03	J			
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	5.60E-03	B				ND					ND					1.90E-03	B			
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					4.10E-03	J				2.80E-03	J				ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					2.60E-03	J				ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					3.10E-03	J				7.30E-03					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-MW09					CWM-511-DEP01					CWM-511-DEP02					CWM-511-MW01				
Sample Number					TE0022					TP0007					TP0008					TP0001				
Sample Date					4-Jun-03					7-Nov-01					7-Nov-01					22-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					1.80E-01	J				ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					2.10E-01	J		YES	YES	1.20E-01	J		YES	YES
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					2.90E-01	J				1.90E-01	J			
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					1.20E-01	J				8.30E-02	J			
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					8.70E-02	J				ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					2.10E-01	J				ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					4.90E-01				YES	7.90E-02	J			
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					1.30E-01	J				8.70E-02	J			
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					2.20E-01	J			YES	ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					3.50E-01				YES	7.30E-02	J			
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-511-MW02					CWM-511-MW03					CWM-511-MW04					CWM-511-MW06				
Sample Number					TP0003					TP0005					TP0009					TP0011				
Sample Date					22-Oct-01					22-Oct-01					29-Oct-02					29-Oct-02				
Parameter	Units	BKG[a]	SSSL[c]	ESV[e]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.48E+04			YES	YES	1.65E+04		YES	YES	YES	1.68E+04		YES	YES	YES	1.14E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	6.59E+00			YES		5.95E+00			YES		9.38E+00			YES		1.14E+01			YES	YES
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	5.54E+01					7.29E+01					5.55E+01					5.81E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	ND					4.70E-01	J				ND					4.65E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					1.16E+00	J	YES		
Calcium	mg/kg	1.72E+03	NA	NA	6.34E+02					6.25E+02					1.64E+03					5.59E+03		YES		
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.84E+01				YES	1.54E+01				YES	2.20E+01				YES	1.96E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	3.65E+00					5.26E+00					4.06E+00					4.68E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	8.82E+00					8.64E+00					9.00E+00					1.68E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.86E+04			YES	YES	1.82E+04			YES	YES	2.12E+04			YES	YES	1.97E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	8.00E+00					9.05E+00					9.18E+00					2.71E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	7.43E+02					8.25E+02					1.46E+03		YES			3.15E+03		YES		
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	8.82E+01					1.15E+02				YES	7.29E+01					2.21E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					ND					3.92E-02	J			
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	6.27E+00					8.01E+00					7.87E+00					5.82E+00				
Potassium	mg/kg	8.00E+02	NA	NA	1.04E+03		YES			7.62E+02					1.28E+03		YES			8.60E+02		YES		
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					1.15E+00		YES		YES	1.69E+00		YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	5.39E+01	B				5.34E+01	B				ND					ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	2.68E+01				YES	2.87E+01				YES	3.26E+01				YES	2.66E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	1.89E+01					2.66E+01					2.30E+01					3.27E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					ND					ND					ND				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	4.40E-02					4.00E-02					9.60E-03	J				7.90E-02	J			
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	1.70E-03	J				1.90E-03	J				1.80E-03	J				ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	1.90E-03	B				2.00E-03	B				ND					ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					6.40E-03	J				ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date					CWM-511-MW02 TP0003 22-Oct-01					CWM-511-MW03 TP0005 22-Oct-01					CWM-511-MW04 TP0009 29-Oct-02					CWM-511-MW06 TP0011 29-Oct-02				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					1.30E-01	J				ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					7.90E-02	J				ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					4.10E-01					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					5.70E-01			YES	YES	ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	7.90E-02	J				8.10E-01					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					3.50E-01	J				ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					2.30E-01	J				ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					1.60E-01	J			
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					4.00E-01					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					1.20E-01	J		YES		ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					9.50E-01				YES	ND					2.10E-01	J			YES
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					3.70E-01	J				ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					7.20E-01				YES	ND					1.60E-01	J			YES
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-512-MW01					CWM-512-MW03					CWM-513-DEP01					CWM-513-MW01				
Sample Number					TPP0001					TPP0004					TR0005					TR0001				
Sample Date					22-Oct-01					29-Oct-02					8-Nov-01					24-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	2.66E+04		YES	YES	YES	1.91E+04		YES	YES	YES	3.97E+03				YES	1.31E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.01E+01			YES	YES	8.89E+00			YES		8.15E+00			YES		2.59E+01		YES	YES	YES
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	1.06E+02					6.86E+01					2.71E+01					8.86E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	5.48E-01	B				ND					4.01E-01	J				6.60E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					1.77E+00		YES		YES	ND				
Calcium	mg/kg	1.72E+03	NA	NA	7.54E+02	J				6.64E+02	J				1.60E+02					2.08E+03		YES		
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	2.57E+01			YES	YES	2.48E+01			YES	YES	1.83E+01				YES	1.68E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	4.32E+00					4.70E+00					4.75E+00					7.01E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.36E+01		YES			8.62E+00					1.76E+01		YES			1.39E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	2.90E+04			YES	YES	2.35E+04			YES	YES	1.75E+04			YES	YES	1.89E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.13E+01					9.98E+00					1.10E+01					1.33E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	1.42E+03		YES			1.12E+03		YES			1.19E+02					8.30E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	4.37E+01					2.14E+02				YES	4.34E+02			YES	YES	2.35E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					ND					ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	9.42E+00					7.50E+00					3.60E+00					7.67E+00				
Potassium	mg/kg	8.00E+02	NA	NA	2.09E+03	J	YES			1.32E+03		YES			2.03E+02	J				7.77E+02				
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	6.72E-01	J	YES			1.84E+00	B	YES		YES	ND					7.74E-01	J	YES		
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	5.80E+01	B				2.25E+01	J				2.44E+01	B				5.28E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	4.99E+01				YES	3.97E+01				YES	2.74E+01				YES	3.31E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	3.12E+01					2.61E+01					3.63E+01					3.02E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					ND					2.70E-02					ND				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	7.30E-03	J				4.90E-02	J				2.40E-01					3.30E-02				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					3.70E-03	J				ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					ND					1.50E-03	B			
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					2.60E-03	B				ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date					CWM-512-MW01 TPP0001 22-Oct-01					CWM-512-MW03 TPP0004 29-Oct-02					CWM-513-DEP01 TR0005 8-Nov-01					CWM-513-MW01 TR0001 24-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					9.80E-02	J			
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					1.10E-01	J		YES	YES
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					1.70E-01	J			
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					7.80E-02	J			
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					6.20E-02	J			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					1.10E-01	J			
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					2.60E-01	J			YES
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					8.80E-02	J			
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					1.20E-01	J			YES
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					1.90E-01	J			YES
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date					CWM-513-MW02 TR0003 6-Nov-01					CWM-514-DEP01 TT0016 27-Jan-03					CWM-514-DEP02 TT0017 27-Jan-03					CWM-514-MW01 TT0001 6-Nov-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	9.87E+03			YES	YES	1.53E+04			YES	YES	1.25E+04			YES	YES	1.86E+04		YES	YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					5.68E+00	B	YES	YES	YES
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	6.24E+00			YES		1.06E+01			YES	YES	4.86E+00			YES		6.98E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	5.33E+01					5.25E+01					6.73E+01					5.99E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	4.76E-01	B				8.24E-01	J	YES			5.07E-01	J				5.41E-01	B			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	3.72E+02					2.82E+02					8.54E+02					2.39E+02				
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	1.48E+01				YES	2.53E+01			YES	YES	2.11E+01				YES	2.04E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	6.60E+00					5.43E+00					1.72E+00	J				5.20E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	7.65E+00					3.84E+01		YES			5.15E+01		YES		YES	8.50E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.61E+04			YES	YES	3.95E+04		YES	YES	YES	2.30E+04			YES	YES	5.43E+04		YES	YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	9.84E+00					3.43E+01					5.15E+01		YES		YES	1.19E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	4.34E+02					6.12E+02					5.03E+02					5.70E+02				
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	2.01E+02				YES	8.28E+01					9.47E+01					2.90E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					5.16E-02	J				ND					5.08E-02	B			
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	6.27E+00					1.96E+01		YES			4.20E+00					1.08E+01		YES		
Potassium	mg/kg	8.00E+02	NA	NA	4.53E+02	J				1.12E+03		YES			1.19E+03		YES			4.04E+02	J			
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					1.26E+00	J	YES		YES	1.25E+00	J	YES		YES	ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	3.89E+01	J				8.33E+01	B				7.12E+01	B				ND				
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	2.01E+01				YES	4.61E+01				YES	2.47E+01				YES	3.71E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	2.24E+01					7.27E+01		YES		YES	7.60E+01		YES		YES	3.66E+01				
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					ND					ND					4.90E-03	J			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	8.00E-02					8.10E-02	J				1.50E-01	J				1.40E-01				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	1.50E-03	B				ND					ND					ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					2.30E-03	J				ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	1.10E-03	B				ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					2.80E-02					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-513-MW02					CWM-514-DEP01					CWM-514-DEP02					CWM-514-MW01				
Sample Number					TR0003					TT0016					TT0017					TT0001				
Sample Date					6-Nov-01					27-Jan-03					27-Jan-03					6-Nov-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					3.40E-01	J				3.80E-01	J				ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					3.30E-01	J		YES	YES	3.70E-01	J		YES	YES	ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					5.50E-01	J				5.80E-01					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					2.50E-01	J				3.00E-01	J				ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					2.10E-01	J				2.30E-01	J				ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					7.70E-02	J				ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					4.70E-01	J				4.90E-01					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					7.80E-01				YES	8.60E-01				YES	ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					2.80E-01	J				3.20E-01	J				ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					3.00E-01	J			YES	3.70E-01	J			YES	ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					7.60E-01				YES	8.30E-01				YES	ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-514-MW02					CWM-514-MW03					CWM-514-MW05					CWM-514-MW07				
Sample Number					TT0003					TT0005					TT0008					TT0010				
Sample Date					6-Nov-01					6-Nov-01					26-Nov-02					29-Oct-02				
Parameter	Units	BKG[a]	SSSL[b]	ESV[c]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	1.85E+04		YES	YES	YES	1.85E+04		YES	YES	YES	1.10E+04			YES	YES	1.67E+04		YES	YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	5.45E+00			YES		6.63E+00			YES		5.27E+00			YES		8.32E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	6.34E+01					9.91E+01					8.26E+01					4.74E+01				
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	4.12E-01	B				6.17E-01	B				6.89E-01	J				7.91E-01	J			
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	2.94E+02					4.40E+02					3.47E+02					1.13E+04		YES		
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	2.11E+01				YES	1.50E+01				YES	2.06E+01				YES	1.66E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	4.53E+00					1.05E+01					1.35E+01					1.04E+01				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	1.01E+01					1.24E+01					1.32E+01		YES			2.33E+01		YES		
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	1.53E+04			YES	YES	1.64E+04			YES	YES	1.98E+04			YES	YES	4.49E+04		YES	YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	9.42E+00					1.57E+01					2.13E+01					1.63E+01				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	7.33E+02					7.69E+02					5.29E+02					3.80E+03		YES		
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	1.85E+02				YES	4.91E+02			YES	YES	5.70E+02			YES	YES	1.28E+02				YES
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	ND					4.80E-02	B				3.70E-02	J				ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	1.00E+01					1.35E+01		YES			6.51E+00					3.69E+01		YES		YES
Potassium	mg/kg	8.00E+02	NA	NA	6.27E+02	J				9.46E+02	J	YES			5.71E+02	J				1.14E+03		YES		
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	ND					ND					1.59E+00	B	YES		YES	2.64E+00		YES		YES
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	3.88E+01	J				4.25E+01	J				3.60E+01	J				2.70E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					7.06E-01	J		YES		ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	3.02E+01				YES	2.88E+01				YES	2.68E+01				YES	2.39E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	3.08E+01					3.68E+01					2.38E+01					8.24E+01		YES		YES
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	ND					ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	ND					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					6.40E-03	J				3.40E-02	B				ND				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					ND					ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	1.00E-01					1.70E-01					4.00E-01	J				ND				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	ND					ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					ND					4.10E-03	B				ND				
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	ND					ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					ND				
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					2.00E-03	J				ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date					CWM-514-MW02 TT0003 6-Nov-01					CWM-514-MW03 TT0005 6-Nov-01					CWM-514-MW05 TT0008 26-Nov-02					CWM-514-MW07 TT0010 29-Oct-02				
Parameter	Units	BKG[a]	SSSL[c]	ESV[e]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					2.60E-01	J			YES
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					2.10E-01	J			YES
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-514-MW09					CWM-514-MW11					CWM-516-MW01					CWM-516-MW02				
Sample Number					TT0012					TT0014					TRR0001					TRR0003				
Sample Date					29-Oct-02					26-Nov-02					6-Nov-01					24-Oct-01				
Parameter	Units	BKG*	SSSL°	ESV°	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																								
Aluminum	mg/kg	1.63E+04	7.80E+03	5.00E+01	2.84E+04		YES	YES	YES	2.06E+04		YES	YES	YES	1.12E+04			YES	YES	1.05E+04			YES	YES
Antimony	mg/kg	1.99E+00	3.11E+00	3.50E+00	ND					ND					ND					ND				
Arsenic	mg/kg	1.37E+01	4.26E-01	1.00E+01	1.18E+01			YES	YES	1.07E+01			YES	YES	9.55E+00			YES		2.76E+00			YES	
Barium	mg/kg	1.24E+02	5.47E+02	1.65E+02	5.06E+01					5.61E+01					5.65E+01					3.74E+02		YES		YES
Beryllium	mg/kg	8.00E-01	9.60E+00	1.10E+00	ND					4.93E-01	J				4.16E-01	J				8.32E-01	J	YES		
Cadmium	mg/kg	2.90E-01	6.25E+00	1.60E+00	ND					ND					ND					ND				
Calcium	mg/kg	1.72E+03	NA	NA	2.76E+03		YES			2.27E+02					5.97E+02					5.74E+02	J			
Chromium	mg/kg	3.70E+01	2.32E+01	4.00E-01	2.87E+01			YES	YES	2.85E+01			YES	YES	2.15E+01				YES	2.11E+01				YES
Cobalt	mg/kg	1.52E+01	4.68E+02	2.00E+01	6.49E+00					6.47E+00					1.45E+01					2.45E+00				
Copper	mg/kg	1.27E+01	3.13E+02	4.00E+01	2.93E+01		YES			1.69E+01		YES			7.12E+00					8.75E+00				
Iron	mg/kg	3.42E+04	2.34E+03	2.00E+02	3.44E+04		YES	YES	YES	3.34E+04			YES	YES	1.63E+04			YES	YES	2.16E+04			YES	YES
Lead	mg/kg	4.01E+01	4.00E+02	5.00E+01	1.33E+01					1.39E+01					1.68E+01					8.57E+00				
Magnesium	mg/kg	1.03E+03	NA	4.40E+05	1.07E+03		YES			7.52E+02					5.01E+02					4.51E+02	J			
Manganese	mg/kg	1.58E+03	3.63E+02	1.00E+02	6.27E+01					3.24E+02				YES	5.49E+02			YES	YES	5.72E+01	J			
Mercury	mg/kg	8.00E-02	2.33E+00	1.00E-01	4.85E-02	J				5.50E-02	J				ND					ND				
Nickel	mg/kg	1.03E+01	1.54E+02	3.00E+01	1.23E+01		YES			1.06E+01		YES			5.17E+00					6.63E+00				
Potassium	mg/kg	8.00E+02	NA	NA	8.84E+02		YES			6.33E+02					4.63E+02	J				1.22E+03		YES		
Selenium	mg/kg	4.80E-01	3.91E+01	8.10E-01	2.26E+00	B	YES		YES	2.21E+00		YES		YES	9.65E-01	J	YES		YES	ND				
Silver	mg/kg	3.60E-01	3.91E+01	2.00E+00	ND					ND					ND					ND				
Sodium	mg/kg	6.34E+02	NA	NA	2.63E+01	J				3.87E+01	J				ND					3.75E+01	J			
Thallium	mg/kg	3.43E+00	5.08E-01	1.00E+00	ND					ND					ND					ND				
Vanadium	mg/kg	5.88E+01	5.31E+01	2.00E+00	5.94E+01		YES	YES	YES	4.41E+01				YES	2.66E+01				YES	3.00E+01				YES
Zinc	mg/kg	4.06E+01	2.34E+03	5.00E+01	4.47E+01		YES			3.46E+01					2.00E+01					4.28E+01		YES		
VOLATILE ORGANIC COMPOUNDS																								
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.00E-01	1.10E-01				YES	ND					ND					ND				
1,1,2-Trichloroethane	mg/kg	NA	1.11E+01	1.00E-01	1.20E-02					ND					ND					ND				
2-Butanone	mg/kg	NA	4.66E+03	8.96E+01	ND					ND					1.10E-02	J				ND				
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	4.43E+02	ND					2.60E-03	J				ND					ND				
Acetone	mg/kg	NA	7.76E+02	2.50E+00	ND					2.70E-02	B				2.10E-01					1.90E-02				
Carbon disulfide	mg/kg	NA	7.77E+02	9.00E-02	ND					ND					ND					ND				
Chloromethane	mg/kg	NA	4.85E+01	1.00E-01	ND					ND					ND					ND				
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	1.00E-01	2.40E-03	J				ND					ND					ND				
Methylene chloride	mg/kg	NA	8.41E+01	2.00E+00	ND					3.70E-03	B				1.60E-03	B				1.50E-03	B			
Naphthalene	mg/kg	NA	1.55E+02	1.00E-01	ND					ND					ND					ND				
Toluene	mg/kg	NA	1.55E+03	5.00E-02	ND					ND					ND					ND				
Trichloroethene	mg/kg	NA	5.72E+01	1.00E-03	5.10E-02				YES	ND					ND					ND				
Trichlorofluoromethane	mg/kg	NA	2.33E+03	1.00E-01	ND					ND					ND					3.80E-03	J			
p-Cymene	mg/kg	NA	1.55E+03	NA	ND					ND					ND					ND				
sec-Butylbenzene	mg/kg	NA	7.77E+01	NA	ND					ND					ND					ND				

Table 4-1

Surface and Depositional Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date					CWM-514-MW09 TT0012 29-Oct-02					CWM-514-MW11 TT0014 26-Nov-02					CWM-516-MW01 TRR0001 6-Nov-01					CWM-516-MW02 TRR0003 24-Oct-01				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
SEMIVOLATILE ORGANIC COMPOUNDS																								
Acenaphthylene	mg/kg	8.91E-01	4.63E+02	6.82E+02	ND					ND					ND					ND				
Anthracene	mg/kg	9.35E-01	2.33E+03	1.00E-01	ND					ND					ND					ND				
Benzo(a)anthracene	mg/kg	1.19E+00	8.51E-01	5.21E+00	ND					ND					ND					ND				
Benzo(a)pyrene	mg/kg	1.42E+00	8.51E-02	1.00E-01	ND					ND					ND					ND				
Benzo(b)fluoranthene	mg/kg	1.66E+00	8.51E-01	5.98E+01	ND					ND					ND					ND				
Benzo(ghi)perylene	mg/kg	9.55E-01	2.32E+02	1.19E+02	ND					ND					ND					ND				
Benzo(k)fluoranthene	mg/kg	1.45E+00	8.51E+00	1.48E+02	ND					ND					ND					ND				
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	9.30E-01	ND					ND					ND					ND				
Carbazole	mg/kg	NA	3.11E+01	NA	ND					ND					ND					ND				
Chrysene	mg/kg	1.40E+00	8.61E+01	4.73E+00	ND					ND					ND					ND				
Dibenz(a,h)anthracene	mg/kg	7.20E-01	8.61E-02	1.84E+01	ND					ND					ND					ND				
Fluoranthene	mg/kg	2.03E+00	3.09E+02	1.00E-01	ND					ND					ND					ND				
Indeno(1,2,3-cd)pyrene	mg/kg	9.37E-01	8.51E-01	1.09E+02	ND					ND					ND					ND				
Phenanthrene	mg/kg	1.08E+00	2.32E+03	1.00E-01	ND					ND					ND					ND				
Pyrene	mg/kg	1.63E+00	2.33E+02	1.00E-01	ND					ND					ND					ND				
CWM BREAKDOWN PRODUCTS																								
Methylphosphonic Acid	mg/kg	NA	6.21E+02	NA	ND					ND					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, Alabama*, July.
For SVOCs, concentration listed is the background screening value for soils adjacent to asphalt as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama*, July.

[b] Residential human health site-specific screening level (SSSL) and ecological screening value (ESV) as given in IT, 2000.

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.
Qual - Data validation qualifier.

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				CWM-180-MW01 TK0002 22-Oct-01 1 - 2				CWM-180-MW02 TK0004 22-Oct-01 2 - 3				CWM-180-MW03 TK0006 22-Oct-01 2 - 3				CWM-180-MW04 TK0010 22-Oct-01 2 - 3				CWM-180-MW06 TK0012 25-Nov-02 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/kg	1.36E+04	7.80E+03	2.49E+04	J	YES	YES	2.30E+04	J	YES	YES	1.84E+04	J	YES	YES	1.68E+04	J	YES	YES	1.25E+04			YES
Antimony	mg/kg	1.31E+00	3.11E+00	5.18E+00	J	YES	YES	ND				5.82E+00	J	YES	YES	ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	2.25E+01		YES	YES	3.07E+01		YES	YES	2.22E+01		YES	YES	9.24E+00			YES	8.55E+00			YES
Barium	mg/kg	2.34E+02	5.47E+02	4.83E+01				1.68E+02				1.38E+02				5.48E+01				6.59E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	6.70E-01	B			1.16E+00	B	YES		1.20E+00	B	YES		5.61E-01	B			5.28E-01	J		
Calcium	mg/kg	6.37E+02	NA	1.01E+02	J			5.36E+02				4.18E+02				3.11E+02				3.25E+02			
Chromium	mg/kg	3.83E+01	2.32E+01	3.03E+01			YES	3.39E+01			YES	3.32E+01			YES	1.67E+01				2.52E+01			YES
Cobalt	mg/kg	1.75E+01	4.68E+02	4.30E+00				5.29E+01		YES		2.34E+01		YES		1.50E+01				4.66E+00			
Copper	mg/kg	1.94E+01	3.13E+02	1.88E+01				1.60E+01				1.59E+01				9.44E+00				1.71E+01			
Iron	mg/kg	4.48E+04	2.34E+03	3.95E+04	J		YES	4.73E+04	J	YES	YES	5.00E+04	J	YES	YES	2.24E+04	J		YES	3.50E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.12E+01				6.00E+01		YES		2.94E+01				1.98E+01				1.46E+01			
Magnesium	mg/kg	7.66E+02	NA	9.37E+02		YES		9.55E+02		YES		8.60E+02		YES		7.81E+02		YES		4.25E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	9.52E+01	J			3.14E+03	J	YES	YES	8.53E+02	J		YES	4.29E+02	J		YES	3.16E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	ND				3.32E-02	J			3.06E-02	J			ND				3.39E-02	J		
Nickel	mg/kg	1.29E+01	1.54E+02	1.38E+01		YES		2.06E+01		YES		1.79E+01		YES		1.09E+01				4.62E+00			
Potassium	mg/kg	7.11E+02	NA	8.22E+02		YES		8.11E+02		YES		6.57E+02				4.96E+02	J			5.96E+02			
Selenium	mg/kg	4.70E-01	3.91E+01	7.64E-01	J	YES		7.21E-01	J	YES		ND				5.90E-01	J	YES		2.29E+00	B	YES	
Silver	mg/kg	2.40E-01	3.91E+01	1.45E+00	B	YES		1.58E+00	B	YES		1.63E+00	B	YES		ND				ND			
Sodium	mg/kg	7.02E+02	NA	5.53E+01	B			5.32E+01	B			5.25E+01	B			5.23E+01	B			1.11E+02	J		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND				ND				9.11E-01	J		YES
Vanadium	mg/kg	6.49E+01	5.31E+01	5.06E+01				5.79E+01			YES	5.17E+01				3.01E+01				4.19E+01			
Zinc	mg/kg	3.49E+01	2.34E+03	4.59E+01	J	YES		4.16E+01	J	YES		5.32E+01	J	YES		2.91E+01	J			1.74E+01			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				2.20E-03	J		
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				1.20E-03	J		
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND				1.40E-02	J			ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				5.80E-03	J			ND				ND			
Acetone	mg/kg	NA	7.76E+02	5.70E-03	J			4.50E-02	J			2.60E-02	J			2.30E-01	J			9.40E-02	B		
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	ND				1.60E-03	B			ND				ND				2.40E-03	B		
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND				4.30E-03	J		
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				2.20E-01	J		
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND				ND				1.90E-01	J		YES
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				3.20E-01	J		
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND				1.40E-01	J		
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND				1.40E-01	J		
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				ND				1.10E-01	J		
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND				2.30E-01	J		
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND				6.00E-01			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				1.60E-01	J		
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND				7.30E-02	J		
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND				4.30E-01			
CWM BREAKDOWN PRODUCTS																							
Methylphosphonic Acid	mg/kg	NA	6.21E+02	ND				ND				ND				ND				5.30E-02	J		

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location				CWM-180-MW08				CWM-182-MW01				CWM-182-MW02				CWM-182-MW03				CWM-182-MW04			
Sample Number				TK0014				TE0002				TE0010				TE0006				TE0008			
Sample Date				25-Nov-02				6-Nov-01				26-Nov-01				26-Nov-01				8-Nov-01			
Sample Depth (Feet)				10 - 12				3 - 4				4 - 5				4 - 5				7 - 8			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/kg	1.36E+04	7.80E+03	1.30E+04			YES	8.16E+03			YES	1.35E+04			YES	1.12E+04			YES	9.93E+03			YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	1.35E+01			YES	1.60E+01			YES	1.57E+01			YES	9.75E+00			YES	3.18E+00			YES
Barium	mg/kg	2.34E+02	5.47E+02	1.54E+02				6.35E+01	J			1.31E+02				9.38E+01				4.45E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	1.03E+00	J	YES		ND				5.84E-01	J			3.73E-01	J			ND			
Calcium	mg/kg	6.37E+02	NA	1.58E+02				6.01E+01	B			1.04E+02	B			5.51E+01	B			5.30E+02			
Chromium	mg/kg	3.83E+01	2.32E+01	5.10E+01		YES	YES	1.36E+01				2.58E+01			YES	1.57E+01				7.73E+00			
Cobalt	mg/kg	1.75E+01	4.68E+02	4.15E+01		YES		5.35E+00				4.19E+01		YES		8.18E+00				9.01E+00			
Copper	mg/kg	1.94E+01	3.13E+02	9.10E+00				1.35E+01				1.77E+01				1.06E+01				6.92E+00			
Iron	mg/kg	4.48E+04	2.34E+03	4.38E+04			YES	1.47E+04			YES	3.34E+04			YES	2.03E+04			YES	9.31E+03			YES
Lead	mg/kg	3.85E+01	4.00E+02	2.55E+01				1.20E+01	J			3.22E+01				1.23E+01				9.30E+00			
Magnesium	mg/kg	7.66E+02	NA	5.00E+02				4.42E+02				5.24E+02				5.08E+02				4.29E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	2.89E+03		YES	YES	3.60E+02	J			2.49E+03		YES	YES	5.29E+02			YES	2.49E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	ND				ND				ND				ND				ND			
Nickel	mg/kg	1.29E+01	1.54E+02	9.40E+00				1.05E+01				9.57E+00				6.80E+00				4.95E+00	B		
Potassium	mg/kg	7.11E+02	NA	4.39E+02	J			3.76E+02	J			6.62E+02				8.70E+02		YES		2.52E+02	J		
Selenium	mg/kg	4.70E-01	3.91E+01	2.73E+00	B	YES		ND				6.08E-01	B	YES		5.53E-01	B	YES		ND			
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				1.27E+00	J	YES		1.29E+00	J	YES		ND			
Sodium	mg/kg	7.02E+02	NA	3.66E+01	B			ND				3.05E+01	J			3.95E+01	J			ND			
Thallium	mg/kg	1.40E+00	5.08E-01	2.13E+00	J	YES	YES	ND				ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	3.74E+01				2.01E+01				3.75E+01				2.62E+01				1.63E+01			
Zinc	mg/kg	3.49E+01	2.34E+03	2.37E+01				3.48E+01				4.14E+01		YES		2.47E+01				1.74E+01			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	2.20E-02	B			2.20E-02				1.90E-02	B			8.70E-03	B			1.30E-02	J		
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	2.20E-03	B			1.80E-03	B			ND				ND				1.80E-03	B		
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND				ND				ND			
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				ND				ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND				ND			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND				ND			
CWM BREAKDOWN PRODUCTS																							
Methylphosphonic Acid	mg/kg	NA	6.21E+02	5.80E-02	J			ND				ND				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location				CWM-182-MW05				CWM-182-MW06				CWM-182-MW08				CWM-182-MW09				CWM-511-MW01			
Sample Number				TE0004				TE0012				TE0021				TE0023				TP0002			
Sample Date				8-Nov-01				6-Nov-01				26-Nov-02				4-Jun-03				22-Oct-01			
Sample Depth (Feet)				11 - 12				11 - 12				8 - 9				10 - 11				7 - 8			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/kg	1.36E+04	7.80E+03	1.87E+04		YES	YES	2.00E+04		YES	YES	9.34E+03			YES	5.93E+03				2.03E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	2.90E+01		YES	YES	1.12E+01			YES	7.23E+00	J		YES	2.47E+01		YES	YES	1.51E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	1.40E+03		YES	YES	9.45E+01	J			1.96E+01				6.51E+01				1.39E+02			
Beryllium	mg/kg	8.60E-01	9.60E+00	2.56E+00		YES		6.39E-01	B			ND				1.04E+00	J	YES		1.74E+00		YES	
Calcium	mg/kg	6.37E+02	NA	1.28E+03		YES		8.41E+02		YES		1.56E+02				3.99E+01	J			7.63E+02		YES	
Chromium	mg/kg	3.83E+01	2.32E+01	2.07E+01				1.98E+01				1.56E+01				9.50E+00				3.44E+01			YES
Cobalt	mg/kg	1.75E+01	4.68E+02	1.45E+02		YES		2.36E+01		YES		1.76E+00	J			5.04E+00				1.33E+01			
Copper	mg/kg	1.94E+01	3.13E+02	3.68E+01		YES		1.75E+01				9.35E+00				3.32E+01		YES		1.28E+01			
Iron	mg/kg	4.48E+04	2.34E+03	4.38E+04			YES	1.87E+04			YES	1.56E+04			YES	3.08E+04			YES	3.06E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	8.37E+01		YES		1.96E+01	J			8.13E+00				1.24E+02		YES		1.97E+01			
Magnesium	mg/kg	7.66E+02	NA	7.57E+02				8.12E+02		YES		3.74E+02				5.42E+02				7.69E+02		YES	
Manganese	mg/kg	1.36E+03	3.63E+02	9.29E+03		YES	YES	1.29E+03	J		YES	5.18E+01				7.72E+02			YES	8.60E+02			YES
Mercury	mg/kg	7.00E-02	2.33E+00	7.90E-02	J	YES		ND				ND				ND				ND			
Nickel	mg/kg	1.29E+01	1.54E+02	7.58E+01		YES		1.80E+01		YES		6.71E+00				1.65E+01		YES		1.84E+01		YES	
Potassium	mg/kg	7.11E+02	NA	8.47E+02		YES		5.99E+02	J			3.98E+02	J			1.57E+03		YES		8.64E+02		YES	
Selenium	mg/kg	4.70E-01	3.91E+01	ND				ND				1.16E+00	J	YES		ND				7.84E-01	J	YES	
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				ND				ND				ND			
Sodium	mg/kg	7.02E+02	NA	ND				ND				4.31E+01	J			5.64E+01	B			5.58E+01	B		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	5.72E+01			YES	3.47E+01				2.49E+01				2.77E+01				5.62E+01			YES
Zinc	mg/kg	3.49E+01	2.34E+03	1.21E+02		YES		4.55E+01		YES		2.41E+01				2.03E+02	J	YES		4.74E+01		YES	
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	5.50E-03	J			ND				ND				ND				6.00E-03	J		
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	3.80E-02				2.70E-02	J			3.20E-02	B			6.10E-03	J			4.50E-02			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND				1.40E-03	J		
Methylene chloride	mg/kg	NA	8.41E+01	2.00E-03	B			1.40E-03	B			4.10E-03	B			2.80E-03	B			2.30E-03	B		
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND				ND				2.20E-01	J		YES
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				1.10E-01	J			ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND				ND			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND				ND			
CWM BREAKDOWN PRODUCTS																							
Methylphosphonic Acid	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				CWM-511-MW02 TP0004 22-Oct-01 3 - 4				CWM-511-MW03 TP0006 22-Oct-01 7 - 8				CWM-511-MW04 TP0010 29-Oct-02 10 - 12				CWM-511-MW06 TP0012 29-Oct-02 10 - 12				CWM-512-MW01 TPP0003 22-Oct-01 3 - 4			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/kg	1.36E+04	7.80E+03	1.55E+04		YES	YES	1.05E+04			YES	3.15E+04		YES	YES	1.52E+04		YES	YES	2.82E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	1.16E+01			YES	1.04E+01			YES	1.63E+01			YES	4.94E+00			YES	1.09E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	6.44E+01				9.63E+01				1.21E+02				9.16E+01				1.05E+02			
Beryllium	mg/kg	8.60E-01	9.60E+00	ND				6.32E-01	J			2.39E+00		YES		9.20E-01	J	YES		4.89E-01	B		
Calcium	mg/kg	6.37E+02	NA	5.20E+02				3.88E+02				7.98E+02		YES		9.76E+02		YES		1.80E+03		YES	
Chromium	mg/kg	3.83E+01	2.32E+01	2.40E+01			YES	1.52E+01				3.69E+01			YES	1.99E+01				2.80E+01			YES
Cobalt	mg/kg	1.75E+01	4.68E+02	7.60E+00				8.99E+00				1.09E+01				2.56E+01		YES		4.21E+00			
Copper	mg/kg	1.94E+01	3.13E+02	1.02E+01				1.06E+01				2.00E+01		YES		8.56E+00				1.44E+01			
Iron	mg/kg	4.48E+04	2.34E+03	3.05E+04			YES	1.76E+04			YES	5.39E+04		YES	YES	2.37E+04			YES	3.15E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	9.86E+00				1.16E+01				1.17E+01				1.56E+01				1.23E+01			
Magnesium	mg/kg	7.66E+02	NA	7.35E+02				5.30E+02				1.28E+03		YES		6.93E+02				2.07E+03		YES	
Manganese	mg/kg	1.36E+03	3.63E+02	1.65E+02				4.70E+02			YES	1.80E+02				8.39E+02			YES	5.29E+01			
Mercury	mg/kg	7.00E-02	2.33E+00	ND				ND				4.87E-02	J			ND				ND			
Nickel	mg/kg	1.29E+01	1.54E+02	7.04E+00				1.00E+01				3.69E+01		YES		1.01E+01				1.00E+01			
Potassium	mg/kg	7.11E+02	NA	1.02E+03		YES		7.87E+02		YES		1.74E+03		YES		6.51E+02				2.15E+03		YES	
Selenium	mg/kg	4.70E-01	3.91E+01	5.83E-01	J	YES		ND				2.43E+00		YES		1.05E+00	J	YES		6.89E-01	J	YES	
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				ND				ND				ND			
Sodium	mg/kg	7.02E+02	NA	5.34E+01	B			4.96E+01	B			8.02E+01	J			ND				5.75E+01	B		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	3.51E+01				2.06E+01				4.59E+01				2.81E+01				5.47E+01			YES
Zinc	mg/kg	3.49E+01	2.34E+03	2.17E+01				4.01E+01		YES		7.66E+01		YES		2.53E+01				3.46E+01			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	3.80E-02				1.40E-02	J			ND				1.40E-02	J			1.10E-02	J		
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	1.60E-03	B			1.70E-03	B			ND				ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				1.70E-01	J		YES	ND				ND				6.10E-02	J		
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				8.90E-02	J		
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				ND				ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND				8.60E-02	J		
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND				8.10E-02	J		
CWM BREAKDOWN PRODUCTS																							
Methylphosphonic Acid	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				CWM-512-MW03 TPP0006 29-Oct-02 10 - 12				CWM-513-MW01 TR0002 24-Oct-01 11 - 12				CWM-513-MW02 TR0004 6-Nov-01 11 - 12				CWM-514-MW01 TT0002 6-Nov-01 11 - 12				CWM-514-MW02 TT0004 6-Nov-01 9 - 10			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/kg	1.36E+04	7.80E+03	1.66E+04		YES	YES	3.43E+04		YES	YES	1.60E+04		YES	YES	4.10E+04		YES	YES	1.99E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	8.56E+00			YES	1.39E+01			YES	1.53E+01			YES	1.03E+01			YES	1.80E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	6.55E+01				1.31E+02				1.26E+02				4.65E+01				5.70E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	6.18E-01	J			1.68E+00		YES		1.34E+00		YES		5.00E-01	B			7.04E-01	B		
Calcium	mg/kg	6.37E+02	NA	1.13E+03		YES		1.82E+03		YES		9.69E+02		YES		8.09E+01	J			1.05E+02	J		
Chromium	mg/kg	3.83E+01	2.32E+01	2.94E+01			YES	3.86E+01		YES	YES	3.00E+01			YES	2.79E+01			YES	3.66E+01			YES
Cobalt	mg/kg	1.75E+01	4.68E+02	1.11E+01				1.08E+01				2.23E+01		YES		4.03E+00				9.30E+00			
Copper	mg/kg	1.94E+01	3.13E+02	1.07E+01				2.36E+01		YES		1.96E+01		YES		2.15E+01		YES		3.77E+01		YES	
Iron	mg/kg	4.48E+04	2.34E+03	2.10E+04			YES	4.02E+04			YES	4.19E+04			YES	2.88E+04			YES	5.00E+04		YES	YES
Lead	mg/kg	3.85E+01	4.00E+02	9.51E+00				1.05E+01				1.56E+01				1.44E+01				1.25E+01			
Magnesium	mg/kg	7.66E+02	NA	6.87E+02				1.51E+03		YES		5.77E+02				1.03E+03		YES		6.42E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	3.38E+02				1.06E+02				5.86E+02			YES	1.10E+02				7.67E+01			
Mercury	mg/kg	7.00E-02	2.33E+00	4.12E-02	J			6.07E-02	J			ND				4.50E-02	B			ND			
Nickel	mg/kg	1.29E+01	1.54E+02	1.15E+01				2.93E+01		YES		2.16E+01		YES		1.97E+01		YES		2.77E+01		YES	
Potassium	mg/kg	7.11E+02	NA	7.05E+02				1.57E+03		YES		6.82E+02	J			7.32E+02	J	YES		1.40E+03	J	YES	
Selenium	mg/kg	4.70E-01	3.91E+01	1.49E+00	B	YES		1.06E+00	J	YES		ND				ND				7.55E-01	B	YES	
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				ND				ND				ND			
Sodium	mg/kg	7.02E+02	NA	2.09E+01	J			6.08E+01	J			ND				ND				ND			
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	2.98E+01				4.84E+01				4.67E+01				5.69E+01			YES	6.55E+01		YES	YES
Zinc	mg/kg	3.49E+01	2.34E+03	2.92E+01				6.02E+01		YES		5.30E+01		YES		5.75E+01		YES		9.03E+01		YES	
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	2.40E-02	J			4.90E-03	J			1.30E-02	J			ND				5.80E-03	J		
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	ND				ND				ND				ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	1.70E-03	J			ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				2.20E-03	B			ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND				ND				ND			
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				ND				ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND				ND			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND				ND			
CWM BREAKDOWN PRODUCTS																							
Methylphosphonic Acid	mg/kg	NA	6.21E+02	ND				ND				ND				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				CWM-514-MW03 TT0006 6-Nov-01 11 - 12				CWM-514-MW05 TT0009 26-Nov-02 8 - 10				CWM-514-MW07 TT0011 29-Oct-02 10 - 12				CWM-514-MW09 TT0013 29-Oct-02 10 - 12			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																			
Aluminum	mg/kg	1.36E+04	7.80E+03	2.92E+04		YES	YES	1.73E+04		YES	YES	2.33E+04		YES	YES	1.64E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	9.09E+00			YES	7.15E+00			YES	7.94E+00			YES	1.22E+01			YES
Barium	mg/kg	2.34E+02	5.47E+02	4.81E+01				6.74E+01				6.55E+01				4.53E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	4.31E-01	B			1.33E+00		YES		2.66E+00		YES		6.11E-01	J		
Calcium	mg/kg	6.37E+02	NA	3.24E+01	B			5.49E+01	J			2.92E+01	B			8.82E+01	J		
Chromium	mg/kg	3.83E+01	2.32E+01	2.46E+01			YES	1.90E+01				3.23E+01			YES	2.90E+01			YES
Cobalt	mg/kg	1.75E+01	4.68E+02	5.04E+00				4.78E+00				8.73E+01		YES		6.40E+00			
Copper	mg/kg	1.94E+01	3.13E+02	1.69E+01				7.26E+01		YES		9.90E+01		YES		4.35E+01		YES	
Iron	mg/kg	4.48E+04	2.34E+03	2.58E+04			YES	5.47E+04		YES	YES	5.74E+04		YES	YES	4.28E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.28E+01				3.06E+01				3.83E+01				1.63E+01			
Magnesium	mg/kg	7.66E+02	NA	9.35E+02		YES		3.58E+02				5.35E+02				5.84E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	9.31E+01				3.29E+01				6.88E+02			YES	1.19E+02			
Mercury	mg/kg	7.00E-02	2.33E+00	2.96E-02	B			4.11E-02	J			3.33E-02	J			ND			
Nickel	mg/kg	1.29E+01	1.54E+02	1.58E+01		YES		6.76E+00				3.07E+01		YES		2.08E+01		YES	
Potassium	mg/kg	7.11E+02	NA	8.57E+02	J	YES		1.86E+03		YES		1.89E+03		YES		1.30E+03		YES	
Selenium	mg/kg	4.70E-01	3.91E+01	ND				3.92E+00		YES		4.15E+00		YES		3.01E+00		YES	
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				ND				ND			
Sodium	mg/kg	7.02E+02	NA	ND				5.88E+01	J			2.44E+01	J			2.69E+01	J		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				2.04E+00	J	YES	YES	1.65E+00	J	YES	YES	8.25E-01	J		YES
Vanadium	mg/kg	6.49E+01	5.31E+01	4.64E+01				3.61E+01				3.16E+01				6.07E+01			YES
Zinc	mg/kg	3.49E+01	2.34E+03	4.72E+01		YES		7.33E+01		YES		1.23E+02		YES		7.00E+01		YES	
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	1.20E-03	J			ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	9.90E-03	J			ND				ND				ND			
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	1.40E-03	B			4.60E-03	B			ND				ND			
Naphthalene	mg/kg	NA	1.55E+02	ND				ND				ND				ND			
Trichloroethene	mg/kg	NA	5.72E+01	ND				ND				ND				ND			
Trichlorofluoromethane	mg/kg	NA	2.33E+03	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND				ND			
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND				ND			
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND				ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND				ND			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND				ND			
CWM BREAKDOWN PRODUCTS																			
Methylphosphonic Acid	mg/kg	NA	6.21E+02	ND				ND				ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date Sample Depth (Feet)				CWM-514-MW11 TT0015 26-Nov-02 11 - 12				CWM-516-MW01 TRR0002 6-Nov-01 11 - 12				CWM-516-MW02 TRR0006 24-Oct-01 10 - 11			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS															
Aluminum	mg/kg	1.36E+04	7.80E+03	2.70E+04		YES	YES	2.15E+04		YES	YES	1.96E+04		YES	YES
Antimony	mg/kg	1.31E+00	3.11E+00	ND				ND				ND			
Arsenic	mg/kg	1.83E+01	4.26E-01	1.00E+01			YES	1.41E+01			YES	9.44E+00			YES
Barium	mg/kg	2.34E+02	5.47E+02	2.92E+01				5.71E+01				3.82E+01			
Beryllium	mg/kg	8.60E-01	9.60E+00	4.14E-01	J			8.37E-01	J			5.03E-01	J		
Calcium	mg/kg	6.37E+02	NA	1.05E+02	J			3.88E+02				7.12E+02		YES	
Chromium	mg/kg	3.83E+01	2.32E+01	2.68E+01			YES	2.75E+01			YES	1.73E+01			
Cobalt	mg/kg	1.75E+01	4.68E+02	6.04E+00				1.30E+01				2.12E+01		YES	
Copper	mg/kg	1.94E+01	3.13E+02	1.88E+01				1.66E+01				1.27E+01			
Iron	mg/kg	4.48E+04	2.34E+03	3.39E+04			YES	3.32E+04			YES	2.21E+04			YES
Lead	mg/kg	3.85E+01	4.00E+02	1.52E+01				1.53E+01				1.38E+01			
Magnesium	mg/kg	7.66E+02	NA	7.24E+02				6.98E+02				7.12E+02			
Manganese	mg/kg	1.36E+03	3.63E+02	1.60E+02				3.80E+02			YES	5.24E+02			YES
Mercury	mg/kg	7.00E-02	2.33E+00	7.08E-02	J	YES		ND				3.00E-02	J		
Nickel	mg/kg	1.29E+01	1.54E+02	1.63E+01		YES		1.53E+01		YES		1.18E+01			
Potassium	mg/kg	7.11E+02	NA	5.23E+02	B			6.01E+02				4.41E+02	J		
Selenium	mg/kg	4.70E-01	3.91E+01	2.34E+00		YES		9.97E-01	J	YES		ND			
Silver	mg/kg	2.40E-01	3.91E+01	ND				ND				ND			
Sodium	mg/kg	7.02E+02	NA	3.89E+01	J			ND				3.80E+01	J		
Thallium	mg/kg	1.40E+00	5.08E-01	ND				ND				ND			
Vanadium	mg/kg	6.49E+01	5.31E+01	5.41E+01			YES	4.31E+01				3.81E+01			
Zinc	mg/kg	3.49E+01	2.34E+03	5.32E+01		YES		4.05E+01		YES		3.11E+01			
VOLATILE ORGANIC COMPOUNDS															
1,1,2,2-Tetrachloroethane	mg/kg	NA	3.13E+00	ND				ND				ND			
1,2,4-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND			
1,3,5-Trimethylbenzene	mg/kg	NA	3.88E+02	ND				ND				ND			
2-Butanone	mg/kg	NA	4.66E+03	ND				ND				ND			
4-Methyl-2-pentanone	mg/kg	NA	6.21E+02	ND				ND				ND			
Acetone	mg/kg	NA	7.76E+02	1.70E-02	B			3.60E-02				1.10E-02	J		
Cis-1,2-Dichloroethene	mg/kg	NA	7.77E+01	ND				ND				ND			
Methylene chloride	mg/kg	NA	8.41E+01	3.90E-03	B			1.70E-03	B			ND			
Naphthalene	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				ND				2.60E-03	J		
SEMIVOLATILE ORGANIC COMPOUNDS															
Benzo(a)anthracene	mg/kg	NA	8.51E-01	ND				ND				ND			
Benzo(a)pyrene	mg/kg	NA	8.51E-02	ND				ND				ND			
Benzo(b)fluoranthene	mg/kg	NA	8.51E-01	ND				ND				ND			
Benzo(ghi)perylene	mg/kg	NA	2.32E+02	ND				ND				ND			
Benzo(k)fluoranthene	mg/kg	NA	8.51E+00	ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/kg	NA	4.52E+01	ND				ND				ND			
Chrysene	mg/kg	NA	8.61E+01	ND				ND				ND			
Fluoranthene	mg/kg	NA	3.09E+02	ND				ND				ND			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.51E-01	ND				ND				ND			
Phenanthrene	mg/kg	NA	2.32E+03	ND				ND				ND			
Pyrene	mg/kg	NA	2.33E+02	ND				ND				ND			
CWM BREAKDOWN PRODUCTS															
Methylphosphonic Acid	mg/kg	NA	6.21E+02	5.00E-02	J			ND				ND			

Table 4-2

Subsurface Soil Analytical Results
Training Area T-5 Sites
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 SAIC, 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/kg - Milligrams per kilogram.
NA - Not available.
ND - Not detected.
Qual - Data validation qualifier.

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-180-MW01 TK3001 18-Dec-01				CWM-180-MW01 TK3006 14-Mar-03				CWM-180-MW01 TKC3017 30-Mar-04				CWM-180-MW02 TK3002 14-Dec-01				CWM-180-MW02 TK3007 17-Mar-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				8.31E-01				NR				5.50E-02	J			ND			
Arsenic	mg/L	1.78E-02	4.46E-05	2.39E-03	B		YES	2.88E-03	B		YES	NR				3.97E-03	B		YES	1.73E-03	B		YES
Barium	mg/L	1.27E-01	1.10E-01	3.50E-02				6.11E-02				NR				1.56E-02				1.82E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				NR				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				NR				ND				ND			
Calcium	mg/L	5.65E+01	NA	5.58E+01				3.95E+01				NR				1.51E+01				6.10E+00			
Chromium	mg/L	NA	4.69E-03	ND				ND				NR				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				NR				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				NR				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	5.64E-02	J			1.85E+00			YES	NR				1.38E-01	J			1.58E+00			YES
Lead	mg/L	8.00E-03	1.50E-02	ND				2.41E-03	B			NR				ND				ND			
Magnesium	mg/L	2.13E+01	NA	2.58E+00				1.89E+00				NR				1.50E+00				9.31E-01	J		
Manganese	mg/L	5.81E-01	7.35E-02	6.90E-02	J			8.72E-01		YES	YES	NR				1.74E-01			YES	8.03E-01		YES	YES
Mercury	mg/L	NA	4.69E-04	ND				ND				NR				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				NR				ND				ND			
Potassium	mg/L	7.20E+00	NA	9.32E-01	J			ND				NR				1.72E+00	J			2.79E+00	B		
Selenium	mg/L	NA	7.82E-03	ND				ND				NR				ND				ND			
Sodium	mg/L	1.48E+01	NA	2.04E+00	B			3.15E+00				NR				5.67E+00	B			9.33E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	6.94E-03	B	YES	YES	ND				NR				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				NR				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				ND				NR				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				5.70E-03	J		
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	1.80E+00	J		YES	ND				ND				5.50E+00	J		YES	4.60E+00	J		YES
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	1.20E-03	J		YES	2.40E-04	J			ND				2.40E-03	J		YES	ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.90E-04	J			2.50E-04	B			ND				3.40E-04	B			2.50E-04	J		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				2.20E-04	J		
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				NR				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				NR				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				NR				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				NR				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-180-MW02 TKC3018 29-Mar-04				CWM-180-MW03 TK3003 20-Dec-01				CWM-180-MW03 TK3008 18-Mar-03				CWM-180-MW03 TKC3019 31-Mar-04				CWM-180-MW04 TK3004 11-Dec-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				ND				NR				ND			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				3.23E-03	B		YES	NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.69E-02				1.22E-01			YES	NR				9.13E-03	J		
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				ND				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				ND				NR				ND			
Calcium	mg/L	5.65E+01	NA	NR				1.92E+01				1.86E+01				NR				5.84E+00			
Chromium	mg/L	NA	4.69E-03	NR				ND				ND				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				4.95E-02		YES		NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				ND				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	NR				8.73E-02	J			2.56E+01		YES	YES	NR				1.28E-01	J		
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				ND				NR				ND			
Magnesium	mg/L	2.13E+01	NA	NR				1.37E+00				3.02E+00				NR				8.88E-01	J		
Manganese	mg/L	5.81E-01	7.35E-02	NR				2.03E-01			YES	7.02E+00		YES	YES	NR				1.54E-01			YES
Mercury	mg/L	NA	4.69E-04	NR				ND				ND				NR				ND			
Nickel	mg/L	NA	3.13E-02	NR				ND				ND				NR				ND			
Potassium	mg/L	7.20E+00	NA	NR				1.68E+00	J			1.45E+00	B			NR				ND			
Selenium	mg/L	NA	7.82E-03	NR				ND				ND				NR				4.88E-03	B		
Sodium	mg/L	1.48E+01	NA	NR				2.51E+00				2.55E+01	B	YES		NR				1.81E+00			
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				ND				NR				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				ND				NR				ND			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				ND				NR				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				1.50E-02	J		YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				5.60E-04	J		
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				3.30E-04	J			ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				1.40E-02	J			ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	4.60E-03	B			6.60E-02	J			2.00E+01	J		YES	ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	2.40E-04	J			7.60E-03			YES	7.30E-04	J			1.10E-03				1.40E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				3.30E-04	B			ND				3.50E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				4.00E-04	J			ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				2.80E-04	J			ND				1.80E-04	J			2.80E-02			YES
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				6.90E-03	J			NR				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				ND				NR				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				ND				NR				ND			
Phenol	mg/L	NA	9.31E-01	NR				ND				ND				NR				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-180-MW04 TK3009 20-Mar-03				CWM-180-MW04 TKC3020 5-Apr-04				CWM-180-MW05 TK3010 21-Mar-03				CWM-180-MW05 TKC3021 13-Apr-04				CWM-180-MW06 TK3011 25-Mar-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				NR				2.61E+01		YES	YES	NR				2.25E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	2.43E-03	B		YES	NR				2.83E-02		YES	YES	NR				3.25E-03	B		YES
Barium	mg/L	1.27E-01	1.10E-01	1.47E-02				NR				1.51E-01		YES	YES	NR				3.97E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				6.37E-03	J	YES	YES	NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				ND				NR				ND			
Calcium	mg/L	5.65E+01	NA	6.14E+00				NR				3.00E+01				NR				2.63E+01			
Chromium	mg/L	NA	4.69E-03	3.53E-02			YES	NR				2.89E-02			YES	NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				3.58E-02		YES		NR				1.78E-02	J		
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				3.57E-02		YES		NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	1.23E+01		YES	YES	NR				5.96E+01		YES	YES	NR				7.25E-01	J		YES
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				5.71E-02		YES	YES	NR				ND			
Magnesium	mg/L	2.13E+01	NA	1.21E+00				NR				4.81E+00				NR				1.71E+00			
Manganese	mg/L	5.81E-01	7.35E-02	5.38E-01			YES	NR				1.02E+00		YES	YES	NR				1.78E+00		YES	YES
Mercury	mg/L	NA	4.69E-04	ND				NR				ND				NR				ND			
Nickel	mg/L	NA	3.13E-02	3.82E-02			YES	NR				5.05E-02			YES	NR				ND			
Potassium	mg/L	7.20E+00	NA	ND				NR				4.21E+00	B			NR				5.62E+00			
Selenium	mg/L	NA	7.82E-03	ND				NR				ND				NR				ND			
Sodium	mg/L	1.48E+01	NA	4.46E+00	B			NR				8.95E+01	B	YES		NR				1.99E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				NR				ND				NR				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				NR				4.80E-02		YES	YES	NR				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				2.61E-01		YES		NR				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	5.00E-01	J		YES	ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				2.70E-04	J			ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	3.10E-04	J			ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	8.70E-04	J			ND				2.80E-02			YES	1.30E-02			YES	ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				NR				ND				NR				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				ND				NR				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				NR				ND				NR				ND			
Phenol	mg/L	NA	9.31E-01	ND				NR				ND				NR				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-180-MW06 TKC3022 24-Mar-04				CWM-180-MW07 TK3012 26-Mar-03				CWM-180-MW07 TKC3023 24-Mar-04				CWM-180-MW08 TK3013 28-Mar-03				CWM-180-MW08 TKC3024 6-Apr-04			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				5.72E-02	J			NR				1.92E-01	J			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				3.25E-03	B		YES	NR				ND				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				3.28E-02				NR				7.48E-03	J			NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				7.91E+01		YES		NR				4.57E+00				NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				2.26E-02	B			NR				3.27E-01	J			NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				1.90E+00				NR				8.82E-01	B			NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				2.01E-02	J			NR				5.37E-02	J			NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				1.47E+00	B			NR				9.32E-01	B			NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				1.67E+00	B			NR				3.09E+00	B			NR			
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				NR				ND				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				NR				ND				NR			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	1.80E-04	J			ND				2.60E-04	J			1.90E-03			YES	2.00E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				1.20E-03				1.60E-03				8.70E-04	J		
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				NR				ND				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				ND				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				NR				ND				NR			
Phenol	mg/L	NA	9.31E-01	NR				ND				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-182-MW01 TE3001 28-Jan-02				CWM-182-MW01 TE3007 18-Mar-03				CWM-182-MW02 TE3002 19-Dec-01				CWM-182-MW02 TE3008 21-Mar-03				CWM-182-MW03 TE3003 30-Jan-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	7.38E-02	J			2.36E-01				ND				1.71E-01	J			3.68E+00		YES	YES
Arsenic	mg/L	1.78E-02	4.46E-05	1.81E-03	J		YES	ND				2.65E-03	B		YES	2.39E-03	B		YES	ND			
Barium	mg/L	1.27E-01	1.10E-01	1.87E-02				3.31E-02				2.10E-01		YES	YES	1.70E-01		YES	YES	8.15E-01		YES	YES
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	2.77E+00				1.80E+00				4.13E+00				1.70E+00				9.05E+00			
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				9.64E-03	J		YES
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				1.66E-02	J			ND				1.11E-02	J		
Copper	mg/L	2.55E-02	6.26E-02	ND				3.27E-02		YES		ND				ND				1.13E-02	J		
Iron	mg/L	7.04E+00	4.69E-01	2.47E-02	B			2.39E-01	J			5.36E-02	J			6.96E-02	B			3.57E+00			YES
Lead	mg/L	8.00E-03	1.50E-02	ND				3.15E-03	J			ND				ND				4.30E-03	J		
Magnesium	mg/L	2.13E+01	NA	4.52E-01	J			3.00E-01	B			1.32E+00				7.06E-01	J			2.37E+00			
Manganese	mg/L	5.81E-01	7.35E-02	1.91E-01			YES	7.57E-02	J		YES	2.35E+00		YES	YES	7.90E-01		YES	YES	5.48E+00		YES	YES
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				2.41E-02	B			2.49E-02				1.94E-02	J		
Potassium	mg/L	7.20E+00	NA	7.81E-01	J			7.88E-01	B			3.16E+00	J			2.68E+00	B			6.02E+00			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	2.13E+00	B			2.00E+00	B			1.26E+00	B			1.02E+00	B			1.98E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				8.35E-03	J		
Zinc	mg/L	2.20E-01	4.69E-01	ND				1.05E-01				ND				ND				4.68E-02	J		
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				2.60E-02			YES	3.40E-02			YES	ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				4.30E-04	J			3.80E-04	J			ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				3.70E-02			YES	5.90E-02			YES	8.70E-04	J		YES
Chloroform	mg/L	NA	1.15E-03	ND				ND				8.60E-03			YES	7.50E-03			YES	5.60E-04	B		
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				2.50E-04	J			ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.40E-04	B			2.70E-04	B			4.60E-04	B			ND				3.60E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				6.60E-04	J			9.30E-04	J			ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				3.20E-03				5.50E-03			YES	ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-182-MW03 TE3009 20-Mar-03				CWM-182-MW04 TE3004 19-Dec-01				CWM-182-MW04 TE3010 18-Mar-03				CWM-182-MW05 TE3005 24-Jan-02				CWM-182-MW05 TE3011 19-Mar-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				ND				ND				ND				1.01E-01	J		
Arsenic	mg/L	1.78E-02	4.46E-05	ND				2.13E-03	B		YES	ND				ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	1.05E+00		YES	YES	7.61E-02				1.49E-01		YES	YES	4.63E-02				3.47E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	9.98E+00				4.03E+01				4.75E+01				5.81E+01		YES		3.85E+01			
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				ND				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	8.45E-01	J		YES	6.90E-02	J			9.18E-01	J		YES	7.99E-03	B			1.56E-01	J		
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	1.74E+00				6.88E+00				7.24E+00				9.65E+00				7.58E+00			
Manganese	mg/L	5.81E-01	7.35E-02	4.96E+00		YES	YES	8.98E-01		YES	YES	1.98E+00		YES	YES	1.80E-01			YES	4.45E-02	J		
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	3.99E+00	B			2.03E+00	J			9.48E-01	B			1.08E+00	B			ND			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	2.14E+00	B			2.52E+00	B			2.64E+00	B			3.19E+00				5.91E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	6.90E-03	J			ND				ND				ND				1.40E-02	J		
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	2.20E-04	J			ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	3.00E-04	J			2.70E-03			YES	2.00E-03			YES	3.20E-03			YES	2.90E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				3.20E-04	B			3.10E-04	B			3.40E-04	B			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				1.00E-03				1.20E-03			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				1.20E-01			YES	ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-182-MW06 TE3006 25-Jan-02				CWM-182-MW06 TE3012 18-Mar-03				CWM-182-MW07 TE3013 31-Mar-03				CWM-182-MW08 TE3014 3-Apr-03				CWM-182-MW09 TE3015 29-Mar-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				ND				9.16E-02	J			3.33E-01				4.53E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				ND				ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	5.88E-02				1.31E-01		YES	YES	9.04E-02				4.51E-03	J			1.26E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	5.74E+01		YES		4.86E+01				1.39E+00				1.42E+00				2.06E+00			
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				ND				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	5.14E-02	J			5.71E-01	J		YES	1.78E-02	B			9.96E-01	J		YES	6.61E-01	J		YES
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				ND				ND				2.17E-03	J		
Magnesium	mg/L	2.13E+01	NA	8.88E+00				8.28E+00				4.83E-01	J			9.47E-01	J			1.06E+00			
Manganese	mg/L	5.81E-01	7.35E-02	2.88E-02	J			2.05E+00		YES	YES	3.04E-01			YES	9.54E-02	J		YES	1.07E-01			YES
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				1.14E+00	B			7.81E-01	B			3.32E+00	B			3.43E+00	B		
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	2.13E+00	B			6.41E+00	B			1.98E+00				1.94E+00	B			1.22E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				5.13E-02	J			ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				1.00E-03			YES	ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				5.70E-01	J		YES	ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				3.40E-02			YES	3.80E-02			YES	6.20E-03			YES
Chloroform	mg/L	NA	1.15E-03	3.10E-04	J			ND				2.80E-03			YES	1.40E-02			YES	8.70E-04	J		
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.20E-04	B			2.80E-04	B			ND				3.50E-04	J			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				2.80E-04	J			ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-182-MW10 TE3017 1-Apr-03				CWM-182-MW11 TE3018 4-Apr-03				CWM-511-MW01 TP3001 3-Dec-01				CWM-511-MW01 TP3004 31-Mar-03				CWM-511-MW02 TP3002 30-Nov-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	2.43E-01				1.28E+00				7.50E-02	J			ND				8.90E-02	B		
Arsenic	mg/L	1.78E-02	4.46E-05	ND				2.84E-03	B		YES	7.12E-03	B		YES	ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	7.50E-02				9.80E-02				1.95E-01		YES	YES	1.95E-01		YES	YES	4.68E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	3.32E+00				2.74E+01				4.99E+01				3.79E+01				3.94E+01			
Chromium	mg/L	NA	4.69E-03	1.01E-02	J		YES	6.30E-03	J		YES	ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				ND				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	1.05E-02	J			ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	1.60E+00			YES	9.62E-01	J		YES	1.06E+01	J	YES	YES	1.25E+01		YES	YES	1.18E-01	J		
Lead	mg/L	8.00E-03	1.50E-02	1.84E-03	J			ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	9.38E-01	J			3.18E+00				3.69E+00				3.08E+00				3.94E+00	J		
Manganese	mg/L	5.81E-01	7.35E-02	6.29E-01		YES	YES	7.38E-01		YES	YES	4.06E+00		YES	YES	2.79E+00		YES	YES	1.38E-01			YES
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				8.94E-01	J			8.75E-01	J			ND				ND			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	2.17E+00	B			1.77E+00	B			6.11E+00				2.50E+00	B			2.11E+00	J		
Thallium	mg/L	1.46E-03	1.02E-04	ND				5.04E-03	J	YES	YES	ND				ND				5.82E-03	B	YES	YES
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	4.42E-02	J			ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				5.40E+00	J		YES	ND				1.90E-03	J		
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	1.70E-03			YES	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	3.10E-03			YES	ND				ND				ND				3.10E-04	J		
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				3.00E-04	J			2.60E-04	J			2.20E-04	J		
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				2.30E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				1.80E-03				4.20E-03				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	8.50E-03	J			ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-511-MW02 TP3005 1-Apr-03				CWM-511-MW03 TP3003 29-Nov-01				CWM-511-MW03 TP3006 2-Apr-03				CWM-511-MW04 TP3007 3-Apr-03				CWM-511-MW05 TP3008 4-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				ND				6.11E-02	J			8.43E-02	J			5.49E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				ND				ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	1.20E-01			YES	1.62E-01		YES	YES	3.17E-01		YES	YES	3.95E-02				1.18E-01			YES
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	4.17E+01				3.61E+01				4.13E+01				4.59E+01				6.27E+01		YES	
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				ND				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	2.18E+00			YES	1.32E-01	J			1.74E+00			YES	7.52E-02	J			6.87E-02	J		
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	3.54E+00				4.57E+00	J			4.41E+00				7.86E+00				3.08E+00			
Manganese	mg/L	5.81E-01	7.35E-02	2.74E+00		YES	YES	2.44E+00		YES	YES	5.47E+00		YES	YES	2.83E-02	J			ND			
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				ND				ND				1.01E+00	B			5.06E+00			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				3.96E-03	B		
Sodium	mg/L	1.48E+01	NA	2.48E+00	B			1.17E+01	J			6.20E+00				4.43E+00				6.43E+00			
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	4.65E-02	J			ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				3.90E-03	J		
Acetone	mg/L	NA	1.56E-01	ND				3.40E-03	J			ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				2.80E-03			YES	1.70E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	8.40E-04	J			1.20E-03				3.10E-04	J			ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				2.40E-04	B			ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				2.20E-04	J			ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				1.40E-03				4.70E-04	J			3.30E-03				3.40E-03			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				CWM-511-MW06 TP3009 7-Apr-03				CWM-512-MW01 TPP3001 28-Nov-01				CWM-512-MW01 TPP3003 3-Apr-03				CWM-512-MW02 TPP3005 4-Apr-03				CWM-512-MW03 TPP3006 2-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				ND				8.79E-02	J			3.50E-01				7.53E-02	J		
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				6.59E-03	J		YES	ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	6.85E-02				6.14E-02				1.98E-01		YES	YES	2.96E-02				5.26E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	7.69E+01		YES		6.75E+01		YES		5.51E+01				7.32E+01		YES		6.65E+01		YES	
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				1.37E-02	J			ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	2.74E-02	J			1.71E-01	J			5.79E+00			YES	2.16E-01	J			1.19E-01	J		
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	8.20E+00	B			4.83E+00	J			4.85E+00				4.05E+00				3.41E+00			
Manganese	mg/L	5.81E-01	7.35E-02	2.71E-01			YES	7.43E-02	J		YES	7.07E+00		YES	YES	8.13E-03	J			4.96E-03	J		
Mercury	mg/L	NA	4.69E-04	ND				1.98E-04	J			ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				8.85E-01	J			ND				ND				ND			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	4.18E+00	B			6.60E+00	J			1.73E+01		YES		2.95E+00				1.29E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				1.60E-03			YES	8.30E-04	J		YES	3.50E-03			YES	ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				5.90E-04	J			ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				6.60E-04	J		YES	ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				1.20E-03	B		YES	ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				7.00E-03				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				5.80E-04	B			ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				1.50E-03			YES	ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				1.20E-02			YES	8.10E-03			YES	9.10E-02			YES	1.10E-02			YES
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-513-MW01 TR3001 5-Dec-01				CWM-513-MW01 TR3003 1-Apr-03				CWM-513-MW02 TR3002 6-Dec-01				CWM-513-MW02 TR3004 2-Apr-03				CWM-514-MW01 TT3001 5-Feb-02			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	9.44E-02	J			2.30E-01				5.64E-02	J			7.16E-02	B			2.00E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				4.51E-03	B		YES	ND				1.81E-03	J		YES
Barium	mg/L	1.27E-01	1.10E-01	5.92E-02				4.34E-02				7.89E-02				9.05E-02				3.82E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	7.24E+01		YES		5.38E+01				6.51E+01		YES		6.60E+01		YES		8.85E+01		YES	
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				ND				ND				1.46E-02	J		
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	5.01E-02	J			4.79E-01	J		YES	6.63E-02	J			1.87E-01	J			6.62E+00			YES
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	4.92E+00				3.22E+00				3.39E+00				3.24E+00				4.43E+00			
Manganese	mg/L	5.81E-01	7.35E-02	3.68E-02	J			2.06E-02	J			8.10E-02	J		YES	1.13E-02	J			1.49E+00		YES	YES
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				ND				ND				ND				7.14E+00			
Selenium	mg/L	NA	7.82E-03	ND				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	1.59E+00				1.27E+00	B			1.60E+00				1.26E+00	B			1.21E+01			
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				2.40E+00	J		YES
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	5.50E-04	B			4.00E-04	J			ND				3.10E-04	J			6.50E-04	J		
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	1.20E-03	B			ND				9.30E-04	B			ND				9.50E-04	B		
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				2.20E-04	J		
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				ND				ND				ND				7.70E-02			YES
Diethyl phthalate	mg/L	NA	1.23E+00	ND				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW01 TT3005 9-Apr-03				CWM-514-MW01 TKC3001 31-Mar-04				CWM-514-MW02 TT3002 8-Feb-02				CWM-514-MW02 TT3006 11-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	5.81E-02	B			NR				6.48E-02	J			ND			
Arsenic	mg/L	1.78E-02	4.46E-05	3.82E-03	B		YES	NR				ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	7.45E-02				NR				3.62E-02				1.82E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				ND				ND			
Calcium	mg/L	5.65E+01	NA	5.30E+01				NR				9.37E+01	J	YES		6.69E+01		YES	
Chromium	mg/L	NA	4.69E-03	ND				NR				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	2.94E+00			YES	NR				1.29E-01	J			3.56E-02	J		
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				ND				ND			
Magnesium	mg/L	2.13E+01	NA	2.47E+00	B			NR				3.78E+00				1.89E+00	B		
Manganese	mg/L	5.81E-01	7.35E-02	6.19E+00		YES	YES	NR				1.71E-01			YES	8.51E-03	J		
Mercury	mg/L	NA	4.69E-04	ND				NR				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				NR				ND				ND			
Potassium	mg/L	7.20E+00	NA	7.87E-01	B			NR				3.52E+00	J			1.81E+00	B		
Selenium	mg/L	NA	7.82E-03	ND				NR				ND				ND			
Sodium	mg/L	1.48E+01	NA	1.34E+01	B			NR				3.78E+00				1.66E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				NR				ND				5.37E-03	B	YES	YES
Vanadium	mg/L	1.70E-02	1.10E-02	ND				NR				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				ND				ND			
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				1.70E-03			YES	4.00E-03			YES
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			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	3.40E-01	J		YES	8.90E-03	B			ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	5.30E-04	J			ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	2.10E-04	J			1.40E-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				9.20E-04	J			3.40E-03			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
4-Methylphenol	mg/L	NA	7.69E-03	ND				NR				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				NR				ND				ND			
Phenol	mg/L	NA	9.31E-01	ND				NR				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location / Sample Number / Sample Date				CWM-514-MW02 TKC3002 14-Apr-04				CWM-514-MW03 TT3003 7-Feb-02				CWM-514-MW03 TT3007 14-Apr-03				CWM-514-MW03 TKC3003 15-Apr-04			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	NR				6.68E-02	J			ND				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				ND				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				9.64E-03	J			1.23E-02	B			NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				3.75E+00	J			3.66E+00	B			NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				1.63E-02	J			NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				5.68E-02	J			6.01E+00			YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				4.35E-01	J			4.94E-01	B			NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				2.09E-01			YES	8.45E-01		YES	YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				ND				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				2.14E+00	J			ND				NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				1.44E+00				5.06E-01	B			NR			
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				ND				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				ND				NR			
VOLATILE ORGANIC COMPOUNDS																			
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	4.90E-03			YES	2.90E-01			YES	2.20E-01			YES	2.10E-01			YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				1.00E-03			YES	2.30E-03			YES	1.40E-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				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				4.20E-03	J			2.00E-01	J		YES	ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				1.40E-03			YES	1.20E-03			YES	1.10E-03			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				3.10E-03				1.70E-03			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				1.80E-03			YES	1.80E-03			YES	1.50E-03			YES
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				1.60E-03				7.00E-04	J		
Trichloroethene	mg/L	NA	4.51E-03	3.50E-03				1.00E-01			YES	9.80E-02			YES	8.30E-02			YES
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				ND				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				4.50E-02			YES	ND				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				ND				NR			
Phenol	mg/L	NA	9.31E-01	NR				ND				ND				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW04 TT3009 11-Apr-03				CWM-514-MW04 TKC3005 19-Apr-04				CWM-514-MW05 TT3010 7-Apr-03				CWM-514-MW05 TKC3007 16-Mar-04				CWM-514-MW06 TT3011 8-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	1.30E+00				NR				8.72E-02	J			NR				1.48E-01	B		
Arsenic	mg/L	1.78E-02	4.46E-05	4.53E-03	J		YES	NR				ND				NR				2.86E-03	B		YES
Barium	mg/L	1.27E-01	1.10E-01	6.69E-02				NR				1.91E-02				NR				8.07E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				ND				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				6.60E-03	J	YES	YES	NR				ND			
Calcium	mg/L	5.65E+01	NA	8.22E+01		YES		NR				2.85E+00	B			NR				8.41E+00	B		
Chromium	mg/L	NA	4.69E-03	ND				NR				ND				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				ND				NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				1.65E-02	B			NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	2.70E-02	J			NR				7.30E-01	J		YES	NR				7.68E+00		YES	YES
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				2.11E-03	J			NR				ND			
Magnesium	mg/L	2.13E+01	NA	ND				NR				1.88E+00	B			NR				4.55E+00	B		
Manganese	mg/L	5.81E-01	7.35E-02	ND				NR				1.17E-01			YES	NR				1.68E-01			YES
Mercury	mg/L	NA	4.69E-04	ND				NR				ND				NR				ND			
Nickel	mg/L	NA	3.13E-02	ND				NR				ND				NR				2.14E-02			
Potassium	mg/L	7.20E+00	NA	1.76E+01	B	YES		NR				2.40E+00	B			NR				1.19E+00	B		
Selenium	mg/L	NA	7.82E-03	ND				NR				ND				NR				ND			
Sodium	mg/L	1.48E+01	NA	2.11E+01	B	YES		NR				1.39E+00	B			NR				6.31E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				NR				ND				NR				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	8.82E-03	J			NR				ND				NR				ND			
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				ND				NR				3.73E-02	J		
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				6.50E-04	J		YES	ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	7.70E-03	J			ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	1.10E-02	J			ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	3.30E-04	J			4.50E-04	J			ND				1.90E-04	J			ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				2.80E-04	J			ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				3.60E-04	J			ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				9.30E-03				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	3.50E-02			YES	1.10E-01			YES	ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				6.00E-04	J			ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				NR				ND				NR				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				ND				NR				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				NR				ND				NR				ND			
Phenol	mg/L	NA	9.31E-01	1.30E-02				NR				ND				NR				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW06 TKC3008 18-Mar-04				CWM-514-MW07 TT3012 8-Apr-03				CWM-514-MW07 TKC3009 16-Mar-04				CWM-514-MW08 TT3013 9-Apr-03				CWM-514-MW08 TKC3010 17-Mar-04			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				1.23E-01	B			NR				1.05E-01	B			NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				NR				ND				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.63E-02				NR				1.15E-01			YES	NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				NR				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				NR				ND				NR			
Calcium	mg/L	5.65E+01	NA	NR				1.26E+00	B			NR				1.66E+01				NR			
Chromium	mg/L	NA	4.69E-03	NR				ND				NR				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				NR				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				NR				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				2.75E+00			YES	NR				6.09E+00			YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				NR				ND				NR			
Magnesium	mg/L	2.13E+01	NA	NR				4.21E+00	B			NR				9.45E+00	B			NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				4.85E-02	J			NR				1.87E-01			YES	NR			
Mercury	mg/L	NA	4.69E-04	NR				ND				NR				ND				NR			
Nickel	mg/L	NA	3.13E-02	NR				2.30E-02				NR				ND				NR			
Potassium	mg/L	7.20E+00	NA	NR				1.17E+00	B			NR				1.46E+00	B			NR			
Selenium	mg/L	NA	7.82E-03	NR				ND				NR				ND				NR			
Sodium	mg/L	1.48E+01	NA	NR				1.17E+00	B			NR				6.27E+00	B			NR			
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				NR				ND				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				NR				ND				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				8.86E-02	J			NR				ND				NR			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				NR				ND				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				ND				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				NR				ND				NR			
Phenol	mg/L	NA	9.31E-01	NR				ND				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW09 TT3014 11-Apr-03				CWM-514-MW09 TKC3011 13-Apr-04				CWM-514-MW010 TT3016 8-Apr-03				CWM-514-MW10 TKC3013 13-Apr-04				CWM-514-MW11 TT3017 10-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	4.48E+00		YES	YES	NR				1.04E-01	B			NR				3.01E+00	J	YES	YES
Arsenic	mg/L	1.78E-02	4.46E-05	1.88E-03	J		YES	NR				ND				NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	4.63E-02				NR				6.76E-02				NR				2.02E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				NR				ND				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				NR				ND				NR				ND			
Calcium	mg/L	5.65E+01	NA	8.61E+00				NR				6.98E+01		YES		NR				2.25E+00	B		
Chromium	mg/L	NA	4.69E-03	ND				NR				ND				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				NR				ND				NR				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				NR				ND				NR				ND			
Iron	mg/L	7.04E+00	4.69E-01	2.20E+00			YES	NR				1.39E-01	J			NR				3.48E+00			YES
Lead	mg/L	8.00E-03	1.50E-02	ND				NR				ND				NR				2.44E-03	J		
Magnesium	mg/L	2.13E+01	NA	5.52E-01	B			NR				5.50E+00	B			NR				7.91E-01	B		
Manganese	mg/L	5.81E-01	7.35E-02	7.38E-02	J		YES	NR				1.10E+00		YES	YES	NR				1.08E-01			YES
Mercury	mg/L	NA	4.69E-04	ND				NR				ND				NR				ND			
Nickel	mg/L	NA	3.13E-02	ND				NR				ND				NR				ND			
Potassium	mg/L	7.20E+00	NA	2.76E+00	B			NR				3.07E+00	B			NR				2.10E+00	B		
Selenium	mg/L	NA	7.82E-03	ND				NR				ND				NR				4.88E-03	B		
Sodium	mg/L	1.48E+01	NA	1.09E+01	B			NR				4.06E+00	B			NR				1.09E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	ND				NR				ND				NR				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	7.42E-03	J			NR				ND				NR				5.87E-03	J		
Zinc	mg/L	2.20E-01	4.69E-01	ND				NR				ND				NR				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	1.70E-01			YES	1.40E-01			YES	ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	7.90E-04	J		YES	6.40E-04	J			ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				5.10E-03	J			ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	1.20E-02			YES	1.10E-02			YES	ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	2.20E-04	J			2.10E-04	J			ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	1.20E-03				1.10E-03				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	6.60E-02			YES	5.50E-02			YES	1.90E-02			YES	9.70E-04	J			2.30E-04	J		
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	ND				NR				ND				NR				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				NR				ND				NR				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				NR				ND				NR				ND			
Phenol	mg/L	NA	9.31E-01	ND				NR				ND				NR				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW11 TKC3014 30-Mar-04				CWM-514-MW12 TKC3015 12-Apr-04				CWM-514-MW13 TKC3016 12-Apr-04				CWM-514-MW14 TKC3029 5-Aug-04				CWM-514-MW15 TKC3030 4-Aug-04			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				NR				NR				NR				NR			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				NR				NR				NR				NR			
Barium	mg/L	1.27E-01	1.10E-01	NR				NR				NR				NR				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				NR				NR				NR				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				NR				NR				NR				NR			
Calcium	mg/L	5.65E+01	NA	NR				NR				NR				NR				NR			
Chromium	mg/L	NA	4.69E-03	NR				NR				NR				NR				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				NR				NR				NR				NR			
Copper	mg/L	2.55E-02	6.26E-02	NR				NR				NR				NR				NR			
Iron	mg/L	7.04E+00	4.69E-01	NR				NR				NR				NR				NR			
Lead	mg/L	8.00E-03	1.50E-02	NR				NR				NR				NR				NR			
Magnesium	mg/L	2.13E+01	NA	NR				NR				NR				NR				NR			
Manganese	mg/L	5.81E-01	7.35E-02	NR				NR				NR				NR				NR			
Mercury	mg/L	NA	4.69E-04	NR				NR				NR				NR				NR			
Nickel	mg/L	NA	3.13E-02	NR				NR				NR				NR				NR			
Potassium	mg/L	7.20E+00	NA	NR				NR				NR				NR				NR			
Selenium	mg/L	NA	7.82E-03	NR				NR				NR				NR				NR			
Sodium	mg/L	1.48E+01	NA	NR				NR				NR				NR				NR			
Thallium	mg/L	1.46E-03	1.02E-04	NR				NR				NR				NR				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				NR				NR				NR				NR			
Zinc	mg/L	2.20E-01	4.69E-01	NR				NR				NR				NR				NR			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				1.50E-02			YES	ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				1.50E-03			YES
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				4.30E-04	J			1.50E-04	J		
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				1.00E-03				2.30E-04	J			3.20E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				2.60E-04	J			ND				1.50E-04	J		
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				6.50E-04	J		
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				4.10E-04	B			ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				2.10E-04	J			ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				1.70E-02			YES	1.70E-04	J			1.30E-03			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				NR				NR				NR				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				NR				NR				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				NR				NR				NR				NR			
Phenol	mg/L	NA	9.31E-01	NR				NR				NR				NR				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				CWM-514-MW16 TKC3032 9-Aug-04				CWM-516-MW01 TRR3001 11-Dec-01				CWM-516-MW01 TRR3003 7-Apr-03				CWM-516-MW02 TRR3002 7-Dec-01				CWM-516-MW02 TRR3004 7-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				ND				ND				ND				ND			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				ND				ND				ND			
Barium	mg/L	1.27E-01	1.10E-01	NR				3.19E-02				2.94E-02				4.51E-02				9.47E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				ND				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				ND				ND				ND				ND			
Calcium	mg/L	5.65E+01	NA	NR				3.61E+01				3.24E+01				2.84E+01				7.04E+01		YES	
Chromium	mg/L	NA	4.69E-03	NR				ND				ND				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				ND				ND				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	NR				ND				ND				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	NR				9.37E-02	J			6.44E-02	J			3.41E-02	B			1.32E-02	J		
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				ND				ND				ND			
Magnesium	mg/L	2.13E+01	NA	NR				5.46E+00				4.66E+00	B			4.51E+00				8.23E+00	B		
Manganese	mg/L	5.81E-01	7.35E-02	NR				6.68E-01		YES	YES	4.45E-01			YES	4.56E-02	J			5.40E-02	J		
Mercury	mg/L	NA	4.69E-04	NR				1.67E-04	B			ND				ND				ND			
Nickel	mg/L	NA	3.13E-02	NR				3.34E-02			YES	ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	NR				ND				8.38E-01	B			9.26E-01	J			ND			
Selenium	mg/L	NA	7.82E-03	NR				ND				ND				ND				ND			
Sodium	mg/L	1.48E+01	NA	NR				4.33E+00	B			4.79E+00	B			2.09E+00				2.73E+00	B		
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				ND				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				ND				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	NR				ND				ND				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				3.10E-04	J		YES
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	2.30E-04	J			ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				4.00E-03			YES	3.70E-03			YES
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	3.40E-04	B			6.40E-04	B			ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	9.00E-04	J			2.80E-04	J			3.10E-04	J			1.10E-03				1.10E-03			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				ND				ND				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				ND				ND				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				ND				ND				ND			
Phenol	mg/L	NA	9.31E-01	NR				ND				ND				ND				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				HR-232QX-MW04 ECC3004 17-Apr-01				HR-232QX-MW04 ECC3023 8-Apr-03				HR-232QX-MW04 TKC3025 8-Apr-04				HR-232QX-MW05 ECC3005 1-May-01				HR-232QX-MW05 ECC3025 3-Apr-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	3.01E-01	B			4.09E-01	J			NR				1.10E-01	J			7.15E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				NR				ND				2.33E-03	J		YES
Barium	mg/L	1.27E-01	1.10E-01	4.41E-02				4.68E-02				NR				5.50E-02				5.94E-02			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				NR				ND				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				NR				ND				ND			
Calcium	mg/L	5.65E+01	NA	4.47E+01				5.01E+01				NR				1.74E+01				2.11E+01			
Chromium	mg/L	NA	4.69E-03	ND				ND				NR				ND				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	ND				ND				NR				ND				ND			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				NR				ND				ND			
Iron	mg/L	7.04E+00	4.69E-01	3.51E-01				3.21E-01	J			NR				2.61E-01				7.73E-01	J		YES
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				NR				ND				ND			
Magnesium	mg/L	2.13E+01	NA	7.24E+00				8.06E+00	B			NR				5.81E+00				6.18E+00			
Manganese	mg/L	5.81E-01	7.35E-02	6.50E-03	J			1.60E-02	J			NR				3.90E-01			YES	1.33E-02	J		
Mercury	mg/L	NA	4.69E-04	ND				ND				NR				ND				ND			
Nickel	mg/L	NA	3.13E-02	ND				ND				NR				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				1.05E+00	B			NR				3.25E+00	J			1.72E+00	J		
Selenium	mg/L	NA	7.82E-03	ND				ND				NR				2.33E-03	J			ND			
Sodium	mg/L	1.48E+01	NA	8.70E-01	J			1.33E+00	B			NR				6.13E+00				6.19E+00			
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				NR				ND				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				NR				ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	7.31E-03	B			ND				NR				ND				ND			
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	4.20E-03	J		YES	3.60E-03			YES	4.00E-03			YES	ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				2.50E-04	J			2.90E-04	J			ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				ND				NR				NR				ND			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				ND				NR				NR				ND			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				ND				NR				NR				ND			
Phenol	mg/L	NA	9.31E-01	NR				ND				NR				NR				ND			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				HR-232QX-MW05 TKC3026 30-Mar-04				HR-232QX-MW10 ECC3010 25-Apr-01				HR-232QX-MW10 ECC3026 2-Apr-03				HR-232QX-MW10 TKC3027 25-Mar-04				HR-232QX-MW18 ECC3018 16-Apr-01			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	NR				1.15E-01	J			1.08E-01	J			NR				3.49E-01			
Arsenic	mg/L	1.78E-02	4.46E-05	NR				ND				ND				NR				ND			
Barium	mg/L	1.27E-01	1.10E-01	NR				1.77E-02	B			1.32E-02				NR				1.02E-01			
Beryllium	mg/L	1.25E-03	3.13E-03	NR				ND				ND				NR				ND			
Cadmium	mg/L	2.51E-03	7.82E-04	NR				7.71E-03	B	YES	YES	ND				NR				ND			
Calcium	mg/L	5.65E+01	NA	NR				3.10E-01	B			2.27E-01	J			NR				1.00E+00	B		
Chromium	mg/L	NA	4.69E-03	NR				ND				ND				NR				ND			
Cobalt	mg/L	2.34E-02	9.39E-02	NR				9.79E-03	J			ND				NR				1.59E-02	B		
Copper	mg/L	2.55E-02	6.26E-02	NR				3.20E-03	B			ND				NR				1.50E-02	J		
Iron	mg/L	7.04E+00	4.69E-01	NR				1.75E+00	J		YES	1.51E+00			YES	NR				2.14E+00			YES
Lead	mg/L	8.00E-03	1.50E-02	NR				ND				ND				NR				ND			
Magnesium	mg/L	2.13E+01	NA	NR				1.67E+00	B			1.53E+00				NR				6.00E+00			
Manganese	mg/L	5.81E-01	7.35E-02	NR				3.02E-02	B			1.75E-02	J			NR				5.30E-02			
Mercury	mg/L	NA	4.69E-04	NR				ND				ND				NR				ND			
Nickel	mg/L	NA	3.13E-02	NR				2.03E-02	B			ND				NR				3.06E-02			
Potassium	mg/L	7.20E+00	NA	NR				ND				1.15E+00	J			NR				2.29E+00	J		
Selenium	mg/L	NA	7.82E-03	NR				ND				ND				NR				ND			
Sodium	mg/L	1.48E+01	NA	NR				1.06E+00				1.24E+00	B			NR				1.74E+00			
Thallium	mg/L	1.46E-03	1.02E-04	NR				ND				ND				NR				ND			
Vanadium	mg/L	1.70E-02	1.10E-02	NR				ND				ND				NR				ND			
Zinc	mg/L	2.20E-01	4.69E-01	NR				3.86E-02	B			3.48E-02	J			NR				7.81E-02	B		
VOLATILE ORGANIC COMPOUNDS																							
1,1,2,2-Tetrachloroethane	mg/L	NA	2.04E-04	ND				ND				ND				ND				ND			
1,1,2-Trichloroethane	mg/L	NA	7.16E-04	ND				ND				ND				ND				ND			
1,1-Dichloroethene	mg/L	NA	9.36E-05	ND				ND				ND				ND				ND			
1,2,4-Trimethylbenzene	mg/L	NA	6.00E-03	ND				ND				ND				ND				ND			
1,2-Dichloroethane	mg/L	NA	4.48E-04	ND				ND				ND				ND				ND			
1,2-Dimethylbenzene	mg/L	NA	2.80E+00	ND				ND				ND				ND				ND			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				ND				ND			
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				ND				ND				ND				ND			
Trans-1,2-Dichloroethene	mg/L	NA	3.07E-02	ND				ND				ND				ND				ND			
Trichloroethene	mg/L	NA	4.51E-03	ND				ND				ND				ND				ND			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																							
4-Methylphenol	mg/L	NA	7.69E-03	NR				NR				ND				NR				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	NR				NR				ND				NR				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	NR				NR				ND				NR				NR			
Phenol	mg/L	NA	9.31E-01	NR				NR				ND				NR				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location Sample Number Sample Date				HR-232QX-MW18 ECC3027 1-Apr-03				HR-232QX-MW19 ECC3019 26-Apr-01				HR-232QX-MW19 ECC3028 7-Apr-03				HR-232QX-MW19 TKC3028 26-Mar-04			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																			
Aluminum	mg/L	2.34E+00	1.56E+00	9.71E-01				3.01E-01	J			2.68E+00		YES	YES	NR			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				3.15E-03	J		YES	NR			
Barium	mg/L	1.27E-01	1.10E-01	9.97E-02				6.80E-02				8.71E-02				NR			
Beryllium	mg/L	1.25E-03	3.13E-03	ND				ND				ND				NR			
Cadmium	mg/L	2.51E-03	7.82E-04	ND				ND				ND				NR			
Calcium	mg/L	5.65E+01	NA	7.21E-01	J			3.37E+01				3.42E+01				NR			
Chromium	mg/L	NA	4.69E-03	ND				ND				ND				NR			
Cobalt	mg/L	2.34E-02	9.39E-02	1.39E-02	J			ND				ND				NR			
Copper	mg/L	2.55E-02	6.26E-02	ND				ND				ND				NR			
Iron	mg/L	7.04E+00	4.69E-01	3.50E+00			YES	3.76E-01	J			1.36E+00			YES	NR			
Lead	mg/L	8.00E-03	1.50E-02	ND				ND				1.57E-03	J			NR			
Magnesium	mg/L	2.13E+01	NA	6.32E+00				6.48E+00				6.31E+00	B			NR			
Manganese	mg/L	5.81E-01	7.35E-02	4.72E-02	J			6.20E-02	B			9.96E-03	J			NR			
Mercury	mg/L	NA	4.69E-04	ND				ND				ND				NR			
Nickel	mg/L	NA	3.13E-02	2.63E-02				1.00E-02	B			ND				NR			
Potassium	mg/L	7.20E+00	NA	ND				ND				1.26E+00	B			NR			
Selenium	mg/L	NA	7.82E-03	ND				ND				4.81E-03	B			NR			
Sodium	mg/L	1.48E+01	NA	2.34E+00	B			1.88E+00				2.02E+00	B			NR			
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				ND				NR			
Vanadium	mg/L	1.70E-02	1.10E-02	ND				ND				8.18E-03	J			NR			
Zinc	mg/L	2.20E-01	4.69E-01	7.70E-02	J			2.67E-02	B			6.90E-02	J			NR			
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			
2-Butanone	mg/L	NA	7.14E-01	ND				ND				ND				ND			
4-Methyl-2-pentanone	mg/L	NA	5.84E-02	ND				ND				ND				ND			
Acetone	mg/L	NA	1.56E-01	ND				ND				ND				ND			
Bromodichloromethane	mg/L	NA	1.08E-03	ND				ND				ND				ND			
Carbon disulfide	mg/L	NA	1.51E-01	ND				ND				ND				ND			
Carbon tetrachloride	mg/L	NA	4.08E-04	ND				ND				ND				ND			
Chloroform	mg/L	NA	1.15E-03	ND				1.00E-03	J			3.60E-04	J			6.80E-04	J		
Cis-1,2-Dichloroethene	mg/L	NA	1.55E-02	ND				ND				ND				ND			
Dibromochloromethane	mg/L	NA	7.92E-04	ND				ND				ND				ND			
Methylene chloride	mg/L	NA	7.85E-03	ND				ND				ND				ND			
Tetrachloroethene	mg/L	NA	1.26E-03	ND				ND				ND				ND			
Toluene	mg/L	NA	2.59E-01	ND				1.40E-03	J			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			
p-Cymene	mg/L	NA	2.26E-01	ND				ND				ND				ND			
SEMIVOLATILE ORGANIC COMPOUNDS																			
4-Methylphenol	mg/L	NA	7.69E-03	ND				NR				ND				NR			
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	7.40E-02			YES	NR				ND				NR			
Diethyl phthalate	mg/L	NA	1.23E+00	ND				NR				ND				NR			
Phenol	mg/L	NA	9.31E-01	ND				NR				ND				NR			

Table 4-3

Groundwater Analytical Results
Training Area T-5 Sites
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 SAIC, 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.
Qual - Data validation qualifier.

Table 4-4

Surface Water Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-SW/SD01					CWM-182-SW/SD02					CWM-511-SW/SD3					CWM-511-SW/SD04					CWM-512-SW/SD01				
Sample Number					TE2001					TE2002					TP2003					TP2004					TPP2001				
Sample Date					20-Feb-02					20-Jan-03					18-Feb-02					27-Jan-03					23-Jan-03				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																													
Aluminum	mg/L	5.26E+00	1.53E+01	8.70E-02	3.95E-01				YES	6.60E-02	J				ND					1.10E-01	J			YES	6.51E-02	J			
Barium	mg/L	7.54E-02	1.10E+00	3.90E-03	2.92E-02				YES	2.33E-02				YES	6.77E-02				YES	2.00E-02				YES	2.15E-02				YES
Calcium	mg/L	2.52E+01	NA	1.16E+02	2.11E+00					1.13E+00					8.22E+00					5.86E+00					5.36E+00				
Chromium	mg/L	1.11E-02	4.08E-02	1.10E-02	ND					ND					ND					1.38E-02	J	YES		YES	ND				
Iron	mg/L	1.96E+01	4.70E+00	1.00E+00	2.97E-01	J				5.11E-02	J				4.01E-01	J				1.31E-01	J				1.49E-01	B			
Magnesium	mg/L	1.10E+01	NA	8.20E+01	8.09E-01	J				6.52E-01	J				1.72E+00					1.25E+00					1.09E+00				
Manganese	mg/L	5.65E-01	6.40E-01	8.00E-02	3.57E-02	J				2.74E-02	J				2.56E-01				YES	2.24E-02	J				4.43E-02	J			
Mercury	mg/L	NA	4.25E-03	1.20E-05	ND					ND					2.90E-04	J			YES	ND					ND				
Potassium	mg/L	2.56E+00	NA	5.30E+01	ND					9.44E-01	B				ND					ND					ND				
Sodium	mg/L	3.44E+00	NA	6.80E+02	1.36E+00					8.09E-01	J				1.06E+00					1.06E+00					3.64E-01	B			
VOLATILE ORGANIC COMPOUNDS																													
Acetone	mg/L	NA	1.57E+00	7.80E+01	9.00E-03	J				4.60E-03	J				ND					ND					ND				
Methylene chloride	mg/L	NA	1.42E-01	1.93E+00	2.20E-04	B				ND					ND					6.30E-04	B				ND				
Toluene	mg/L	NA	2.32E+00	1.75E-01	ND					ND					ND					ND					3.50E-04	B			

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, Alabama* , July.

[b] Recreational site user 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/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

Qual - Data validation qualifier.

Table 4-5

Sediment Analytical Results
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Sample Location					CWM-182-SW/SD01					CWM-182-SW/SD02					CWM-511-SW/SD03					CWM-511-SW/SD04					CWM-512-SW/SD01				
Sample Number					TE1001					TE1002					TP1003					TP1004					TPP1001				
Sample Date					20-Feb-02					20-Jan-03					18-Feb-02					27-Jan-03					23-Jan-03				
Sample Depth (Feet)					0 - 0.5					0 - 0.5					0 - 0.5					0 - 0.5					0 - 0.5				
Parameter	Units	BKG[a]	SSSL[b]	ESV[b]	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV	Result	Qual	>BKG	>SSSL	>ESV
METALS																													
Aluminum	mg/kg	8.59E+03	1.15E+06	NA	2.66E+03	J				3.77E+03					1.96E+03					5.04E+03	J				5.74E+03				
Arsenic	mg/kg	1.13E+01	5.58E+01	7.24E+00	4.81E+00					7.03E+00					4.02E+00					4.17E+00					3.95E+00				
Barium	mg/kg	9.89E+01	8.36E+04	NA	9.78E+00					1.13E+01					7.10E+01					4.51E+01	J				2.92E+01				
Beryllium	mg/kg	9.70E-01	1.50E+02	NA	ND					ND					ND					ND					4.81E-01	J			
Cadmium	mg/kg	4.30E-01	1.71E+02	1.00E+00	ND					ND					8.17E-01	J	YES			2.57E+00		YES		YES	1.04E+00	J	YES		YES
Calcium	mg/kg	1.11E+03	NA	NA	6.45E+01	J				4.51E+01	J				3.93E+02					3.55E+02					4.05E+02				
Chromium	mg/kg	3.12E+01	2.79E+03	5.23E+01	1.56E+01					6.18E+01		YES		YES	1.08E+01					1.88E+01					1.95E+01				
Cobalt	mg/kg	1.10E+01	6.72E+04	5.00E+01	1.37E+00	J				ND					2.68E+00					1.12E+01	J	YES			3.02E+00				
Copper	mg/kg	1.71E+01	4.74E+04	1.87E+01	2.84E+01	J	YES		YES	1.65E+01					1.20E+01					1.57E+01					2.01E+01		YES		YES
Iron	mg/kg	3.53E+04	3.59E+05	NA	1.43E+04					1.98E+04					1.02E+04					1.36E+04					1.44E+04				
Lead	mg/kg	3.78E+01	4.00E+02	3.02E+01	7.10E+00					1.06E+01					8.34E+00					1.50E+01					2.25E+01				
Magnesium	mg/kg	9.06E+02	NA	NA	7.20E+01	J				8.63E+01	J				1.63E+02					2.17E+02					1.97E+02				
Manganese	mg/kg	7.12E+02	4.38E+04	NA	8.58E+01					6.00E+01					6.27E+02					5.58E+02					1.34E+02				
Nickel	mg/kg	1.30E+01	1.76E+04	1.59E+01	2.19E+00	J				2.12E+00	J				3.00E+00					5.58E+00					3.79E+00				
Potassium	mg/kg	1.01E+03	NA	NA	1.46E+02	J				2.00E+02	J				1.09E+02	J				3.13E+02	B				2.98E+02	J			
Sodium	mg/kg	6.92E+02	NA	NA	3.74E+01	J				ND					4.54E+01	J				4.72E+01	B				ND				
Vanadium	mg/kg	4.09E+01	4.83E+03	NA	1.72E+01					3.65E+01					1.23E+01					1.73E+01					2.06E+01				
Zinc	mg/kg	5.27E+01	3.44E+05	1.24E+02	2.33E+01					1.29E+01					4.62E+01					6.35E+01		YES			5.61E+01		YES		
VOLATILE ORGANIC COMPOUNDS																													
2-Butanone	mg/kg	NA	6.23E+05	1.37E-01	ND					ND					ND					1.60E-02	J				ND				
Acetone	mg/kg	NA	1.03E+05	4.53E-01	1.00E-02	J				4.20E-02	B				4.20E-02	B				1.60E-01	J				1.10E-01	J			
Carbon disulfide	mg/kg	NA	1.04E+05	1.34E-01	ND					ND					ND					1.60E-03	J				ND				
SEMIVOLATILE ORGANIC COMPOUNDS																													
Benzo(a)anthracene	mg/kg	NA	8.93E+01	3.30E-01	ND					ND					9.90E-02	J				ND					ND				
Benzo(a)pyrene	mg/kg	NA	8.93E+00	3.30E-01	ND					ND					1.50E-01	J				ND					ND				
Benzo(b)fluoranthene	mg/kg	NA	8.93E+01	6.55E-01	ND					ND					2.30E-01	J				ND					ND				
Benzo(ghi)perylene	mg/kg	NA	2.79E+04	6.55E-01	ND					ND					1.40E-01	J				ND					ND				
Benzo(k)fluoranthene	mg/kg	NA	8.93E+02	6.55E-01	ND					ND					7.90E-02	J				ND					ND				
Chrysene	mg/kg	NA	9.79E+03	3.30E-01	ND					ND					1.20E-01	J				ND					ND				
Fluoranthene	mg/kg	NA	3.73E+04	3.30E-01	ND					ND					1.30E-01	J				ND					1.10E-01	J			
Indeno(1,2,3-cd)pyrene	mg/kg	NA	8.93E+01	6.55E-01	ND					ND					1.30E-01	J				ND					ND				
Pyrene	mg/kg	NA	3.06E+04	3.30E-01	ND					ND					1.20E-01	J				ND					ND				
TOTAL ORGANIC CARBON																													
Total Organic Carbon	mg/kg	NA	NA	NA	1.62E+01					1.22E+03					2.25E+01					5.01E+03					1.02E+04				

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, Alabama* , July.
[b] Recreational site user 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.
Qual - Data validation qualifier.

Table 5-1

Physical and Chemical Parameters Affecting Environmental Fate and Transport of Selected Organic Chemicals
Training Area T-5 Sites
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
Volatiles									
Acetone	58.09 [b]	1.00 E+06 [c]	2.70 E+02 [c]	-0.24 [e]	-0.24 [e]	5.75 E-01	n.a.	3.67 E-05 [b]	0.7899 [d]
Bromodichloromethane	163.83 [b]	4.70 E+03 [b]	5.0 E+01 [b]	2.10 [e]	1.74 [e]	55 [e]	n.a.	1.60 E-03 [b]	1.980 [d]
Carbon tetrachloride	153.84 [b]	8.05 E+02 [b]	1.14 E+02(25C) [b]	2.73 [e]	2.24 [e]	174 [e]	152 [e]	3.04 E-02 [b]	1.5940 [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]
1,1-Dichloroethene	96.94 [d]	2.10 E+02(25C) [d]	5.91 E+02(25C) [d]	2.13 [e]	1.77 [e]	58.9 [e]	65 [e]	2.29 E-02 [d]	1.2180 [d]
1,2-Dichloroethane	98.96 [b]	8.52 E+03 [b]	7.87 E+01 [b]	1.48 [b]	1.24 [e]	17.4 [e]	38 [e]	9.77 E-04 [b]	1.2351 [d]
1,1,2-Trichloroethane	133.42 [b]	4.42 E+03 [b]	3.03 E+01 [b]	2.05 [e]	1.70 [e]	50.1 [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]	6.9 E+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]
Semivolatiles									
Bis(2-ethylhexyl)phthalate	390.54 [a]	3.00 E-01(25C) [a]	6.45 E-06 [a]	7.30 [e]	7.18 [e]	1.51 E+07 [e]	1.11E+05 [e]	1.1 E-05 [a]	0.99 [d]
Benzo(a)pyrene	252.3 [f]	2.30 E-03 [f]	5.60 E-09 [f]	6.06 [f]	6.74 [f]	1.02 E+06 [e]	9.69 E+05 [e]	4.90 E-07 [f]	1.351 [d]
Fluoranthene	202.3 [f]	2.0 - 2.6 E-01 [f]	5.00 E-06(25C) [f]	4.90 [f]	4.58 [f]	1.07 E+05 [e]	4.91 E+04 [e]	6.50 E-06 [f]	1.252 [d]
Phenanthrene	178.2 [f]	1.20(25C) [f]	6.80 E-04 (25C) [f]	4.45 [f]	4.15 [f]	n.a.	n.a.	2.56 E-05 [f]	0.980 [d]
Pyrene	202.3 [f]	7.70 E-02(25C) [f]	2.50 E-06(25C) [f]	4.88 [f]	4.58 [f]	1.05 E+05 [e]	6.80 E+04 [e]	1.14 E-05 [f]	1.271 [d]

* Chemicals identified exceeding SSSLs, ESVs, and background, 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/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.
atm-m^3/mol = Cubic meter per mole per atmosphere.
n.a.= not available
mL/g = Milliliters per gram.

Table 5-2

Distribution Coefficient, K_d
Training Area T-5 Sites
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
Training Area T-5 Sites
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												
Acetone	0.006	0.575	0.00345	1.6	0.4	4.12 E+00	0.031	0.429	1.01	0.423	154.2	7,710
Chloroform	0.006	39.8	0.2388	1.6	0.4	4.12 E+00	0.031	0.429	1.96	0.219	80	4,000
Carbon Tetrachloride	0.006	152	0.912	1.6	0.4	4.12 E+00	0.031	0.429	4.65	0.092	33.7	1,685
1,2-Dichloroethane	0.006	17.4	0.1044	1.6	0.4	4.12 E+00	0.031	0.429	1.42	0.302	110.3	5,515
1,1,2-Trichloroethane	0.006	50.1	0.3006	1.6	0.4	4.12 E+00	0.031	0.429	2.20	0.195	71	3,550
1,1,2,2-Tetrachloroethane	0.006	93.3	0.5598	1.6	0.4	4.12 E+00	0.031	0.429	3.24	0.132	48.3	2,415
Trichloroethene	0.006	94.3	0.5658	1.6	0.4	4.12 E+00	0.031	0.429	3.26	0.131	47.9	2,395
Tetrachloroethene	0.006	155	0.93	1.6	0.4	4.12 E+00	0.031	0.429	4.72	0.091	33.1	1,655
Bis(2-ethylhexyl)phthalate	0.006	1.11E+05	666	1.6	0.4	4.12 E+00	0.031	0.429	2665	0.0002	0.06	3
Bedrock												
Chloroform	0.015	39.8	0.597	2.43	0.2	1.44 E-01	0.065	0.621	10.67	0.058	21.2	1,060
1,1-Dichloroethene	0.015	58.9	0.8835	2.43	0.2	1.44 E-01	0.065	0.621	15.31	0.041	14.8	740
1,1,2,2-Tetrachloroethane	0.015	93.3	1.3995	2.43	0.2	1.44 E-01	0.065	0.621	23.67	0.026	9.6	480
Trichloroethene	0.015	94.3	1.4145	2.43	0.2	1.44 E-01	0.065	0.621	23.91	0.026	9.5	475
Tetrachloroethene	0.015	155	2.325	2.43	0.2	1.44 E-01	0.065	0.621	38.67	0.016	5.9	295

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 [assumed from slug tests at Parcel 94(7)]

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

D_b assumed for residuum @ 1.6 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
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Source Medium	Transport Model	Exposure Medium	Exposure Route
CURRENT SITE USE			
Recreational Site User [All parcels except Dog Kennel Area, Parcel 516(7)]			
Surface soil	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
	Biotransfer	Deer/venison	Venison consumption
Surface water	None	Water	Incidental ingestion Dermal contact
Sediment	None	Sediment	Incidental ingestion Dermal contact
Groundkeeper [Only the Dog Kennel Area, Parcel 516(7)]			
Surface soil	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
FUTURE SITE USE (All parcels)			
Groundskeeper			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
Groundwater[b]	None	Water	Drinking water consumption Dermal contact
Recreational Site User			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions	Air	Inhalation
Surface water	None	Water	Incidental ingestion Dermal contact
Sediment	None	Sediment	Incidental ingestion Dermal contact
Construction Worker			
Total soil[a]	None	Soil	Incidental ingestion Dermal contact
	Dust emissions, volatilization	Air	Inhalation
			Drinking water

Table 6-1

Receptor Exposure Scenarios
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Groundwater[b]	None	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
Surface water	None	Water	Incidental ingestion Dermal contact
Sediment	None	Sediment	Incidental ingestion Dermal contact

[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 Water Samples Used in Streamlined Risk Assessment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analyses Performed
CWM-182-SW/SD01	TE2001	20-Feb-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-SW/SD02	TE2002	20-Jan-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-SW/SD03	TP2003	18-Feb-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-SW/SD04	TP2004	27-Jan-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-SW/SD01	TPP2001	23-Jan-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

CA Breakdown = Chemical Agent Breakdown
SVOC = Semivolatile organic compounds
VOC = Volatile organic compounds

Table 6-3

Sediment Samples Used in Streamlined Risk Assessment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analyses Performed
CWM-182-SW/SD01	TE1001	20-Feb-02	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, TOC, VOCs
CWM-182-SW/SD02	TE1002	20-Jan-03	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, TOC, VOCs
CWM-511-SW/SD03	TP1003	18-Feb-02	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, TOC, VOCs
CWM-511-SW/SD04	TP1004	27-Jan-03	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, TOC, VOCs
CWM-512-SW/SD01	TPP1001	23-Jan-03	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, TOC, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
TOC = Total organic carbon
VOCs = Volatile organic compounds

Table 6-4

Groundwater Samples Used in Streamlined Risk Assessment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analyses Performed
HR-232QX-MW04	ECC3004	17-Apr-01	Metals, Nitro, Perchlorate, VOCs
HR-232QX-MW05	ECC3005	1-May-01	Metals, Nitro, Perchlorate, VOCs
HR-232QX-MW10	ECC3010	25-Apr-01	Metals, Nitro, Perchlorate, VOCs
HR-232QX-MW18	ECC3018	16-Apr-01	Metals, Nitro, Perchlorate, VOCs
HR-232QX-MW19	ECC3019	26-Apr-01	Metals, Nitro, Perchlorate, VOCs
HR-232QX-MW04	ECC3023	8-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
HR-232QX-MW05	ECC3025	3-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
HR-232QX-MW10	ECC3026	2-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
HR-232QX-MW18	ECC3027	1-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
HR-232QX-MW19	ECC3028	7-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW01	TE3001	28-Jan-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW02	TE3002	19-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW03	TE3003	30-Jan-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW04	TE3004	19-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW05	TE3005	24-Jan-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW06	TE3006	25-Jan-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW01	TE3007	18-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW02	TE3008	21-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW03	TE3009	20-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW04	TE3010	18-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW05	TE3011	19-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW06	TE3012	18-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW07	TE3013	31-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW08	TE3014	3-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW09	TE3015	29-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW10	TE3017	1-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW11	TE3018	4-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW01	TK3001	18-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW02	TK3002	14-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW03	TK3003	20-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW04	TK3004	11-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW01	TK3006	14-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW02	TK3007	17-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW03	TK3008	18-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW04	TK3009	20-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW05	TK3010	21-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW06	TK3011	25-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW07	TK3012	26-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW08	TK3013	28-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW01	TKC3001	31-Mar-04	VOCs
CWM-514-MW02	TKC3002	14-Apr-04	VOCs
CWM-514-MW03	TKC3003	15-Apr-04	VOCs
CWM-514-MW04	TKC3005	19-Apr-04	VOCs
CWM-514-MW05	TKC3007	16-Mar-04	VOCs
CWM-514-MW06	TKC3008	18-Mar-04	VOCs
CWM-514-MW07	TKC3009	16-Mar-04	VOCs
CWM-514-MW08	TKC3010	17-Mar-04	VOCs
CWM-514-MW09	TKC3011	13-Apr-04	VOCs
CWM-514-MW10	TKC3013	13-Apr-04	VOCs
CWM-514-MW11	TKC3014	30-Mar-04	VOCs
CWM-514-MW12	TKC3015	12-Apr-04	VOCs
CWM-514-MW13	TKC3016	12-Apr-04	VOCs
CWM-180-MW01	TKC3017	30-Mar-04	VOCs
CWM-180-MW02	TKC3018	29-Mar-04	VOCs
CWM-180-MW03	TKC3019	31-Mar-04	VOCs

Table 6-4

Groundwater Samples Used in Streamlined Risk Assessment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Chemical Analyses Performed
CWM-180-MW04	TKC3020	5-Apr-04	VOCs
CWM-180-MW05	TKC3021	13-Apr-04	VOCs
CWM-180-MW06	TKC3022	24-Mar-04	VOCs
CWM-180-MW07	TKC3023	24-Mar-04	VOCs
CWM-180-MW08	TKC3024	6-Apr-04	VOCs
HR-232QX-MW04	TKC3025	8-Apr-04	VOCs
HR-232QX-MW05	TKC3026	30-Mar-04	VOCs
HR-232QX-MW10	TKC3027	25-Mar-04	VOCs
HR-232QX-MW19	TKC3028	26-Mar-04	VOCs
CWM-514-MW14	TKC3029	5-Aug-04	VOCs
CWM-514-MW15	TKC3030	4-Aug-04	VOCs
CWM-514-MW16	TKC3032	9-Aug-04	VOCs
CWM-511-MW01	TP3001	3-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW02	TP3002	30-Nov-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW03	TP3003	29-Nov-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW01	TP3004	31-Mar-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW02	TP3005	1-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW03	TP3006	2-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW04	TP3007	3-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW05	TP3008	4-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW06	TP3009	7-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW01	TPP3001	28-Nov-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW01	TPP3003	3-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW02	TPP3005	4-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW03	TPP3006	2-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW01	TR3001	5-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW02	TR3002	6-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW01	TR3003	1-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW02	TR3004	2-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW01	TRR3001	11-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW02	TRR3002	7-Dec-01	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW01	TRR3003	7-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW02	TRR3004	7-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW01	TT3001	5-Feb-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW02	TT3002	8-Feb-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW03	TT3003	7-Feb-02	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW01	TT3005	9-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW02	TT3006	11-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW03	TT3007	14-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW04	TT3009	11-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW05	TT3010	7-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW06	TT3011	8-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW07	TT3012	8-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW08	TT3013	9-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW09	TT3014	11-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW10	TT3016	8-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW11	TT3017	10-Apr-03	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

CA Breakdown = Chemical Agent Breakdown
NITRO = Nitroaromatic compounds
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-5

Surface Soil Samples Used in Streamlined Risk Assessment
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-180-DEP01	TK0016	27-Jan-03	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW01	TK0001	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW02	TK0003	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW03	TK0005	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW04	TK0007	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW06	TK0011	25-Nov-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW08	TK0013	25-Nov-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-6

Subsurface Soil Samples Used in Streamlined Risk Assessment
Former Detection and Identification Area, Parcel 180(7)
For McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-180-MW01	TK0002	22-Oct-01	1 - 2	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW02	TK0004	22-Oct-01	2 - 3	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW03	TK0006	22-Oct-01	2 - 3	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW04	TK0010	22-Oct-01	2 - 3	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW06	TK0012	25-Nov-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-180-MW08	TK0014	25-Nov-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-7

Selection of Site-Related Chemicals for Surface Water
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limits Minimum	Method Detection Limits Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/L)	95% UCL[b] (mg/L)	Background Screening Criterion[c] (mg/L)	Site-Related?[d]
Metals											
Aluminum	4 / 5	80	6.51E-02	3.95E-01	5.00E-02	5.00E-02	L	1.32E-01	4.32E-01	5.26E+00	N (a)
Barium	5 / 5	100	2.00E-02	6.77E-02	1.00E-03	1.00E-03	L	3.23E-02	7.25E-02	7.54E-02	N (a)
Calcium	5 / 5	100	1.13E+00	8.22E+00	1.50E-01	1.50E-01	N	4.54E+00	7.29E+00	2.52E+01	N (d)
Chromium	1 / 5	20	1.38E-02	1.38E-02	6.00E-03	6.00E-03	NP	5.16E-03	1.48E-02	1.11E-02	N (b)
Iron	4 / 4	100	5.11E-02	4.01E-01	6.00E-03	6.00E-03	NA	2.20E-01	NA	1.96E+01	N (a)
Magnesium	5 / 5	100	6.52E-01	1.72E+00	5.00E-02	5.00E-02	L	1.10E+00	1.94E+00	1.10E+01	N (d)
Manganese	5 / 5	100	2.24E-02	2.56E-01	3.00E-03	3.00E-03	L	7.72E-02	2.78E-01	5.65E-01	N (a)
Mercury	1 / 5	20	2.90E-04	2.90E-04	1.18E-04	1.18E-04	NP	1.05E-04	3.12E-04		N (c)
Sodium	4 / 4	100	8.09E-01	1.36E+00	7.00E-02	7.00E-02	NA	1.07E+00	NA	3.44E+00	N (d)
Volatile Organic Compounds											
Acetone	2 / 3	67	4.60E-03	9.00E-03	1.90E-03	1.90E-03	NA	4.85E-03	NA		Y

NA = Not applicable; mg/L = milligrams 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; distribution is not determined for data sets containing fewer than 5 samples.

[b] 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.

[c] Background screening criterion for inorganic constituents is 2 times the mean background concentration for surface water.
(Science Applications International Corporation, 1998, Background Metals Survey Report, Fort McClellan, Anniston, Alabama, July).

[d] 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) = essential nutrient.

Table 6-8

Selection of Chemicals of Potential Concern for Surface Water
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/L)	Applicable SSSL (mg/L)			
		Recreational Site User			
		Noncancer	COPC?	Cancer	COPC?
Volatile Organic Compounds					
Acetone	9.00E-03	1.57E+00	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/L = milligram per liter.
N = Chemical is determined not to be a COPC ; Y = Chemical is determined to be COPC; NA = Not applicable.

Table 6-9

Selection of Site-Related Chemicals for Sediment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limits Minimum	Method Detection Limits Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/kg)	95% UCL[b] (mg/kg)	Background Screening Criterion[c] (mg/kg)	Site-Related?[d]
Metals											
Aluminum	5 / 5	100	1.96E+03	5.74E+03	6.13E+00	7.09E+00	N	3.83E+03	5.34E+03	8.59E+03	N (a)
Arsenic	5 / 5	100	3.95E+00	7.03E+00	1.83E-01	2.12E-01	L	4.80E+00	7.38E+00	1.13E+01	N (a)
Barium	5 / 5	100	9.78E+00	7.10E+01	4.12E-01	4.77E-01	L	3.33E+01	8.44E+01	9.89E+01	N (a)
Beryllium	1 / 5	20	4.81E-01	4.81E-01	4.09E-01	4.74E-01	NP	2.65E-01	5.07E-01	9.70E-01	N (a)
Cadmium	3 / 5	60	8.17E-01	2.57E+00	5.33E-01	6.18E-01	L	9.93E-01	2.88E+00	4.30E-01	N (c)
Calcium	5 / 5	100	4.51E+01	4.05E+02	1.41E+01	1.64E+01	N	2.53E+02	4.26E+02	1.11E+03	N (d)
Chromium	5 / 5	100	1.08E+01	6.18E+01	9.85E-01	1.14E+00	L	2.53E+01	6.67E+01	3.12E+01	Y
Cobalt	4 / 5	80	1.37E+00	1.12E+01	1.25E+00	1.45E+00	L	3.78E+00	1.23E+01	1.10E+01	N (b)
Copper	5 / 5	100	1.20E+01	2.84E+01	9.55E-01	1.11E+00	L	1.85E+01	3.10E+01	1.71E+01	N (c)
Iron	5 / 5	100	1.02E+04	1.98E+04	1.22E+01	1.41E+01	L	1.45E+04	2.13E+04	3.53E+04	N (a)
Lead	5 / 5	100	7.10E+00	2.25E+01	2.44E-01	2.82E-01	L	1.27E+01	NA	3.78E+01	N (a)
Magnesium	5 / 5	100	7.20E+01	2.17E+02	1.91E+01	2.22E+01	N	1.47E+02	2.09E+02	9.06E+02	N (d)
Manganese	5 / 5	100	6.00E+01	6.27E+02	4.74E-01	5.49E-01	L	2.93E+02	8.44E+02	7.12E+02	N (a)
Nickel	5 / 5	100	2.12E+00	5.58E+00	6.70E-01	7.76E-01	L	3.34E+00	6.19E+00	1.30E+01	N (a)
Potassium	4 / 4	100	1.09E+02	2.98E+02	8.72E+01	1.01E+02	NA	1.88E+02	NA	1.01E+03	N (d)
Sodium	2 / 4	50	3.74E+01	4.54E+01	2.19E+01	2.54E+01	NA	2.66E+01	NA	6.92E+02	N (d)
Vanadium	5 / 5	100	1.23E+01	3.65E+01	9.57E-01	1.11E+00	L	2.08E+01	3.93E+01	4.09E+01	N (a)
Zinc	5 / 5	100	1.29E+01	6.35E+01	3.51E-01	4.06E-01	N	4.04E+01	6.10E+01	5.27E+01	N (c)
Semivolatile Organic Compounds											
Benzo(a)anthracene	1 / 5	20	9.90E-02	9.90E-02	5.70E-02	6.60E-02	NP	4.38E-02	1.06E-01		Y
Benzo(a)pyrene	1 / 5	20	1.50E-01	1.50E-01	5.60E-02	6.50E-02	NP	5.37E-02	1.61E-01		Y
Benzo(b)fluoranthene	1 / 5	20	2.30E-01	2.30E-01	7.90E-02	9.20E-02	NP	7.93E-02	2.48E-01		Y
Benzo(ghi)perylene	1 / 5	20	1.40E-01	1.40E-01	5.10E-02	5.90E-02	NP	4.94E-02	1.51E-01		Y
Benzo(k)fluoranthene	1 / 5	20	7.90E-02	7.90E-02	6.00E-02	7.00E-02	NP	4.12E-02	8.36E-02		Y
Chrysene	1 / 5	20	1.20E-01	1.20E-01	5.80E-02	6.70E-02	NP	4.83E-02	1.29E-01		Y
Fluoranthene	2 / 5	40	1.10E-01	1.30E-01	6.60E-02	7.70E-02	NP	6.82E-02	1.64E-01		Y
Indeno(1,2,3-cd)pyrene	1 / 5	20	1.30E-01	1.30E-01	5.70E-02	6.60E-02	NP	4.99E-02	1.39E-01		Y
Pyrene	1 / 5	20	1.20E-01	1.20E-01	6.40E-02	7.40E-02	NP	5.08E-02	1.28E-01		Y

Table 6-9

Selection of Site-Related Chemicals for Sediment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limits Minimum	Method Detection Limits Maximum	Statistical Distribution[a]	Arithmetic Mean (mg/kg)	95% UCL[b] (mg/kg)	Background Screening Criterion[c] (mg/kg)	Site-Related?[d]
Volatile Organic Compounds											
2-Butanone	1 / 5	20	1.60E-02	1.60E-02	2.70E-03	3.40E-03	NP	4.39E-03	1.74E-02		Y
Acetone	3 / 3	100	1.00E-02	1.60E-01	3.10E-03	3.40E-03	NA	9.33E-02	NA		Y
Carbon disulfide	1 / 5	20	1.60E-03	1.60E-03	2.70E-04	3.50E-04	NP	4.41E-04	1.74E-03		Y

mg/kg = milligrams per kilogram
N = Chemical is determined not to be site-related; Y = Chemical is determined to be site-related; NA = not applicable.

[a] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution; distribution is not determined for data sets containing fewer than 5 samples.

[b] 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.
UCL is not estimated for lead.

[c] Background screening criterion for inorganic constituents is 2 times the mean background concentration for sediment.
(Science Applications International Corporation, 1998, Background Metals Survey Report, Fort McClellan, Anniston, Alabama, July).

[d] 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) = essential nutrient.

Table 6-10

Selection of Chemicals of Potential Concern for Sediment
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg)			
		Recreational Site User			
		Noncancer	COPC?	Cancer	COPC?
Metals					
Chromium	6.18E+01	2.79E+03	N	NA	NA
Semivolatile Organic Compounds					
Benzo(a)anthracene	9.90E-02	NA	NA	8.93E+01	N
Benzo(a)pyrene	1.50E-01	NA	NA	8.93E+00	N
Benzo(b)fluoranthene	2.30E-01	NA	NA	8.93E+01	N
Benzo(ghi)perylene	1.40E-01	2.79E+04	N	NA	NA
Benzo(k)fluoranthene	7.90E-02	NA	NA	8.93E+02	N
Chrysene	1.20E-01	NA	NA	9.79E+03	N
Fluoranthene	1.30E-01	3.73E+04	N	NA	NA
Indeno(1,2,3-cd)pyrene	1.30E-01	NA	NA	8.93E+01	N
Pyrene	1.20E-01	3.06E+04	N	NA	NA
Volatile Organic Compounds					
2-Butanone	1.60E-02	6.23E+05	N	NA	NA
Acetone	1.60E-01	1.03E+05	N	NA	NA
Carbon disulfide	1.60E-03	1.04E+05	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.

Table 6-11

Selection of Site-Related Chemicals for Groundwater
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

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Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limits Minimum	Method Detection Limits Maximum	Arithmetic Mean (mg/L)	Background Screening Criterion[a] (mg/L)	Site-Related?[b]
Metals									
Aluminum	42 / 66	64	5.50E-02	2.61E+01	4.63E-02	5.00E-02	7.78E-01	2.34E+00	N (b)
Arsenic	8 / 58	14	1.81E-03	2.83E-02	1.70E-03	2.40E-03	1.63E-03	1.78E-02	N (b)
Barium	72 / 72	100	4.51E-03	1.05E+00	1.00E-03	1.00E-03	9.52E-02	1.27E-01	N (c)
Beryllium	1 / 74	1	6.37E-03	6.37E-03	6.00E-04	1.00E-03	5.66E-04	1.25E-03	N (c)
Cadmium	1 / 73	1	6.60E-03	6.60E-03	4.20E-03	5.00E-03	2.53E-03	2.51E-03	N (b)
Calcium	67 / 67	100	2.27E-01	9.37E+01	9.17E-02	1.50E-01	3.68E+01	5.65E+01	N (d)
Chromium	5 / 74	7	6.30E-03	3.53E-02	4.70E-03	6.00E-03	3.97E-03		N (c)
Cobalt	10 / 73	14	9.79E-03	4.95E-02	9.10E-03	1.10E-02	7.43E-03	2.34E-02	N (c)
Copper	5 / 72	7	1.05E-02	3.57E-02	2.70E-03	5.00E-03	3.74E-03	2.55E-02	N (b)
Iron	68 / 68	100	1.32E-02	5.96E+01	6.00E-03	1.05E-02	2.93E+00	7.04E+00	N (b)
Lead	8 / 73	11	1.57E-03	5.71E-02	1.30E-03	1.30E-03	1.60E-03	8.00E-03	N (c)
Magnesium	55 / 56	98	4.35E-01	9.65E+00	5.00E-02	8.12E-02	3.71E+00	2.13E+01	N (d)
Manganese	70 / 72	97	4.96E-03	7.07E+00	1.50E-03	3.00E-03	9.91E-01	5.81E-01	N (c)
Mercury	1 / 73	1	1.98E-04	1.98E-04	1.18E-04	1.29E-04	6.13E-05		N (b)
Nickel	9 / 71	13	1.94E-02	5.05E-02	8.90E-03	1.50E-02	1.02E-02		N (c)
Potassium	20 / 46	43	7.81E-01	7.14E+00	7.50E-01	1.97E+00	1.38E+00	7.20E+00	N (d)
Selenium	1 / 70	1	2.33E-03	2.33E-03	1.60E-03	2.70E-03	1.33E-03		N (b)
Sodium	26 / 26	100	8.70E-01	1.73E+01	7.00E-02	4.17E-01	4.50E+00	1.48E+01	N (d)
Thallium	1 / 71	1	5.04E-03	5.04E-03	3.70E-03	4.70E-03	1.93E-03	1.46E-03	N (b)
Vanadium	6 / 74	8	5.87E-03	4.80E-02	3.80E-03	5.00E-03	3.43E-03	1.70E-02	N (c)
Zinc	11 / 70	16	3.48E-02	2.61E-01	5.80E-03	2.70E-02	2.35E-02	2.20E-01	N (b)
Semivolatile Organic Compounds									
4-Methylphenol	1 / 69	1	6.90E-03	6.90E-03	3.70E-03	4.10E-03	1.99E-03		Y
Bis(2-Ethylhexyl)phthalate	4 / 69	6	4.50E-02	1.20E-01	9.30E-03	1.00E-02	9.15E-03		Y
Diethyl phthalate	1 / 69	1	8.50E-03	8.50E-03	5.40E-03	6.10E-03	2.90E-03		Y
Phenol	1 / 69	1	1.30E-02	1.30E-02	3.90E-03	4.40E-03	2.18E-03		Y

Table 6-11

Selection of Site-Related Chemicals for Groundwater
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Detection Frequency	Percent hits	Range of values (mg/L) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limits Minimum	Method Detection Limits Maximum	Arithmetic Mean (mg/L)	Background Screening Criterion[a] (mg/L)	Site-Related?[b]
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	17 / 102	17	3.10E-04	2.90E-01	2.80E-04	1.40E-02	1.13E-02		Y
1,1,2-Trichloroethane	9 / 102	9	3.80E-04	2.30E-03	2.30E-04	8.30E-04	1.99E-04		Y
1,1-Dichloroethene	1 / 102	1	6.50E-04	6.50E-04	1.50E-04	8.60E-04	9.80E-05		Y
1,2,4-Trimethylbenzene	1 / 102	1	3.30E-04	3.30E-04	1.40E-04	1.20E-03	9.85E-05		Y
1,2-Dichloroethane	1 / 102	1	6.60E-04	6.60E-04	1.70E-04	9.50E-04	1.10E-04		Y
1,2-Dimethylbenzene	1 / 102	1	2.30E-04	2.30E-04	1.20E-04	8.80E-04	8.03E-05		Y
2-Butanone	4 / 9	44	5.70E-03	1.40E-02	1.80E-03	6.70E-03	6.37E-03		Y
4-Methyl-2-pentanone	2 / 97	2	3.90E-03	7.70E-03	1.00E-03	3.60E-03	6.76E-04		Y
Acetone	16 / 18	89	1.90E-03	2.00E+01	1.90E-03	9.60E-01	2.30E+00		Y
Bromodichloromethane	1 / 102	1	1.50E-03	1.50E-03	1.50E-04	8.20E-04	1.05E-04		Y
Carbon disulfide	3 / 100	3	1.50E-04	5.30E-04	1.30E-04	6.10E-04	8.62E-05		Y
Carbon tetrachloride	8 / 102	8	2.20E-04	5.90E-02	1.70E-04	1.70E-03	1.83E-03		Y
Chloroform	50 / 99	51	1.80E-04	1.40E-02	1.20E-04	6.70E-04	1.33E-03		Y
Cis-1,2-Dichloroethene	16 / 102	16	1.50E-04	7.00E-03	1.30E-04	7.90E-04	2.34E-04		Y
Dibromochloromethane	1 / 102	1	6.50E-04	6.50E-04	1.90E-04	7.10E-04	1.13E-04		Y
Methylene chloride	4 / 79	5	2.10E-04	3.90E-04	1.20E-04	1.40E-03	1.13E-04		Y
p-Cymene	1 / 102	1	6.00E-04	6.00E-04	1.80E-04	1.20E-03	1.20E-04		Y
Tetrachloroethene	10 / 102	10	2.10E-04	1.80E-03	1.80E-04	1.10E-03	2.12E-04		Y
Toluene	6 / 102	6	2.20E-04	1.40E-03	1.20E-04	9.90E-04	1.00E-04		Y
Trans-1,2-Dichloroethene	3 / 102	3	7.00E-04	9.30E-03	1.50E-04	7.30E-04	2.01E-04		Y
Trichloroethene	46 / 102	45	1.70E-04	1.10E-01	1.50E-04	7.80E-03	8.09E-03		Y

mg/L = milligrams per liter

N = Chemical is determined not to be site-related; Y = Chemical is determined to be site-related; NA = Not applicable.

[a] 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).

[b] 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) = essential nutrient.

Table 6-12

Selection of Chemicals of Potential Concern for Groundwater
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/L)	Applicable SSSL (mg/L) Groundskeeper				Applicable SSSL (mg/L) Construction Worker				Applicable SSSL (mg/L) On-Site Resident				Source-Term Concentration [a] (mg/L)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Semivolatile Organic Compounds														
4-Methylphenol	6.90E-03	4.87E-02	N	NA	NA	4.87E-02	N	NA	NA	7.69E-03	N	NA	NA	
Bis(2-Ethylhexyl)phthalate	1.20E-01	1.61E-01	N	1.61E-02	Y	1.61E-01	N	4.02E-01	N	2.85E-02	Y	4.31E-03	Y	NA
Diethyl phthalate	8.50E-03	7.87E+00	N	NA	NA	7.87E+00	N	NA	NA	1.23E+00	N	NA	NA	
Phenol	1.30E-02	5.99E+00	N	NA	NA	5.99E+00	N	NA	NA	9.31E-01	N	NA	NA	
Volatile Organic Compounds														
1,1,2,2-Tetrachloroethane	2.90E-01	5.82E-01	N	1.36E-03	Y	5.82E-01	N	3.40E-02	Y	9.21E-02	Y	2.04E-04	Y	2.00E-01
1,1,2-Trichloroethane	2.30E-03	3.95E-02	N	4.85E-03	N	3.95E-02	N	1.21E-01	N	6.18E-03	N	7.15E-04	Y	1.20E-03
1,1-Dichloroethene	6.50E-04	8.63E-02	N	4.48E-04	Y	8.63E-02	N	1.12E-02	N	1.38E-02	N	9.36E-05	Y	6.50E-04
1,2,4-Trimethylbenzene	3.30E-04	2.86E-01	N	NA	NA	2.86E-01	N	NA	NA	6.00E-03	N	NA	NA	
1,2-Dichloroethane	6.60E-04	3.00E-01	N	3.08E-03	N	3.00E-01	N	7.69E-02	N	4.88E-03	N	4.48E-04	Y	NA
1,2-Dimethylbenzene	2.30E-04	1.54E+01	N	NA	NA	1.54E+01	N	NA	NA	2.80E+00	N	NA	NA	
2-Butanone	1.40E-02	6.10E+00	N	NA	NA	6.10E+00	N	NA	NA	7.14E-01	N	NA	NA	
4-Methyl-2-pentanone	7.70E-03	8.05E-01	N	NA	NA	8.05E-01	N	NA	NA	5.84E-02	N	NA	NA	
Acetone	2.00E+01	1.02E+00	Y	NA	NA	1.02E+00	Y	NA	NA	1.56E-01	Y	NA	NA	5.40E+00
Bromodichloromethane	1.50E-03	1.99E-01	N	4.50E-03	N	1.99E-01	N	1.12E-01	N	3.10E-02	N	1.08E-03	Y	NA
Carbon disulfide	5.30E-04	9.21E-01	N	NA	NA	9.21E-01	N	NA	NA	1.51E-01	N	NA	NA	
Carbon tetrachloride	5.90E-02	6.43E-03	Y	1.98E-03	Y	6.43E-03	Y	4.95E-02	Y	1.05E-03	Y	4.08E-04	Y	2.20E-02
Chloroform	1.40E-02	9.86E-02	N	NA	NA	9.86E-02	N	NA	NA	1.54E-02	N	NA	NA	
Cis-1,2-Dichloroethene	7.00E-03	9.91E-02	N	NA	NA	9.91E-02	N	NA	NA	1.55E-02	N	NA	NA	
Dibromochloromethane	6.50E-04	2.01E-01	N	3.35E-03	N	2.01E-01	N	8.37E-02	N	3.11E-02	N	7.92E-04	N	
Methylene chloride	3.90E-04	6.02E-01	N	3.75E-02	N	6.02E-01	N	9.37E-01	N	9.32E-02	N	7.85E-03	N	
p-Cymene	6.00E-04	9.85E-01	N	NA	NA	9.85E-01	N	NA	NA	2.26E-01	N	NA	NA	
Tetrachloroethene	1.80E-03	8.54E-02	N	4.60E-03	N	8.54E-02	N	1.15E-01	N	1.46E-02	N	1.26E-03	Y	9.70E-04
Toluene	1.40E-03	1.73E+00	N	NA	NA	1.73E+00	N	NA	NA	2.59E-01	N	NA	NA	
Trans-1,2-Dichloroethene	9.30E-03	1.95E-01	N	NA	NA	1.95E-01	N	NA	NA	3.07E-02	N	NA	NA	
Trichloroethene	1.10E-01	5.72E-02	Y	2.42E-02	Y	5.72E-02	Y	6.06E-01	N	9.15E-03	Y	4.51E-03	Y	2.60E-02

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] See text Section 6.2.1.2 for explanation of COPC selection and source-term concentration estimation.

Table 6-13

Selection of Site-Related Chemicals for Surface Soil [a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

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	7 / 7	100	8.46E+03	2.30E+04	5.69E+00	5.64E+01	N	1.71E+04	2.07E+04	1.63E+04	N (c)
Arsenic	7 / 7	100	5.16E+00	3.83E+01	1.68E-01	1.98E-01	L	1.48E+01	3.35E+01	1.37E+01	N (c)
Barium	7 / 7	100	3.39E+01	1.30E+02	3.82E-01	3.79E+00	N	7.16E+01	9.85E+01	1.24E+02	N (c)
Beryllium	4 / 5	80	4.81E-01	1.31E+00	3.85E-01	3.77E+00	L	1.01E+00	2.19E+00	8.00E-01	N (c)
Cadmium	1 / 7	14	2.25E+00	2.25E+00	4.95E-01	4.92E+00	NP	8.57E-01	2.59E+00	2.90E-01	Y
Calcium	7 / 7	100	2.01E+02	1.18E+03	1.31E+01	1.30E+02	L	5.68E+02	1.13E+03	1.72E+03	N (d)
Chromium	7 / 7	100	1.42E+01	6.36E+01	9.15E-01	9.08E+00	L	2.84E+01	5.87E+01	3.70E+01	N (c)
Cobalt	7 / 7	100	3.60E+00	3.00E+01	1.16E+00	1.15E+01	L	1.20E+01	2.76E+01	1.52E+01	N (c)
Copper	7 / 7	100	1.09E+01	4.35E+01	8.87E-01	8.80E+00	L	2.00E+01	3.93E+01	1.27E+01	N (c)
Iron	7 / 7	100	1.74E+04	1.32E+05	1.13E+01	1.12E+02	L	4.81E+04	1.13E+05	3.42E+04	N (c)
Lead	7 / 7	100	1.68E+01	4.12E+01	2.24E-01	2.64E-01	N	3.09E+01	NA	4.01E+01	N (b)
Magnesium	7 / 7	100	4.70E+02	1.00E+03	1.78E+01	1.76E+02	N	7.34E+02	8.80E+02	1.03E+03	N (d)
Manganese	7 / 7	100	7.82E+01	1.15E+03	4.40E-01	4.37E+00	N	6.21E+02	9.90E+02	1.58E+03	N (a)
Mercury	5 / 7	71	3.10E-02	6.32E-02	2.81E-02	3.30E-02	N	3.55E-02	4.86E-02	8.00E-02	N (a)
Nickel	7 / 7	100	5.28E+00	2.36E+01	6.22E-01	6.17E+00	N	1.36E+01	1.86E+01	1.03E+01	N (c)
Potassium	7 / 7	100	5.75E+02	9.62E+02	8.10E+01	8.03E+02	L	7.50E+02	1.00E+03	8.00E+02	N (d)
Selenium	5 / 7	71	6.37E-01	3.40E+00	5.25E-01	6.18E-01	L	1.39E+00	3.60E+00	4.80E-01	N (c)
Thallium	1 / 7	14	1.28E+00	1.28E+00	6.80E-01	8.01E-01	NP	4.92E-01	1.08E+00	3.43E+00	N (a)
Vanadium	7 / 7	100	2.43E+01	9.51E+01	8.89E-01	8.82E+00	L	4.63E+01	8.56E+01	5.88E+01	N (c)
Zinc	7 / 7	100	2.99E+01	1.09E+02	3.26E-01	3.23E+00	L	5.63E+01	1.08E+02	4.06E+01	N (c)
Semivolatile Organic Compounds											
Acenaphthylene	1 / 7	14	1.70E-01	1.70E-01	8.40E-02	9.90E-02	NP	6.27E-02	1.43E-01		Y
Anthracene	2 / 7	29	9.60E-02	4.50E-01	6.40E-02	7.60E-02	NP	1.02E-01	3.64E-01		Y
Benzo(a)anthracene	2 / 7	29	6.20E-01	3.30E+00	5.30E-02	6.20E-02	NP	5.80E-01	2.64E+00		Y
Benzo(a)pyrene	2 / 7	29	6.80E-01	2.80E+00	5.20E-02	6.10E-02	NP	5.16E-01	2.27E+00		Y
Benzo(b)fluoranthene	2 / 7	29	1.20E+00	4.50E+00	7.30E-02	8.60E-02	NP	8.41E-01	3.66E+00		Y
Benzo(ghi)perylene	2 / 7	29	7.60E-01	1.50E+00	4.70E-02	5.50E-02	NP	3.40E-01	1.32E+00		Y
Benzo(k)fluoranthene	2 / 7	29	4.20E-01	1.50E+00	5.60E-02	6.60E-02	NP	2.95E-01	1.23E+00		Y
Carbazole	2 / 7	29	7.40E-02	1.10E-01	5.60E-02	6.60E-02	NP	4.71E-02	1.02E-01		Y
Chrysene	2 / 7	29	9.00E-01	3.60E+00	5.30E-02	6.30E-02	NP	6.63E-01	2.92E+00		Y
Dibenz(a,h)anthracene	2 / 7	29	1.80E-01	4.60E-01	5.20E-02	6.10E-02	NP	1.11E-01	3.88E-01		Y
Fluoranthene	2 / 7	29	1.40E+00	7.70E+00	6.10E-02	1.20E-01	NP	1.32E+00	6.15E+00		Y
Indeno(1,2,3-cd)pyrene	2 / 7	29	7.80E-01	1.80E+00	5.20E-02	6.10E-02	NP	3.88E-01	1.54E+00		Y
Phenanthrene	2 / 7	29	7.30E-01	1.50E+00	5.70E-02	6.70E-02	NP	3.40E-01	1.31E+00		Y
Pyrene	2 / 7	29	1.50E+00	5.50E+00	5.90E-02	1.20E-01	NP	1.02E+00	4.48E+00		Y

Table 6-13

Selection of Site-Related Chemicals for Surface Soil [a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

(Page 2 of 2)

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]
Volatile Organic Compounds											
2-Butanone	4 / 7	57	1.20E-02	1.50E-02	2.40E-03	3.50E-03	NP	8.29E-03	1.94E-02		Y
Acetone	5 / 5	100	5.80E-02	3.40E-01	2.40E-03	3.50E-03	N	2.10E-01	3.05E-01		Y
Chemical Agent Breakdown											
Methylphosphonic Acid	1 / 7	14	6.00E-02	6.00E-02	4.80E-02	5.50E-02	NP	3.04E-02	5.25E-02		Y

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 1 foot bgs.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-14

Selection of Site-Related Chemicals for Subsurface Soil [a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

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	6 / 6	100	1.25E+04	2.49E+04	5.60E+00	5.92E+00	L	1.81E+04	2.74E+04	1.36E+04	N (c)
Antimony	2 / 6	33	5.18E+00	5.82E+00	4.39E+00	4.64E+00	NP	3.32E+00	6.42E+00	1.31E+00	N (b)
Arsenic	6 / 6	100	8.55E+00	3.07E+01	1.67E-01	1.76E-01	N	1.78E+01	2.50E+01	1.83E+01	N (c)
Barium	6 / 6	100	4.83E+01	1.68E+02	3.76E-01	3.98E-01	L	1.05E+02	2.04E+02	2.34E+02	N (a)
Beryllium	2 / 2	100	5.28E-01	1.03E+00	3.81E-01	3.91E-01	N	7.79E-01	2.36E+00	8.60E-01	N (c)
Calcium	6 / 6	100	1.01E+02	5.36E+02	1.29E+01	1.37E+01	N	3.08E+02	4.41E+02	6.37E+02	N (d)
Chromium	6 / 6	100	1.67E+01	5.10E+01	9.01E-01	9.52E-01	L	3.17E+01	5.25E+01	3.83E+01	N (c)
Cobalt	6 / 6	100	4.30E+00	5.29E+01	1.14E+00	1.21E+00	N	2.36E+01	4.00E+01	1.75E+01	N (c)
Copper	6 / 6	100	9.10E+00	1.88E+01	8.73E-01	9.22E-01	N	1.44E+01	1.78E+01	1.94E+01	N (a)
Iron	6 / 6	100	2.24E+04	5.00E+04	1.11E+01	1.18E+01	N	3.97E+04	4.79E+04	4.48E+04	N (c)
Lead	6 / 6	100	1.12E+01	6.00E+01	2.23E-01	2.35E-01	L	2.68E+01	NA	3.85E+01	N (c)
Magnesium	6 / 6	100	4.25E+02	9.55E+02	1.75E+01	1.85E+01	N	7.43E+02	9.30E+02	7.66E+02	N (d)
Manganese	6 / 6	100	9.52E+01	3.14E+03	4.33E-01	4.58E-01	L	1.29E+03	3.77E+03	1.36E+03	N (c)
Mercury	3 / 6	50	3.06E-02	3.39E-02	2.78E-02	2.94E-02	NP	2.34E-02	4.18E-02	7.00E-02	N (a)
Nickel	6 / 6	100	4.62E+00	2.06E+01	6.12E-01	6.47E-01	N	1.29E+01	1.77E+01	1.29E+01	N (c)
Potassium	6 / 6	100	4.39E+02	8.22E+02	7.97E+01	8.42E+01	L	6.37E+02	9.26E+02	7.11E+02	N (d)
Selenium	3 / 4	75	5.90E-01	7.64E-01	5.21E-01	5.51E-01	N	5.84E-01	8.52E-01	4.70E-01	N (c)
Sodium	1 / 1	100	1.11E+02	1.11E+02	2.09E+01	2.09E+01	NA	1.11E+02	NA	7.02E+02	N (d)
Thallium	2 / 6	33	9.11E-01	2.13E+00	6.75E-01	7.13E-01	NP	7.36E-01	2.05E+00	1.40E+00	N (b)
Vanadium	6 / 6	100	3.01E+01	5.79E+01	8.75E-01	9.25E-01	N	4.49E+01	5.34E+01	6.49E+01	N (a)
Zinc	6 / 6	100	1.74E+01	5.32E+01	3.21E-01	3.39E-01	N	3.52E+01	4.66E+01	3.49E+01	N (c)
Semivolatile Organic Compounds											
Benzo(a)anthracene	1 / 6	17	2.20E-01	2.20E-01	5.20E-02	5.50E-02	NP	5.88E-02	2.03E-01		Y
Benzo(a)pyrene	1 / 6	17	1.90E-01	1.90E-01	5.10E-02	5.40E-02	NP	5.34E-02	1.76E-01		Y
Benzo(b)fluoranthene	1 / 6	17	3.20E-01	3.20E-01	7.20E-02	7.60E-02	NP	8.38E-02	2.95E-01		Y
Benzo(ghi)perylene	1 / 6	17	1.40E-01	1.40E-01	4.70E-02	4.90E-02	NP	4.31E-02	1.30E-01		Y
Benzo(k)fluoranthene	1 / 6	17	1.40E-01	1.40E-01	5.50E-02	5.80E-02	NP	4.67E-02	1.30E-01		Y
Bis(2-Ethylhexyl)phthalate	1 / 6	17	1.10E-01	1.10E-01	5.70E-02	6.10E-02	NP	4.26E-02	1.03E-01		Y
Chrysene	1 / 6	17	2.30E-01	2.30E-01	5.30E-02	5.60E-02	NP	6.08E-02	2.12E-01		Y
Fluoranthene	1 / 6	17	6.00E-01	6.00E-01	6.10E-02	6.40E-02	NP	1.26E-01	5.50E-01		Y
Indeno(1,2,3-cd)pyrene	1 / 6	17	1.60E-01	1.60E-01	5.20E-02	5.50E-02	NP	4.88E-02	1.48E-01		Y
Phenanthrene	1 / 6	17	7.30E-02	7.30E-02	5.60E-02	6.00E-02	NP	3.61E-02	6.91E-02		Y
Pyrene	1 / 6	17	4.30E-01	4.30E-01	5.80E-02	6.20E-02	NP	9.63E-02	3.95E-01		Y

Table 6-14

Selection of Site-Related Chemicals for Subsurface Soil [a]
Former Detection and Identification Area, Parcel 180(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]
Volatile Organic Compounds											
1,2,4-Trimethylbenzene	1 / 6	17	2.20E-03	2.20E-03	2.50E-04	3.20E-04	NP	4.87E-04	2.02E-03		Y
1,3,5-Trimethylbenzene	1 / 6	17	1.20E-03	1.20E-03	3.60E-04	4.60E-04	NP	3.73E-04	1.11E-03		Y
2-Butanone	1 / 6	17	1.40E-02	1.40E-02	2.30E-03	2.90E-03	NP	3.45E-03	1.29E-02		Y
4-Methyl-2-pentanone	1 / 6	17	5.80E-03	5.80E-03	1.40E-03	1.70E-03	NP	1.64E-03	5.36E-03		Y
Acetone	4 / 4	100	5.70E-03	2.30E-01	2.30E-03	2.60E-03	L	7.67E-02	3.08E-01		Y
Naphthalene	1 / 6	17	4.30E-03	4.30E-03	2.70E-03	3.40E-03	NP	1.99E-03	4.07E-03		Y
Chemical Agent Breakdown											
Methylphosphonic Acid	2 / 6	33	5.30E-02	5.80E-02	4.60E-02	5.10E-02	NP	3.49E-02	6.42E-02		Y

mg/kg = milligrams 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 1 to 12 feet below ground surface.

[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution; distribution is not determined for data sets containing fewer than 5 samples.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-15

Selection of Chemicals of Potential Concern for Surface Soil[a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident				Applicable SSSL (mg/kg) Venison Consumer				Source-Term Concentration [b] (mg/kg)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Metals																						
Cadmium	2.25E+00	6.55E+01	N	2.27E+01	N	3.43E+02	N	NA	NA	2.13E+01	N	2.84E+02	N	6.25E+00	N	NA	NA	9.91E+03	N	NA	NA	
Semivolatile Organic Compounds																						
Acenaphthylene	1.70E-01	6.07E+03	N	NA	NA	3.64E+04	N	NA	NA	2.91E+03	N	NA	NA	4.63E+02	N	NA	NA	NA	NA	NA	NA	
Anthracene	4.50E-01	3.04E+04	N	NA	NA	1.84E+05	N	NA	NA	1.48E+04	N	NA	NA	2.33E+03	N	NA	NA	NA	NA	NA	NA	
Benzo(a)anthracene	3.30E+00	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	Y	NA	NA	NA	NA	2.64E+00
Benzo(a)pyrene	2.80E+00	NA	NA	3.85E-01	Y	NA	NA	5.81E+00	N	NA	NA	4.62E+00	N	NA	NA	8.51E-02	Y	NA	NA	NA	NA	2.27E+00
Benzo(b)fluoranthene	4.50E+00	NA	NA	3.85E+00	Y	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	Y	NA	NA	NA	NA	3.66E+00
Benzo(ghi)perylene	1.50E+00	3.03E+03	N	NA	NA	1.82E+04	N	NA	NA	1.46E+03	N	NA	NA	2.32E+02	N	NA	NA	NA	NA	NA	NA	
Benzo(k)fluoranthene	1.50E+00	NA	NA	3.85E+01	N	NA	NA	5.81E+02	N	NA	NA	4.62E+02	N	NA	NA	8.51E+00	N	NA	NA	NA	NA	
Carbazole	1.10E-01	NA	NA	1.42E+02	N	NA	NA	2.12E+03	N	NA	NA	1.70E+03	N	NA	NA	3.11E+01	N	NA	NA	NA	NA	
Chrysene	3.60E+00	NA	NA	3.86E+02	N	NA	NA	5.90E+03	N	NA	NA	4.71E+03	N	NA	NA	8.61E+01	N	NA	NA	NA	NA	
Dibenz(a,h)anthracene	4.60E-01	NA	NA	3.86E-01	Y	NA	NA	5.90E+00	N	NA	NA	4.71E+00	N	NA	NA	8.61E-02	Y	NA	NA	NA	NA	3.88E-01
Fluoranthene	7.70E+00	4.05E+03	N	NA	NA	2.43E+04	N	NA	NA	1.94E+03	N	NA	NA	3.09E+02	N	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	1.80E+00	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	Y	NA	NA	NA	NA	1.54E+00
Phenanthrene	1.50E+00	3.03E+04	N	NA	NA	1.82E+05	N	NA	NA	1.46E+04	N	NA	NA	2.32E+03	N	NA	NA	NA	NA	NA	NA	
Pyrene	5.50E+00	3.05E+03	N	NA	NA	1.85E+04	N	NA	NA	1.48E+03	N	NA	NA	2.33E+02	N	NA	NA	NA	NA	NA	NA	
Volatile Organic Compounds																						
2-Butanone	1.50E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA	NA	NA	NA	NA	
Acetone	3.40E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA	NA	NA	NA	NA	
Chemical Agent Breakdown																						
Methylphosphonic Acid	6.00E-02	8.13E+03	N	NA	NA	4.94E+04	N	NA	NA	3.97E+03	N	NA	NA	6.21E+02	N	NA	NA	NA	NA	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 1 foot bgs.
[b] The 95% UCL or maximum concentration, whichever is lower, is selected as the source-term concentration for those chemicals identified as COPCs.

Table 6-16

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident				Source-Term Concentration [b] (mg/kg)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Semivolatile Organic Compounds																		
Benzo(a)anthracene	2.20E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	N	
Benzo(a)pyrene	1.90E-01	NA	NA	3.85E-01	N	NA	NA	5.81E+00	N	NA	NA	4.62E+00	N	NA	NA	8.51E-02	Y	1.76E-01
Benzo(b)fluoranthene	3.20E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	N	
Benzo(ghi)perylene	1.40E-01	3.03E+03	N	NA	NA	1.82E+04	N	NA	NA	1.46E+03	N	NA	NA	2.32E+02	N	NA	NA	
Benzo(k)fluoranthene	1.40E-01	NA	NA	3.85E+01	N	NA	NA	5.81E+02	N	NA	NA	4.62E+02	N	NA	NA	8.51E+00	N	
Bis(2-Ethylhexyl)phthalate	1.10E-01	2.04E+03	N	2.00E+02	N	1.24E+04	N	3.11E+03	N	1.00E+03	N	2.45E+03	N	1.56E+02	N	4.52E+01	N	
Chrysene	2.30E-01	NA	NA	3.86E+02	N	NA	NA	5.90E+03	N	NA	NA	4.71E+03	N	NA	NA	8.61E+01	N	
Fluoranthene	6.00E-01	4.05E+03	N	NA	NA	2.43E+04	N	NA	NA	1.94E+03	N	NA	NA	3.09E+02	N	NA	NA	
Indeno(1,2,3-cd)pyrene	1.60E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N	NA	NA	8.51E-01	N	
Phenanthrene	7.30E-02	3.03E+04	N	NA	NA	1.82E+05	N	NA	NA	1.46E+04	N	NA	NA	2.32E+03	N	NA	NA	
Pyrene	4.30E-01	3.05E+03	N	NA	NA	1.85E+04	N	NA	NA	1.48E+03	N	NA	NA	2.33E+02	N	NA	NA	
Volatile Organic Compounds																		
1,2,4-Trimethylbenzene	2.20E-03	3.20E+03	N	NA	NA	3.08E+04	N	NA	NA	1.58E+03	N	NA	NA	3.88E+02	N	NA	NA	
1,3,5-Trimethylbenzene	1.20E-03	3.20E+03	N	NA	NA	3.08E+04	N	NA	NA	1.58E+03	N	NA	NA	3.88E+02	N	NA	NA	
2-Butanone	1.40E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA	
4-Methyl-2-pentanone	5.80E-03	7.53E+03	N	NA	NA	4.94E+04	N	NA	NA	3.69E+03	N	NA	NA	6.21E+02	N	NA	NA	
Acetone	2.30E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA	
Naphthalene	4.30E-03	1.39E+03	N	NA	NA	1.24E+04	N	NA	NA	6.85E+02	N	NA	NA	1.55E+02	N	NA	NA	
Chemical Agent Breakdown																		
Methylphosphonic Acid	5.80E-02	8.13E+03	N	NA	NA	4.94E+04	N	NA	NA	3.97E+03	N	NA	NA	6.21E+02	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] Subsurface soil is defined as soil from 1 to 12 feet bgs.
[b] The 95% UCL or maximum concentration, whichever is lower, is selected as the source-term concentration for those chemicals identified as COPCs.

Table 6-17

Selection of Chemicals of Potential Concern for Total Soil
Future Land Use
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Groundskeeper COPC			Recreational Site-User COPC			Construction Worker COPC			On-site Resident COPC		
	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration
Semivolatile Organic Compounds												
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.64E+00	NA	2.64E+00
Benzo(a)pyrene	2.27E+00	NA	2.27E+00	NA	NA	NA	NA	NA	NA	2.27E+00	1.76E-01	2.27E+00
Benzo(b)fluoranthene	3.66E+00	NA	3.66E+00	NA	NA	NA	NA	NA	NA	3.66E+00	NA	3.66E+00
Dibenz(a,h)anthracene	3.88E-01	NA	3.88E-01	NA	NA	NA	NA	NA	NA	3.88E-01	NA	3.88E-01
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.54E+00	NA	1.54E+00

COPC = Chemical of potential concern.
NA = not applicable; the source-term concentration is presented only if the chemical is selected as a COPC.

Table 6-18

Cancer Risk and Noncancer Hazard Estimates Across All Media
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NA	NA	NE	NE	NE	NE	NE	NE
Venison Consumption	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	7.85E-06	NA	NA	NA	4.04E-05
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.69E-04**	**9.18E-01**	**6.33E-06**	**6.05E+00**	**1.09E-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 6-19

Cancer Risk and Noncancer Hazard Estimates for the Groundskeeper Exposed to Total Soil
Future Land Use
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/kg)	Total Noncancer Hazard / Cancer Risk Groundskeeper HI	ILCR
Semivolatile Organic Compounds			
Benzo(a)pyrene	2.27E+00	NA	5.89E-06
Benzo(b)fluoranthene	3.66E+00	NA	9.52E-07
Dibenz(a,h)anthracene	3.88E-01	NA	1.01E-06
Total HI / ILCR		**NA**	**7.85E-06**

COPC = Chemical of potential concern
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 6-20

Cancer Risk and Noncancer Hazard Estimates for the On-Site Resident Exposed to Total Soil
Future Land Use
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/kg)	Total Noncancer Hazard / Cancer Risk On-Site Resident HI	ILCR
Semivolatile Organic Compounds			
Benzo(a)anthracene	2.64E+00	NA	3.10E-06
Benzo(a)pyrene	2.27E+00	NA	2.66E-05
Benzo(b)fluoranthene	3.66E+00	NA	4.31E-06
Dibenz(a,h)anthracene	3.88E-01	NA	4.51E-06
Indeno(1,2,3-cd)pyrene	1.54E+00	NA	1.81E-06
Total HI / ILCR		**NA**	**4.04E-05**

COPC = Chemical of potential concern
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 6-21

Cancer Risk and Noncancer Hazard Estimates for the Groundskeeper Exposed to Groundwater Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(7) Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk Groundskeeper HI	ILCR
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.00E-01	NA	1.47E-04
1,1-Dichloroethene	6.50E-04	NA	1.45E-06
Acetone	5.40E+00	5.30E-01	NA
Carbon tetrachloride	2.20E-02	3.42E-01	1.11E-05
Trichloroethene	2.60E-02	4.55E-02	1.07E-06
Total HI / ILCR		**9.18E-01**	**1.61E-04**

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

Table 6-22

Cancer Risk and Noncancer Hazard Estimates for the Construction Worker Exposed to Groundwater Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) and 516(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	2.00E-01	NA	5.89E-06
Acetone	5.40E+00	5.30E-01	NA
Carbon tetrachloride	2.20E-02	3.42E-01	4.45E-07
Trichloroethene	2.60E-02	4.55E-02	NA
Total HI / ILCR		**9.18E-01**	**6.33E-06**

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

Table 6-23

Cancer Risk and Noncancer Hazard Estimates for On-Site Resident Exposed to Groundwater
Future Land Use
Training Area T-5 Sites, Parcels 180(7), 182(7), 511(7), 512(7), 513(7), 514(7) 516(7)
Fort McClellan, Alabama

COPC	Source-Term Concentration (mg/L)	Total Noncancer Hazard / Cancer Risk On-Site Resident HI	ILCR
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	2.00E-01	2.17E-01	9.81E-04
1,1,2-Trichloroethane	1.20E-03	NA	1.68E-06
1,1-Dichloroethene	6.50E-04	NA	6.95E-06
Acetone	5.40E+00	3.46E+00	NA
Carbon tetrachloride	2.20E-02	2.09E+00	5.39E-05
Tetrachloroethene	9.70E-04	NA	7.72E-07
Trichloroethene	2.60E-02	2.84E-01	5.77E-06
Total HI / ILCR		**6.05E+00**	**1.05E-03**

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

Table 6-24

Surface Soil Samples Used in Streamlined Risk Assessment
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-182-DEP01	TE0015	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP02	TE0014	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP03	TE0016	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP04	TE0017	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP05	TE0018	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP06	TE0024	16-Jan-03	0.25 - 0.75	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP08	TE0026	21-Jan-03	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP09	TE0027	21-Jan-03	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-DEP10	TE0028	16-Jan-03	0.25 - 0.75	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW01	TE0001	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW02	TE0009	26-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW03	TE0005	26-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW04	TE0007	8-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW05	TE0003	8-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW06	TE0011	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW08	TE0020	26-Nov-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW09	TE0022	4-Jun-03	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-25

Subsurface Soil Samples Used in Streamlined Risk Assessment
Training Area T-5, Parcel 182(7)
For McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-182-MW01	TE0002	6-Nov-01	3 - 4	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW05	TE0004	8-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW03	TE0006	26-Nov-01	4 - 5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW04	TE0008	8-Nov-01	7 - 8	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW02	TE0010	26-Nov-01	4 - 5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW06	TE0012	6-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW08	TE0021	26-Nov-02	8 - 9	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-182-MW09	TE0023	4-Jun-03	10 - 11	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-26

Selection of Site-Related Chemicals for Surface Soil [a]
Training Area T-5, Parcel 182(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	17 / 17	100	6.37E+03	2.16E+04	5.03E+00	7.34E+00	N	1.33E+04	1.50E+04	1.63E+04	N (c)
Arsenic	17 / 17	100	3.49E+00	1.37E+01	1.50E-01	2.19E-01	N	8.12E+00	9.35E+00	1.37E+01	N (a)
Barium	17 / 17	100	1.25E+01	2.04E+02	3.38E-01	4.93E-01	NP	8.61E+01	1.44E+02	1.24E+02	N (c)
Beryllium	12 / 16	75	3.84E-01	2.41E+00	3.36E-01	4.91E-01	L	8.26E-01	1.55E+00	8.00E-01	N (c)
Calcium	15 / 15	100	9.15E+01	3.61E+03	1.16E+01	1.69E+01	L	9.07E+02	2.07E+03	1.72E+03	N (d)
Chromium	17 / 17	100	1.21E+01	4.10E+01	8.09E-01	1.18E+00	NP	1.72E+01	2.52E+01	3.70E+01	N (c)
Cobalt	17 / 17	100	1.80E+00	2.01E+01	1.03E+00	1.50E+00	N	1.01E+01	1.23E+01	1.52E+01	N (c)
Copper	17 / 17	100	6.08E+00	1.99E+02	7.84E-01	1.14E+00	NP	2.84E+01	8.21E+01	1.27E+01	Y
Iron	17 / 17	100	8.90E+03	3.11E+04	1.00E+01	1.46E+01	L	1.73E+04	2.43E+04	3.42E+04	N (a)
Lead	17 / 17	100	8.83E+00	6.62E+01	2.00E-01	2.92E-01	L	2.16E+01	NA	4.01E+01	N (b)
Magnesium	17 / 17	100	2.54E+02	1.31E+03	1.57E+01	2.29E+01	N	7.53E+02	8.70E+02	1.03E+03	N (d)
Manganese	17 / 17	100	5.02E+01	5.04E+03	3.89E-01	5.68E-01	L	1.08E+03	2.65E+03	1.58E+03	N (b)
Mercury	6 / 17	35	3.10E-02	1.07E-01	2.74E-02	3.65E-02	NP	3.25E-02	6.47E-02	8.00E-02	N (b)
Nickel	13 / 13	100	5.39E+00	3.06E+01	5.50E-01	8.03E-01	L	1.36E+01	2.35E+01	1.03E+01	N (c)
Potassium	17 / 17	100	3.48E+02	1.40E+03	7.16E+01	1.04E+02	L	6.64E+02	9.60E+02	8.00E+02	N (d)
Selenium	1 / 14	7	8.59E-01	8.59E-01	4.68E-01	6.64E-01	NP	3.18E-01	5.07E-01	4.80E-01	N (c)
Silver	1 / 17	6	1.32E+00	1.32E+00	1.10E+00	1.60E+00	NP	6.92E-01	8.84E-01	3.60E-01	N (c)
Sodium	5 / 13	38	3.24E+01	4.86E+01	1.97E+01	2.55E+01	NP	2.24E+01	4.16E+01	6.34E+02	N (d)
Vanadium	17 / 17	100	1.67E+01	3.73E+01	7.86E-01	1.15E+00	N	2.57E+01	2.82E+01	5.88E+01	N (a)
Zinc	17 / 17	100	2.58E+01	1.17E+03	2.88E-01	4.20E-01	NP	1.12E+02	4.08E+02	4.06E+01	N (c)
Semivolatile Organic Compounds											
Bis(2-Ethylhexyl)phthalate	1 / 17	6	8.40E-02	8.40E-02	5.70E-02	2.50E-01	NP	4.03E-02	6.78E-02		Y
Volatile Organic Compounds											
2-Butanone	13 / 15	87	8.50E-03	9.70E-02	2.40E-03	2.00E-01	L	3.30E-02	6.78E-02		Y
Acetone	12 / 12	100	2.30E-02	8.80E-01	2.40E-03	1.80E-01	N	3.22E-01	4.43E-01		Y
p-Cymene	4 / 17	24	7.90E-03	3.10E-02	2.20E-04	1.80E-02	NP	4.68E-03	1.43E-02		Y
sec-Butylbenzene	1 / 17	6	1.30E-03	1.30E-03	2.60E-04	2.20E-02	NP	8.79E-04	3.72E-03		Y
Toluene	6 / 17	35	1.40E-03	1.40E-02	4.80E-04	4.00E-02	NP	3.33E-03	9.47E-03		Y
Trichlorofluoromethane	1 / 16	6	1.60E-03	1.60E-03	2.40E-04	2.00E-02	NP	8.69E-04	3.62E-03		Y

Table 6-26

Selection of Site-Related Chemicals for Surface Soil [a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

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 1 foot bgs.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-27

Selection of Site-Related Chemicals for Subsurface Soil [a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

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	8 / 8	100	5.93E+03	2.00E+04	5.51E+00	6.16E+00	L	1.21E+04	2.00E+04	1.36E+04	N (c)
Arsenic	8 / 8	100	3.18E+00	2.90E+01	1.64E-01	1.84E-01	L	1.46E+01	2.84E+01	1.83E+01	N (c)
Barium	8 / 8	100	1.96E+01	1.40E+03	3.70E-01	4.14E-01	L	2.39E+02	9.82E+02	2.34E+02	N (c)
Beryllium	4 / 7	57	3.73E-01	2.56E+00	3.68E-01	4.12E-01	L	7.34E-01	2.19E+00	8.60E-01	N (c)
Calcium	5 / 5	100	3.99E+01	1.28E+03	1.31E+01	1.42E+01	N	5.69E+02	1.05E+03	6.37E+02	N (d)
Chromium	8 / 8	100	7.73E+00	2.58E+01	8.86E-01	9.91E-01	N	1.61E+01	2.01E+01	3.83E+01	N (a)
Cobalt	8 / 8	100	1.76E+00	1.45E+02	1.13E+00	1.26E+00	L	3.00E+01	1.06E+02	1.75E+01	N (c)
Copper	8 / 8	100	6.92E+00	3.68E+01	8.59E-01	9.61E-01	L	1.82E+01	3.57E+01	1.94E+01	N (c)
Iron	8 / 8	100	9.31E+03	4.38E+04	1.10E+01	1.23E+01	L	2.33E+04	4.16E+04	4.48E+04	N (a)
Lead	8 / 8	100	8.13E+00	1.24E+02	2.19E-01	2.45E-01	L	3.77E+01	NA	3.85E+01	N (c)
Magnesium	8 / 8	100	3.74E+02	8.12E+02	1.72E+01	1.93E+01	L	5.49E+02	7.96E+02	7.66E+02	N (d)
Manganese	8 / 8	100	5.18E+01	9.29E+03	4.26E-01	4.77E-01	L	1.88E+03	6.77E+03	1.36E+03	N (c)
Mercury	1 / 8	13	7.90E-02	7.90E-02	2.74E-02	3.06E-02	NP	2.24E-02	5.86E-02	7.00E-02	N (c)
Nickel	7 / 7	100	6.71E+00	7.58E+01	6.02E-01	6.74E-01	L	2.06E+01	6.24E+01	1.29E+01	N (c)
Potassium	8 / 8	100	2.52E+02	1.57E+03	7.84E+01	8.77E+01	L	6.97E+02	1.36E+03	7.11E+02	N (d)
Selenium	1 / 6	17	1.16E+00	1.16E+00	5.18E-01	5.74E-01	NP	4.20E-01	1.08E+00	4.70E-01	N (c)
Silver	2 / 8	25	1.27E+00	1.29E+00	1.20E+00	1.34E+00	NP	7.99E-01	1.27E+00	2.40E-01	N (c)
Sodium	3 / 7	43	3.05E+01	4.31E+01	1.97E+01	2.17E+01	NP	2.20E+01	4.76E+01	7.02E+02	N (d)
Vanadium	8 / 8	100	1.63E+01	5.72E+01	8.61E-01	9.63E-01	L	3.06E+01	5.08E+01	6.49E+01	N (a)
Zinc	8 / 8	100	1.74E+01	2.03E+02	3.15E-01	3.53E-01	L	6.40E+01	1.67E+02	3.49E+01	N (c)
Semivolatile Organic Compounds											
Bis(2-Ethylhexyl)phthalate	1 / 8	13	1.10E-01	1.10E-01	5.60E-02	6.30E-02	NP	3.95E-02	8.46E-02		Y
Volatile Organic Compounds											
2-Butanone	1 / 4	25	5.50E-03	5.50E-03	2.40E-03	2.80E-03	NP	2.36E-03	7.04E-03		Y
Acetone	5 / 5	100	6.10E-03	3.80E-02	2.30E-03	2.80E-03	N	2.12E-02	3.30E-02		Y

Table 6-27

Selection of Site-Related Chemicals for Subsurface Soil [a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

mg/kg = milligrams 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 1 to 12 feet below ground surface.
[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution; distribution is not determined for data sets containing fewer than 5 samples.
[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.
UCL is not estimated for lead.
[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) = essential nutrient.

Table 6-28

Selection of Chemicals of Potential Concern for Surface Soil[a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident				Applicable SSSL (mg/kg) Venison Consumer			
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?
Metals																					
Copper	1.99E+02	4.08E+03	N	NA	NA	2.52E+04	N	NA	NA	2.04E+03	N	NA	NA	3.13E+02	N	NA	NA	3.00E+04	N	NA	NA
Semivolatile Organic Compounds																					
Bis(2-Ethylhexyl)phthalate	8.40E-02	2.04E+03	N	2.00E+02	N	1.24E+04	N	3.11E+03	N	1.00E+03	N	2.45E+03	N	1.56E+02	N	4.52E+01	N	NA	NA	NA	NA
Volatile Organic Compounds																					
2-Butanone	9.70E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA	NA	NA	NA	NA
Acetone	8.80E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA	NA	NA	NA	NA
p-Cymene	3.10E-02	2.03E+04	N	NA	NA	1.23E+05	N	NA	NA	9.93E+03	N	NA	NA	1.55E+03	N	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	1.30E-03	1.02E+03	N	NA	NA	6.17E+03	N	NA	NA	4.97E+02	N	NA	NA	7.77E+01	N	NA	NA	NA	NA	NA	NA
Toluene	1.40E-02	1.96E+04	N	NA	NA	1.24E+05	N	NA	NA	9.62E+03	N	NA	NA	1.55E+03	N	NA	NA	NA	NA	NA	NA
Trichlorofluoromethane	1.60E-03	2.96E+04	N	NA	NA	1.85E+05	N	NA	NA	1.44E+04	N	NA	NA	2.33E+03	N	NA	NA	n	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 1 foot bgs.

Table 6-29

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Semivolatile Organic Compounds																	
Bis(2-Ethylhexyl)phthalate	1.10E-01	2.04E+03	N	2.00E+02	N	1.24E+04	N	3.11E+03	N	1.00E+03	N	2.45E+03	N	1.56E+02	N	4.52E+01	N
Volatile Organic Compounds																	
2-Butanone	5.50E-03	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA
Acetone	3.80E-02	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	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] Subsurface soil is defined as soil from 1 to 12 feet bgs.

Table 6-30

Cancer Risk and Noncancer Hazard Estimates Across All Media
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NA	NA	NE	NE	NE	NE	NE	NE
Venison Consumption	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.61E-04**	**9.18E-01**	**6.33E-06**	**6.05E+00**	**1.05E-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 6-31

Surface Soil Samples Used in Streamlined Risk Assessment
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-511-DEP01	TP0007	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-DEP02	TP0008	7-Nov-01	0 - 0.5	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW01	TP0001	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW02	TP0003	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW03	TP0005	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW04	TP0009	29-Oct-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW06	TP0011	29-Oct-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW01	TPP0001	22-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW03	TPP0004	29-Oct-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-32

Subsurface Soil Samples Used in Streamlined Risk Assessment
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-511-MW01	TP0002	22-Oct-01	7 - 8	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW02	TP0004	22-Oct-01	3 - 4	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW03	TP0006	22-Oct-01	7 - 8	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW04	TP0010	29-Oct-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-511-MW06	TP0012	29-Oct-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW01	TPP0003	22-Oct-01	3 - 4	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-512-MW03	TPP0006	29-Oct-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-33

Selection of Site-Related Chemicals for Surface Soil [a]
Blacktop Training Area, Parcels 511(7) and 512(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	9 / 9	100	7.80E+03	2.66E+04	5.36E+00	6.21E+00	L	1.50E+04	2.36E+04	1.63E+04	N (c)
Arsenic	9 / 9	100	2.89E+00	1.14E+01	1.60E-01	1.85E-01	N	7.64E+00	9.24E+00	1.37E+01	N (a)
Barium	9 / 9	100	3.91E+01	1.06E+02	3.60E-01	4.17E-01	L	6.20E+01	9.07E+01	1.24E+02	N (a)
Beryllium	4 / 8	50	4.65E-01	7.18E-01	3.58E-01	3.93E-01	NP	3.65E-01	6.84E-01	8.00E-01	N (a)
Cadmium	3 / 9	33	1.16E+00	2.72E+00	4.67E-01	5.41E-01	NP	8.52E-01	2.32E+00	2.90E-01	Y
Calcium	9 / 9	100	5.16E+02	7.75E+03	1.24E+01	1.43E+01	NP	2.10E+03	6.07E+03	1.72E+03	N (d)
Chromium	9 / 9	100	1.48E+01	3.14E+01	8.62E-01	9.99E-01	N	2.21E+01	2.56E+01	3.70E+01	N (a)
Cobalt	9 / 9	100	3.17E+00	6.72E+00	1.10E+00	1.27E+00	L	4.46E+00	6.05E+00	1.52E+01	N (a)
Copper	9 / 9	100	8.37E+00	1.19E+02	8.36E-01	9.68E-01	NP	2.50E+01	7.88E+01	1.27E+01	Y
Iron	9 / 9	100	1.08E+04	2.96E+04	1.07E+01	1.23E+01	N	2.09E+04	2.45E+04	3.42E+04	N (a)
Lead	9 / 9	100	8.00E+00	3.19E+01	2.13E-01	2.47E-01	NP	1.57E+01	NA	4.01E+01	N (a)
Magnesium	9 / 9	100	2.81E+02	4.65E+03	1.67E+01	1.94E+01	L	1.56E+03	3.70E+03	1.03E+03	N (d)
Manganese	9 / 9	100	4.37E+01	5.79E+02	4.15E-01	4.80E-01	L	1.80E+02	4.20E+02	1.58E+03	N (a)
Mercury	1 / 8	13	3.92E-02	3.92E-02	2.67E-02	3.08E-02	NP	1.74E-02	3.13E-02	8.00E-02	N (a)
Nickel	9 / 9	100	5.43E+00	9.42E+00	5.86E-01	6.79E-01	L	7.02E+00	8.93E+00	1.03E+01	N (a)
Potassium	9 / 9	100	2.49E+02	2.09E+03	7.63E+01	8.83E+01	L	9.76E+02	1.79E+03	8.00E+02	N (d)
Selenium	3 / 8	38	6.72E-01	1.69E+00	4.99E-01	5.78E-01	NP	6.03E-01	1.46E+00	4.80E-01	N (c)
Sodium	1 / 3	33	2.25E+01	2.25E+01	2.04E+01	2.11E+01	L	1.44E+01	3.25E+01	6.34E+02	N (d)
Vanadium	9 / 9	100	1.94E+01	4.99E+01	8.38E-01	9.70E-01	L	3.25E+01	4.67E+01	5.88E+01	N (a)
Zinc	9 / 9	100	1.89E+01	1.26E+02	3.07E-01	3.56E-01	NP	4.10E+01	9.13E+01	4.06E+01	Y
Semivolatile Organic Compounds											
Acenaphthylene	1 / 9	11	1.30E-01	1.30E-01	8.00E-02	1.80E-01	NP	5.76E-02	1.04E-01	1.21E+00	N (a)
Anthracene	1 / 9	11	7.90E-02	7.90E-02	6.10E-02	1.30E-01	NP	4.14E-02	6.78E-02	2.10E+00	N (a)
Benzo(a)anthracene	2 / 9	22	1.80E-01	4.10E-01	5.00E-02	1.10E-01	NP	8.97E-02	2.84E-01	3.13E+00	N (a)
Benzo(a)pyrene	3 / 9	33	1.20E-01	5.70E-01	4.90E-02	1.10E-01	NP	1.21E-01	3.89E-01	3.16E+00	N (a)
Benzo(b)fluoranthene	4 / 9	44	7.90E-02	8.10E-01	6.90E-02	1.50E-01	L	1.77E-01	5.54E-01	3.90E+00	N (a)
Benzo(ghi)perylene	3 / 9	33	8.30E-02	3.50E-01	4.50E-02	9.80E-02	NP	8.03E-02	2.39E-01	1.64E+00	N (a)
Benzo(k)fluoranthene	2 / 9	22	8.70E-02	2.30E-01	5.30E-02	1.20E-01	NP	6.09E-02	1.60E-01	2.72E+00	N (a)
Bis(2-Ethylhexyl)phthalate	1 / 9	11	1.60E-01	1.60E-01	5.50E-02	1.20E-01	NP	4.39E-02	1.09E-01		Y
Chrysene	2 / 9	22	2.10E-01	4.00E-01	5.10E-02	1.10E-01	NP	9.20E-02	2.86E-01	3.33E+00	N (a)
Dibenz(a,h)anthracene	1 / 9	11	1.20E-01	1.20E-01	4.90E-02	1.10E-01	NP	3.99E-02	8.69E-02	9.90E-01	N (a)
Fluoranthene	4 / 9	44	7.90E-02	9.50E-01	5.80E-02	1.30E-01	NP	2.10E-01	6.82E-01	7.16E+00	N (a)
Indeno(1,2,3-cd)pyrene	3 / 9	33	8.70E-02	3.70E-01	5.00E-02	1.10E-01	NP	8.62E-02	2.54E-01	1.72E+00	N (a)
Phenanthrene	1 / 9	11	2.20E-01	2.20E-01	5.40E-02	1.20E-01	NP	5.38E-02	1.48E-01	5.46E+00	N (a)
Pyrene	4 / 9	44	7.30E-02	7.20E-01	5.60E-02	1.20E-01	NP	1.62E-01	5.12E-01	5.58E+00	N (a)

Table 6-33

Selection of Site-Related Chemicals for Surface Soil [a]
Blacktop Training Area, Parcels 511(7) and 512(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]
Volatile Organic Compounds											
2-Butanone	3 / 6	50	7.30E-03	3.80E-02	2.40E-03	3.10E-03	L	1.06E-02	3.67E-02		Y
Acetone	9 / 9	100	7.30E-03	3.30E-01	2.40E-03	3.40E-03	L	9.21E-02	2.52E-01		Y
Carbon disulfide	5 / 9	56	1.70E-03	2.60E-03	2.40E-04	3.50E-04	NP	1.22E-03	2.79E-03		Y
Naphthalene	1 / 9	11	6.40E-03	6.40E-03	2.80E-03	4.00E-03	NP	2.20E-03	4.56E-03		Y
p-Cymene	2 / 9	22	3.10E-03	7.30E-03	2.20E-04	3.10E-04	NP	1.26E-03	4.94E-03		Y
Toluene	2 / 9	22	2.80E-03	4.10E-03	4.70E-04	6.80E-04	NP	9.89E-04	3.12E-03		Y
Trichlorofluoromethane	1 / 9	11	2.60E-03	2.60E-03	2.30E-04	3.40E-04	NP	4.14E-04	1.64E-03		Y

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 1 foot bgs.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-34

Selection of Site-Related Chemicals for Subsurface Soil [a]
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

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	7 / 7	100	1.05E+04	3.15E+04	5.71E+00	6.37E+00	L	1.97E+04	3.25E+04	1.36E+04	N (c)
Arsenic	7 / 7	100	4.94E+00	1.63E+01	1.70E-01	1.90E-01	N	1.11E+01	1.39E+01	1.83E+01	N (a)
Barium	7 / 7	100	6.44E+01	1.39E+02	3.84E-01	4.28E-01	N	9.75E+01	1.18E+02	2.34E+02	N (a)
Beryllium	5 / 6	83	6.18E-01	2.39E+00	3.82E-01	4.26E-01	L	1.08E+00	2.58E+00	8.60E-01	N (c)
Calcium	7 / 7	100	3.88E+02	1.80E+03	1.32E+01	1.47E+01	L	9.11E+02	1.70E+03	6.37E+02	N (d)
Chromium	7 / 7	100	1.52E+01	3.69E+01	9.19E-01	1.03E+00	N	2.68E+01	3.25E+01	3.83E+01	N (a)
Cobalt	7 / 7	100	4.21E+00	2.56E+01	1.17E+00	1.30E+00	L	1.17E+01	2.32E+01	1.75E+01	N (c)
Copper	7 / 7	100	8.56E+00	2.00E+01	8.91E-01	9.94E-01	L	1.25E+01	1.89E+01	1.94E+01	N (c)
Iron	7 / 7	100	1.76E+04	5.39E+04	1.14E+01	1.27E+01	L	2.98E+04	4.99E+04	4.48E+04	N (c)
Lead	7 / 7	100	9.51E+00	1.97E+01	2.27E-01	2.53E-01	L	1.29E+01	NA	3.85E+01	N (a)
Magnesium	7 / 7	100	5.30E+02	2.07E+03	1.79E+01	1.99E+01	L	9.66E+02	1.88E+03	7.66E+02	N (d)
Manganese	7 / 7	100	5.29E+01	8.60E+02	4.42E-01	4.93E-01	L	4.15E+02	9.65E+02	1.36E+03	N (a)
Mercury	2 / 7	29	4.12E-02	4.87E-02	2.84E-02	3.17E-02	NP	2.34E-02	4.86E-02	7.00E-02	N (a)
Nickel	7 / 7	100	7.04E+00	3.69E+01	6.25E-01	6.97E-01	L	1.48E+01	3.23E+01	1.29E+01	N (c)
Potassium	7 / 7	100	6.51E+02	2.15E+03	8.13E+01	9.07E+01	L	1.13E+03	2.11E+03	7.11E+02	N (d)
Selenium	5 / 6	83	5.83E-01	2.43E+00	5.32E-01	5.93E-01	L	9.67E-01	2.36E+00	4.70E-01	N (c)
Sodium	2 / 3	67	2.09E+01	8.02E+01	2.06E+01	2.26E+01	NA	3.72E+01	1.34E+02	NA	N (d)
Vanadium	7 / 7	100	2.06E+01	5.62E+01	8.93E-01	9.96E-01	L	3.86E+01	6.20E+01	6.49E+01	N (a)
Zinc	7 / 7	100	2.17E+01	7.66E+01	3.27E-01	3.65E-01	L	3.93E+01	7.08E+01	3.49E+01	N (c)
Semivolatile Organic Compounds											
Benzo(a)pyrene	3 / 7	43	6.10E-02	2.20E-01	5.20E-02	5.90E-02	NP	7.99E-02	2.17E-01	3.16E+00	N (a)
Benzo(b)fluoranthene	1 / 7	14	8.90E-02	8.90E-02	7.40E-02	8.20E-02	NP	4.56E-02	7.81E-02	3.90E+00	N (a)
Fluoranthene	1 / 7	14	8.60E-02	8.60E-02	6.20E-02	6.90E-02	NP	3.99E-02	7.44E-02	7.16E+00	N (a)
Pyrene	1 / 7	14	8.10E-02	8.10E-02	6.00E-02	6.60E-02	NP	3.81E-02	7.02E-02	5.58E+00	N (a)
Volatile Organic Compounds											
2-Butanone	1 / 4	25	6.00E-03	6.00E-03	2.60E-03	2.90E-03	NA	2.51E-03	NA		Y
Acetone	6 / 6	100	1.10E-02	4.50E-02	2.60E-03	3.10E-03	L	2.43E-02	5.02E-02		Y
Cis-1,2-Dichloroethene	1 / 7	14	1.40E-03	1.40E-03	2.40E-04	3.50E-04	NP	3.17E-04	1.12E-03		Y
Trichloroethene	1 / 7	14	1.70E-03	1.70E-03	3.00E-04	4.40E-04	NP	3.89E-04	1.37E-03		Y

Table 6-34

Selection of Site-Related Chemicals for Subsurface Soil [a]
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

mg/kg = milligrams 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 3 to 12 feet below ground surface.

[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution; distribution is not determined for data sets containing fewer than 5 samples.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-35

Selection of Chemicals of Potential Concern for Surface Soil[a]
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Metals																	
Cadmium	2.72E+00	6.55E+01	N	2.27E+01	N	3.43E+02	N	NA	NA	2.13E+01	N	2.84E+02	N	6.25E+00	N	NA	NA
Copper	1.19E+02	4.08E+03	N	NA	NA	2.52E+04	N	NA	NA	2.04E+03	N	NA	NA	3.13E+02	N	NA	NA
Zinc	1.26E+02	3.06E+04	N	NA	NA	1.88E+05	N	NA	NA	1.52E+04	N	NA	NA	2.34E+03	N	NA	NA
Semivolatile Organic Compounds																	
Bis(2-Ethylhexyl)phthalate	1.60E-01	2.04E+03	N	2.00E+02	N	1.24E+04	N	3.11E+03	N	1.00E+03	N	2.45E+03	N	1.56E+02	N	4.52E+01	N
Volatile Organic Compounds																	
2-Butanone	3.80E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA
Acetone	3.30E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Carbon disulfide	2.60E-03	1.01E+04	N	NA	NA	6.17E+04	N	NA	NA	4.92E+03	N	NA	NA	7.77E+02	N	NA	NA
Naphthalene	6.40E-03	1.39E+03	N	NA	NA	1.24E+04	N	NA	NA	6.85E+02	N	NA	NA	1.55E+02	N	NA	NA
p-Cymene	7.30E-03	2.03E+04	N	NA	NA	1.23E+05	N	NA	NA	9.93E+03	N	NA	NA	1.55E+03	N	NA	NA
Toluene	4.10E-03	1.96E+04	N	NA	NA	1.24E+05	N	NA	NA	9.62E+03	N	NA	NA	1.55E+03	N	NA	NA
Trichlorofluoromethane	2.60E-03	2.96E+04	N	NA	NA	1.85E+05	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 1 foot bgs.

Table 6-36

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Volatile Organic Compounds																	
2-Butanone	6.00E-03	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA
Acetone	4.50E-02	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Cis-1,2-Dichloroethene	1.40E-03	1.02E+03	N	NA	NA	6.19E+03	N	NA	NA	4.98E+02	N	NA	NA	7.77E+01	N	NA	NA
Trichloroethene	1.70E-03	6.10E+02	N	2.56E+02	N	3.70E+03	N	3.93E+03	N	2.98E+02	N	3.13E+03	N	4.66E+01	N	5.72E+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 1 to 12 feet bgs.

Table 6-37

Cancer Risk and Noncancer Hazard Estimates Across All Media
Blacktop Training Area, Parcels 511(7) and 512(7)
Fort McClellan, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	NA	NA	NA	NA
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.61E-04**	**9.18E-01**	**6.33E-06**	**6.05E+00**	**1.05E-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 6-38

Surface Soil Samples Used in Streamlined Risk Assessment
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-513-DEP01	TR0005	8-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW01	TR0001	24-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW02	TR0003	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-39

Subsurface Soil Samples Used in Streamlined Risk Assessment
Dog Training Area, Parcel 513(7)
For McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-513-MW01	TR0002	24-Oct-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-513-MW02	TR0004	6-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-40

Selection of Site-Related Chemicals for Surface Soil [a]
Dog Training Area, Parcel 513(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	Arithmetic Mean (mg/kg)	Background Screening Criterion [b] (mg/kg)	Site-Related?[c]
Metals									
Aluminum	3 / 3	100	3.97E+03	1.31E+04	5.21E+00	5.88E+00	8.98E+03	1.63E+04	N (a)
Arsenic	3 / 3	100	6.24E+00	2.59E+01	1.55E-01	1.75E-01	1.34E+01	1.37E+01	N (c)
Barium	3 / 3	100	2.71E+01	8.86E+01	3.50E-01	3.95E-01	5.63E+01	1.24E+02	N (a)
Beryllium	2 / 2	100	4.01E-01	6.60E-01	3.48E-01	3.93E-01	5.31E-01	8.00E-01	N (a)
Cadmium	1 / 3	33	1.77E+00	1.77E+00	4.54E-01	5.12E-01	7.58E-01	2.90E-01	Y
Calcium	3 / 3	100	1.60E+02	2.08E+03	1.20E+01	1.36E+01	8.71E+02	1.72E+03	N (d)
Chromium	3 / 3	100	1.48E+01	1.83E+01	8.38E-01	9.46E-01	1.66E+01	3.70E+01	N (a)
Cobalt	3 / 3	100	4.75E+00	7.01E+00	1.07E+00	1.20E+00	6.12E+00	1.52E+01	N (a)
Copper	3 / 3	100	7.65E+00	1.76E+01	8.12E-01	9.17E-01	1.31E+01	1.27E+01	N (c)
Iron	3 / 3	100	1.61E+04	1.89E+04	1.04E+01	1.17E+01	1.75E+04	3.42E+04	N (a)
Lead	3 / 3	100	9.84E+00	1.33E+01	2.07E-01	2.34E-01	1.14E+01	4.01E+01	N (a)
Magnesium	3 / 3	100	1.19E+02	8.30E+02	1.63E+01	1.84E+01	4.61E+02	1.03E+03	N (d)
Manganese	3 / 3	100	2.01E+02	4.34E+02	4.03E-01	4.55E-01	2.90E+02	1.58E+03	N (a)
Nickel	3 / 3	100	3.60E+00	7.67E+00	5.70E-01	6.43E-01	5.85E+00	1.03E+01	N (a)
Potassium	3 / 3	100	2.03E+02	7.77E+02	7.42E+01	8.37E+01	4.78E+02	8.00E+02	N (d)
Selenium	1 / 3	33	7.74E-01	7.74E-01	4.85E-01	5.47E-01	4.27E-01	4.80E-01	N (c)
Sodium	2 / 2	100	3.89E+01	5.28E+01	2.03E+01	2.10E+01	4.59E+01	6.34E+02	N (d)
Vanadium	3 / 3	100	2.01E+01	3.31E+01	8.15E-01	9.19E-01	2.69E+01	5.88E+01	N (a)
Zinc	3 / 3	100	2.24E+01	3.63E+01	2.98E-01	3.37E-01	2.96E+01	4.06E+01	N (a)
Semivolatile Organic Compounds									
Benzo(a)anthracene	1 / 3	33	9.80E-02	9.80E-02	4.80E-02	5.50E-02	4.95E-02		Y
Benzo(a)pyrene	1 / 3	33	1.10E-01	1.10E-01	4.80E-02	5.40E-02	5.33E-02		Y
Benzo(b)fluoranthene	1 / 3	33	1.70E-01	1.70E-01	6.70E-02	7.60E-02	8.00E-02		Y
Benzo(ghi)perylene	1 / 3	33	7.80E-02	7.80E-02	4.30E-02	4.90E-02	4.10E-02		Y
Benzo(k)fluoranthene	1 / 3	33	6.20E-02	6.20E-02	5.10E-02	5.80E-02	3.85E-02		Y
Chrysene	1 / 3	33	1.10E-01	1.10E-01	4.90E-02	5.50E-02	5.38E-02		Y
Fluoranthene	1 / 3	33	2.60E-01	2.60E-01	5.60E-02	6.40E-02	1.06E-01		Y
Indeno(1,2,3-cd)pyrene	1 / 3	33	8.80E-02	8.80E-02	4.80E-02	5.40E-02	4.62E-02		Y
Phenanthrene	1 / 3	33	1.20E-01	1.20E-01	5.30E-02	5.90E-02	5.83E-02		Y
Pyrene	1 / 3	33	1.90E-01	1.90E-01	5.40E-02	6.10E-02	8.22E-02		Y

Table 6-40

Selection of Site-Related Chemicals for Surface Soil [a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

(Page 2 of 2)

Chemical	Detection Frequency	Percent hits	Range of values (mg/kg) Detected Concentration Minimum	Detected Concentration Maximum	Method Detection Limit Minimum	Method Detection Limit Maximum	Arithmetic Mean (mg/kg)	Background Screening Criterion [b] (mg/kg)	Site-Related?[c]
Volatile Organic Compounds									
2-Butanone	1 / 2	50	2.70E-02	2.70E-02	2.60E-03	3.40E-03	1.42E-02		Y
Acetone	3 / 3	100	3.30E-02	2.40E-01	2.30E-03	3.40E-03	1.18E-01		Y
Chloromethane	1 / 3	33	3.70E-03	3.70E-03	2.10E-03	3.10E-03	1.98E-03		Y

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 1 foot bgs.

[b] 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).

[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) = essential nutrient.

Table 6-41

Selection of Site-Related Chemicals for Subsurface Soil [a]
Dog Training Area, Parcel 513(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	Arithmetic Mean (mg/kg)	Background Screening Criterion [b] (mg/kg)	Site-Related?[c]
Metals									
Aluminum	2 / 2	100	1.60E+04	3.43E+04	5.97E+00	6.14E+00	2.52E+04	1.36E+04	N (c)
Arsenic	2 / 2	100	1.39E+01	1.53E+01	1.78E-01	1.83E-01	1.46E+01	1.83E+01	N (a)
Barium	2 / 2	100	1.26E+02	1.31E+02	4.01E-01	4.13E-01	1.29E+02	2.34E+02	N (a)
Beryllium	2 / 2	100	1.34E+00	1.68E+00	3.99E-01	4.10E-01	1.51E+00	8.60E-01	N (c)
Calcium	2 / 2	100	9.69E+02	1.82E+03	1.38E+01	1.42E+01	1.39E+03	6.37E+02	N (d)
Chromium	2 / 2	100	3.00E+01	3.86E+01	9.61E-01	9.88E-01	3.43E+01	3.83E+01	N (c)
Cobalt	2 / 2	100	1.08E+01	2.23E+01	1.22E+00	1.26E+00	1.66E+01	1.75E+01	N (c)
Copper	2 / 2	100	1.96E+01	2.36E+01	9.31E-01	9.57E-01	2.16E+01	1.94E+01	N (c)
Iron	2 / 2	100	4.02E+04	4.19E+04	1.19E+01	1.22E+01	4.11E+04	4.48E+04	N (a)
Lead	2 / 2	100	1.05E+01	1.56E+01	2.38E-01	2.44E-01	1.31E+01	3.85E+01	N (a)
Magnesium	2 / 2	100	5.77E+02	1.51E+03	1.87E+01	1.92E+01	1.04E+03	7.66E+02	N (d)
Manganese	2 / 2	100	1.06E+02	5.86E+02	4.62E-01	4.75E-01	3.46E+02	1.36E+03	N (a)
Mercury	1 / 2	50	6.07E-02	6.07E-02	2.97E-02	3.05E-02	3.78E-02	7.00E-02	N (a)
Nickel	2 / 2	100	2.16E+01	2.93E+01	6.53E-01	6.72E-01	2.55E+01	1.29E+01	N (c)
Potassium	2 / 2	100	6.82E+02	1.57E+03	8.50E+01	8.74E+01	1.13E+03	7.11E+02	N (d)
Selenium	1 / 2	50	1.06E+00	1.06E+00	5.56E-01	5.71E-01	6.69E-01	4.70E-01	N (c)
Sodium	1 / 2	50	6.08E+01	6.08E+01	2.14E+01	2.20E+01	3.58E+01	7.02E+02	N (d)
Vanadium	2 / 2	100	4.67E+01	4.84E+01	9.33E-01	9.60E-01	4.76E+01	6.49E+01	N (a)
Zinc	2 / 2	100	5.30E+01	6.02E+01	3.42E-01	3.52E-01	5.66E+01	3.49E+01	N (c)
Volatile Organic Compounds									
Acetone	2 / 2	100	4.90E-03	1.30E-02	2.40E-03	2.90E-03	8.95E-03		Y

mg/kg = milligrams 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 1 to 12 feet bgs.

[b] 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).

[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) = essential nutrient.

Table 6-42

Selection of Chemicals of Potential Concern for Surface Soil[a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker			
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?
Metals													
Cadmium	1.77E+00	6.55E+01	N	2.27E+01	N	3.43E+02	N	NA	NA	2.13E+01	N	2.84E+02	N
Semivolatile Organic Compounds													
Benzo(a)anthracene	9.80E-02	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Benzo(a)pyrene	1.10E-01	NA	NA	3.85E-01	N	NA	NA	5.81E+00	N	NA	NA	4.62E+00	N
Benzo(b)fluoranthene	1.70E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Benzo(ghi)perylene	7.80E-02	3.03E+03	N	NA	NA	1.82E+04	N	NA	NA	1.46E+03	N	NA	NA
Benzo(k)fluoranthene	6.20E-02	NA	NA	3.85E+01	N	NA	NA	5.81E+02	N	NA	NA	4.62E+02	N
Chrysene	1.10E-01	NA	NA	3.86E+02	N	NA	NA	5.90E+03	N	NA	NA	4.71E+03	N
Fluoranthene	2.60E-01	4.05E+03	N	NA	NA	2.43E+04	N	NA	NA	1.94E+03	N	NA	NA
Indeno(1,2,3-cd)pyrene	8.80E-02	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Phenanthrene	1.20E-01	3.03E+04	N	NA	NA	1.82E+05	N	NA	NA	1.46E+04	N	NA	NA
Pyrene	1.90E-01	3.05E+03	N	NA	NA	1.85E+04	N	NA	NA	1.48E+03	N	NA	NA
Volatile Organic Compounds													
2-Butanone	2.70E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA
Acetone	2.40E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA
Chloromethane	3.70E-03	4.06E+02	N	2.17E+02	N	2.47E+03	N	3.33E+03	N	1.99E+02	N	2.66E+03	N

Table 6-42

Selection of Chemicals of Potential Concern for Surface Soil[a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) On-Site Resident				Applicable SSSL (mg/kg) Venison Consumer				Source-Term Concentration [b] (mg/kg)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Metals										
Cadmium	1.77E+00	6.25E+00	N	NA	NA	9.91E+03	N	NA	NA	
Semivolatile Organic Compounds										
Benzo(a)anthracene	9.80E-02	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Benzo(a)pyrene	1.10E-01	NA	NA	8.51E-02	Y	NA	NA	NA	NA	1.10E-01
Benzo(b)fluoranthene	1.70E-01	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Benzo(ghi)perylene	7.80E-02	2.32E+02	N	NA	NA	NA	NA	NA	NA	
Benzo(k)fluoranthene	6.20E-02	NA	NA	8.51E+00	N	NA	NA	NA	NA	
Chrysene	1.10E-01	NA	NA	8.61E+01	N	NA	NA	NA	NA	
Fluoranthene	2.60E-01	3.09E+02	N	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	8.80E-02	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Phenanthrene	1.20E-01	2.32E+03	N	NA	NA	NA	NA	NA	NA	
Pyrene	1.90E-01	2.33E+02	N	NA	NA	NA	NA	NA	NA	
Volatile Organic Compounds										
2-Butanone	2.70E-02	4.66E+03	N	NA	NA	NA	NA	NA	NA	
Acetone	2.40E-01	7.76E+02	N	NA	NA	NA	NA	NA	NA	
Chloromethane	3.70E-03	3.11E+01	N	4.85E+01	N	NA	NA	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 1 foot bgs.
[b] The maximum concentration is selected as the source-term concentration for those chemicals selected as COPCs.

Table 6-43

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Volatile Organic Compounds																	
Acetone	1.30E-02	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	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] Subsurface soil is defined as soil from 1 to 12 feet bgs.

Table 6-44

Selection of Chemicals of Potential Concern for Total Soil
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Groundskeeper COPC			Recreational Site-User COPC			Construction Worker COPC			On-site Resident COPC		
	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration
Semivolatile Organic Compounds												
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.10E-01	NA	1.10E-01

COPC = Chemical of potential concern.
NA = not applicable; the source-term concentration is presented only if the chemical is selected as a COPC.

Table 6-45

Cancer Risk and Noncancer Hazard Estimates Across All Media
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NA	NA	NE	NE	NE	NE	NE	NE
Venison Consumption	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	NA	NA	NA	1.29E-06
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.61E-04**	**9.18E-01**	**6.33E-06**	**6.05E+00**	**1.05E-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 6-46

Cancer Risk and Noncancer Hazard Estimates for the On-Site Resident Exposed to Total Soil
Future Site Use
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/kg)	Total Noncancer Hazard / Cancer Risk On-Site Resident HI	ILCR
Semivolatile Organic Compounds			
Benzo(a)pyrene	1.10E-01	NA	1.29E-06
Total HI / ILCR		**NA**	**1.29E-06**

COPC = Chemical of potential concern
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 6-47

Surface Soil Samples Used in Streamlined Risk Assessment
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-182-DEP07	TE0025	20-Jan-03	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW01	TRR0001	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW02	TRR0003	24-Oct-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-48

Subsurface Soil Samples Used in Streamlined Risk Assessment
Dog Kennel Area, Parcel 516(7)
For McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-516-MW01	TRR0002	6-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-516-MW02	TRR0006	24-Oct-01	10 - 11	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-49

Selection of Site-Related Chemicals for Surface Soil [a]
Dog Kennel Area, Parcel 516(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	Arithmetic Mean (mg/kg)	Background Screening Criterion [b] (mg/kg)	Site-Related? [c]
Metals									
Aluminum	3 / 3	100	9.49E+03	1.12E+04	5.64E+00	9.77E+00	1.04E+04	1.63E+04	N (a)
Arsenic	3 / 3	100	2.76E+00	9.55E+00	1.68E-01	2.91E-01	5.02E+00	1.37E+01	N (a)
Barium	3 / 3	100	5.32E+01	3.74E+02	3.79E-01	6.56E-01	1.61E+02	1.24E+02	Y
Beryllium	2 / 3	67	4.16E-01	8.32E-01	3.77E-01	6.52E-01	5.25E-01	8.00E-01	N (c)
Calcium	3 / 3	100	5.74E+02	2.19E+03	1.30E+01	2.25E+01	1.12E+03	1.72E+03	N (d)
Chromium	3 / 3	100	9.59E+00	2.15E+01	9.07E-01	1.57E+00	1.74E+01	3.70E+01	N (a)
Cobalt	2 / 3	67	2.45E+00	1.45E+01	1.15E+00	2.00E+00	5.98E+00	1.52E+01	N (a)
Copper	3 / 3	100	7.12E+00	8.75E+00	8.79E-01	1.52E+00	8.01E+00	1.27E+01	N (a)
Iron	3 / 3	100	1.02E+04	2.16E+04	1.12E+01	1.94E+01	1.60E+04	3.42E+04	N (a)
Lead	3 / 3	100	8.57E+00	1.68E+01	2.24E-01	3.88E-01	1.21E+01	4.01E+01	N (a)
Magnesium	3 / 3	100	4.51E+02	9.14E+02	1.76E+01	3.05E+01	6.22E+02	1.03E+03	N (d)
Manganese	3 / 3	100	4.55E+01	5.49E+02	4.36E-01	7.55E-01	2.17E+02	1.58E+03	N (a)
Nickel	3 / 3	100	5.14E+00	6.63E+00	6.17E-01	1.07E+00	5.65E+00	1.03E+01	N (a)
Potassium	3 / 3	100	3.41E+02	1.22E+03	8.02E+01	1.39E+02	6.75E+02	8.00E+02	N (d)
Selenium	1 / 3	33	9.65E-01	9.65E-01	5.25E-01	9.09E-01	5.61E-01	4.80E-01	N (c)
Sodium	1 / 3	33	3.75E+01	3.75E+01	2.02E+01	3.49E+01	2.17E+01	6.34E+02	N (d)
Vanadium	3 / 3	100	1.61E+01	3.00E+01	8.81E-01	1.53E+00	2.42E+01	5.88E+01	N (a)
Zinc	3 / 3	100	2.00E+01	6.50E+01	3.23E-01	5.59E-01	4.26E+01	4.06E+01	N (c)
Volatile Organic Compounds									
2-Butanone	1 / 3	33	1.10E-02	1.10E-02	2.50E-03	5.30E-03	4.98E-03		Y
Acetone	2 / 2	100	1.90E-02	2.10E-01	2.50E-03	2.50E-03	1.15E-01		Y
Trichloroethene	1 / 3	33	2.10E-03	2.10E-03	2.90E-04	6.10E-04	7.97E-04		Y
Trichlorofluoromethane	1 / 3	33	3.80E-03	3.80E-03	2.50E-04	5.20E-04	1.40E-03		Y

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 1 foot bgs.

[b] 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).

[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) = essential nutrient.

Table 6-50

Selection of Site-Related Chemicals for Subsurface Soil [a]
Dog Kennel Area, Parcel 516(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	Arithmetic Mean (mg/kg)	Background Screening Criterion [b] (mg/kg)	Site-Related?[c]
Metals									
Aluminum	2 / 2	100	1.96E+04	2.15E+04	5.85E+00	5.95E+00	2.06E+04	1.36E+04	N (c)
Arsenic	2 / 2	100	9.44E+00	1.41E+01	1.74E-01	1.78E-01	1.18E+01	1.83E+01	N (a)
Barium	2 / 2	100	3.82E+01	5.71E+01	3.93E-01	4.00E-01	4.77E+01	2.34E+02	N (a)
Beryllium	2 / 2	100	5.03E-01	8.37E-01	3.91E-01	3.98E-01	6.70E-01	8.60E-01	N (a)
Calcium	2 / 2	100	3.88E+02	7.12E+02	1.35E+01	1.37E+01	5.50E+02	6.37E+02	N (d)
Chromium	2 / 2	100	1.73E+01	2.75E+01	9.41E-01	9.57E-01	2.24E+01	3.83E+01	N (a)
Cobalt	2 / 2	100	1.30E+01	2.12E+01	1.20E+00	1.22E+00	1.71E+01	1.75E+01	N (c)
Copper	2 / 2	100	1.27E+01	1.66E+01	9.12E-01	9.28E-01	1.47E+01	1.94E+01	N (a)
Iron	2 / 2	100	2.21E+04	3.32E+04	1.16E+01	1.18E+01	2.77E+04	4.48E+04	N (a)
Lead	2 / 2	100	1.38E+01	1.53E+01	2.33E-01	2.37E-01	1.46E+01	3.85E+01	N (a)
Magnesium	2 / 2	100	6.98E+02	7.12E+02	1.83E+01	1.86E+01	7.05E+02	7.66E+02	N (d)
Manganese	2 / 2	100	3.80E+02	5.24E+02	4.52E-01	4.60E-01	4.52E+02	1.36E+03	N (a)
Mercury	1 / 2	50	3.00E-02	3.00E-02	2.91E-02	2.96E-02	2.24E-02	7.00E-02	N (a)
Nickel	2 / 2	100	1.18E+01	1.53E+01	6.40E-01	6.51E-01	1.36E+01	1.29E+01	N (c)
Potassium	2 / 2	100	4.41E+02	6.01E+02	8.32E+01	8.47E+01	5.21E+02	7.11E+02	N (d)
Selenium	1 / 2	50	9.97E-01	9.97E-01	5.44E-01	5.54E-01	6.35E-01	4.70E-01	N (c)
Sodium	1 / 2	50	3.80E+01	3.80E+01	2.09E+01	2.13E+01	2.43E+01	7.02E+02	N (d)
Vanadium	2 / 2	100	3.81E+01	4.31E+01	9.14E-01	9.30E-01	4.06E+01	6.49E+01	N (a)
Zinc	2 / 2	100	3.11E+01	4.05E+01	3.35E-01	3.41E-01	3.58E+01	3.49E+01	N (c)
Volatile Organic Compounds									
Acetone	2 / 2	100	1.10E-02	3.60E-02	2.60E-03	2.60E-03	2.35E-02		Y
Trichlorofluoromethane	1 / 2	50	2.60E-03	2.60E-03	2.50E-04	2.50E-04	1.36E-03		Y

mg/kg = milligrams 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 10 to 12 feet below ground surface.

[b] 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).

[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) = essential nutrient.

Table 6-51

Selection of Chemicals of Potential Concern for Surface Soil[a]
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker				Applicable SSSL (mg/kg) On-Site Resident				Source-Term Concentration[b] (mg/kg)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Metals																		
Barium	3.74E+02	6.50E+02	N	NA	NA	4.41E+04	N	NA	NA	3.25E+02	Y	NA	NA	5.47E+02	N	NA	NA	3.74E+02
VOCs																		
2-Butanone	1.10E-02	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA	4.66E+03	N	NA	NA	
Acetone	2.10E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA	
Trichloroethene	2.10E-03	6.10E+02	N	2.56E+02	N	3.70E+03	N	3.93E+03	N	2.98E+02	N	3.13E+03	N	4.66E+01	N	5.72E+01	N	
Trichlorofluoromethane	3.80E-03	2.96E+04	N	NA	NA	1.85E+05	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.
VOC = Volatile organic compound.
[a] Surface soil is defined as soil from 0 to 1 foot bgs.
[b] The maximum concentration is selected as the source-term concentration.

Table 6-52

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Volatile Organic Compounds																	
Acetone	3.60E-02	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Trichlorofluoromethane	2.60E-03	2.96E+04	N	NA	NA	1.85E+05	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] Subsurface soil is defined as soil from 1 to 12 feet bgs.

Table 6-53

Selection of Chemicals of Potential Concern for Total Soil
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Groundskeeper COPC			Recreational Site-User COPC			Construction Worker COPC			On-site Resident COPC		
	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration
Metals												
Barium	NA	NA	NA	NA	NA	NA	3.74E+02	NA	3.74E+02	NA	NA	NA

COPC = Chemical of potential concern.
NA = not applicable; the source-term concentration is presented only if the chemical is selected as a COPC.

Table 6-54

Cancer Risk and Noncancer Hazard Estimates Across All Media
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NE	NE	NA	NA	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	1.15E-01	NA	NA	NA
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NE**	**NE**	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.61E-04**	**1.03E+00**	**6.33E-06**	**6.05E+00**	**1.05E-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 6-55

Cancer Risk and Noncancer Hazard Estimates for the Construction Worker Exposed to Total Soil
Future Land Use
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/kg)	Total Noncancer Hazard / Cancer Risk Construction Worker HI	ILCR
Metals			
Barium	3.74E+02	1.15E-01	NA
Total HI / ILCR		**1.15E-01**	**NA**

COPC = Chemical of potential concern
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 6-56

Surface Soil Samples Used in Streamlined Risk Assessment
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-514-DEP01	TT0016	27-Jan-03	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-DEP02	TT0017	27-Jan-03	0 - 0.3	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW01	TT0001	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW02	TT0003	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW03	TT0005	6-Nov-01	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW05	TT0008	26-Nov-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW07	TT0010	29-Oct-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW09	TT0012	29-Oct-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW11	TT0014	26-Nov-02	0 - 1	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = foot
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-57

Subsurface Soil Samples Used in Streamlined Risk Assessment
Old Burn Pit, Parcel 514(7)
For McClellan, Calhoun County, Alabama

Sample Location	Sample Number	Sample Date	Sample Depth (ft)	Chemical Analysis Performed
CWM-514-MW01	TT0002	6-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW02	TT0004	6-Nov-01	9 - 10	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW03	TT0006	6-Nov-01	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW05	TT0009	26-Nov-02	8 - 10	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW07	TT0011	29-Oct-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW09	TT0013	29-Oct-02	10 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs
CWM-514-MW11	TT0015	26-Nov-02	11 - 12	CA Breakdown, Metals, Orthosulfur, SVOCs, VOCs

ft = feet
CA Breakdown = Chemical Agent Breakdown
SVOCs = Semivolatile organic compounds
VOCs = Volatile organic compounds

Table 6-58

Selection of Site-Related Chemicals for Surface Soil [a]
Old Burn Pit, Parcel 514(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	9 / 9	100	1.10E+04	2.84E+04	5.41E+00	8.33E+00	L	1.78E+04	2.53E+04	1.63E+04	N (c)
Arsenic	9 / 9	100	4.86E+00	1.18E+01	1.61E-01	2.48E-01	L	7.85E+00	1.18E+01	1.37E+01	N (a)
Barium	9 / 9	100	4.74E+01	9.91E+01	3.64E-01	5.60E-01	L	6.43E+01	8.93E+01	1.24E+02	N (a)
Beryllium	5 / 6	83	4.93E-01	8.24E-01	3.88E-01	5.56E-01	N	5.85E-01	7.76E-01	8.00E-01	N (c)
Calcium	9 / 9	100	2.27E+02	1.13E+04	1.25E+01	1.92E+01	NP	1.86E+03	7.27E+03	1.72E+03	N (d)
Chromium	9 / 9	100	1.50E+01	2.87E+01	8.71E-01	1.34E+00	L	2.19E+01	2.90E+01	3.70E+01	N (a)
Cobalt	9 / 9	100	1.72E+00	1.35E+01	1.11E+00	1.70E+00	N	7.14E+00	9.40E+00	1.52E+01	N (a)
Copper	9 / 9	100	8.50E+00	5.15E+01	8.44E-01	1.30E+00	L	2.26E+01	4.44E+01	1.27E+01	N (c)
Iron	9 / 9	100	1.53E+04	5.43E+04	1.08E+01	1.66E+01	N	3.12E+04	3.96E+04	3.42E+04	N (c)
Lead	9 / 9	100	9.42E+00	5.15E+01	2.15E-01	3.31E-01	L	2.08E+01	NA	4.01E+01	N (b)
Magnesium	9 / 9	100	5.03E+02	3.80E+03	1.69E+01	2.60E+01	NP	1.04E+03	2.60E+03	1.03E+03	N (d)
Manganese	9 / 9	100	6.27E+01	5.70E+02	4.19E-01	6.44E-01	L	2.48E+02	5.23E+02	1.58E+03	N (a)
Mercury	4 / 7	57	3.70E-02	5.50E-02	2.69E-02	4.14E-02	N	3.42E-02	4.75E-02	8.00E-02	N (a)
Nickel	9 / 9	100	4.20E+00	3.69E+01	5.92E-01	9.11E-01	L	1.38E+01	2.82E+01	1.03E+01	N (c)
Potassium	9 / 9	100	4.04E+02	1.19E+03	7.70E+01	1.18E+02	N	8.35E+02	1.01E+03	8.00E+02	N (d)
Selenium	4 / 7	57	1.25E+00	2.64E+00	5.04E-01	7.75E-01	N	1.16E+00	1.88E+00	4.80E-01	N (c)
Sodium	6 / 7	86	2.63E+01	4.25E+01	1.94E+01	2.31E+01	N	3.13E+01	3.96E+01	6.34E+02	N (d)
Thallium	1 / 9	11	7.06E-01	7.06E-01	6.52E-01	1.00E+00	NP	4.15E-01	5.98E-01	3.43E+00	N (a)
Vanadium	9 / 9	100	2.39E+01	5.94E+01	8.46E-01	1.30E+00	L	3.57E+01	5.36E+01	5.88E+01	N (c)
Zinc	9 / 9	100	2.38E+01	8.24E+01	3.10E-01	4.77E-01	L	4.87E+01	8.16E+01	4.06E+01	N (c)
Semivolatile Organic Compounds											
Benzo(a)anthracene	2 / 9	22	3.40E-01	3.80E-01	5.00E-02	1.20E-01	NP	1.07E-01	3.22E-01		Y
Benzo(a)pyrene	2 / 9	22	3.30E-01	3.70E-01	5.00E-02	1.20E-01	NP	1.05E-01	3.13E-01		Y
Benzo(b)fluoranthene	2 / 9	22	5.50E-01	5.80E-01	7.00E-02	1.70E-01	NP	1.64E-01	5.04E-01		Y
Benzo(ghi)perylene	2 / 9	22	2.50E-01	3.00E-01	4.50E-02	1.10E-01	NP	8.57E-02	2.48E-01		Y
Benzo(k)fluoranthene	2 / 9	22	2.10E-01	2.30E-01	5.30E-02	1.30E-01	NP	7.82E-02	2.00E-01		Y
Carbazole	1 / 9	11	7.70E-02	7.70E-02	5.40E-02	1.30E-01	NP	4.25E-02	7.17E-02		Y
Chrysene	2 / 9	22	4.70E-01	4.90E-01	5.10E-02	1.20E-01	NP	1.34E-01	4.27E-01		Y
Fluoranthene	3 / 9	33	2.60E-01	8.60E-01	5.90E-02	1.40E-01	NP	2.35E-01	7.42E-01		Y
Indeno(1,2,3-cd)pyrene	2 / 9	22	2.80E-01	3.20E-01	5.00E-02	1.20E-01	NP	9.39E-02	2.70E-01		Y
Phenanthrene	2 / 9	22	3.00E-01	3.70E-01	5.50E-02	1.30E-01	NP	1.04E-01	3.02E-01		Y
Pyrene	3 / 9	33	2.10E-01	8.30E-01	5.60E-02	1.30E-01	NP	2.24E-01	7.15E-01		Y

Table 6-58

Selection of Site-Related Chemicals for Surface Soil [a]
Old Burn Pit, Parcel 514(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]
Volatile Organic Compounds											
1,1,2,2-Tetrachloroethane	1 / 9	11	1.10E-01	1.10E-01	2.70E-04	5.00E-04	NP	1.24E-02	6.69E-02		Y
1,1,2-Trichloroethane	1 / 9	11	1.20E-02	1.20E-02	9.80E-04	1.80E-03	NP	1.88E-03	7.54E-03		Y
2-Butanone	2 / 6	33	4.90E-03	6.40E-03	2.30E-03	3.20E-03	NP	2.82E-03	6.92E-03		Y
4-Methyl-2-pentanone	1 / 9	11	2.60E-03	2.60E-03	1.40E-03	2.60E-03	NP	1.09E-03	1.97E-03		Y
Acetone	6 / 6	100	8.10E-02	4.00E-01	2.30E-03	1.30E-01	L	1.74E-01	3.85E-01		Y
Cis-1,2-Dichloroethene	1 / 9	11	2.40E-03	2.40E-03	2.10E-04	4.00E-04	NP	3.87E-04	1.51E-03		Y
p-Cymene	2 / 9	22	2.00E-03	2.80E-02	2.10E-04	4.00E-04	NP	3.44E-03	1.72E-02		Y
Toluene	1 / 9	11	2.30E-03	2.30E-03	4.60E-04	8.60E-04	NP	5.13E-04	1.52E-03		Y
Trichloroethene	1 / 9	11	5.10E-02	5.10E-02	2.70E-04	5.00E-04	NP	5.82E-03	3.11E-02		Y

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 1 foot bgs.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-59

Selection of Site-Related Chemicals for Subsurface Soil [a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

(Page 1 of 2)

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	7 / 7	100	1.64E+04	4.10E+04	5.81E+00	6.27E+00	L	2.49E+04	3.93E+04	1.36E+04	N (c)
Arsenic	7 / 7	100	7.15E+00	1.80E+01	1.73E-01	1.87E-01	L	1.07E+01	1.68E+01	1.83E+01	N (a)
Barium	7 / 7	100	2.92E+01	6.74E+01	3.90E-01	4.21E-01	N	5.13E+01	6.10E+01	2.34E+02	N (a)
Beryllium	4 / 4	100	4.14E-01	2.66E+00	3.97E-01	4.19E-01	NA	1.25E+00	NA	8.60E-01	N (c)
Calcium	5 / 5	100	5.49E+01	1.05E+02	1.37E+01	1.40E+01	N	8.68E+01	1.07E+02	6.37E+02	N (d)
Chromium	7 / 7	100	1.90E+01	3.66E+01	9.34E-01	1.01E+00	N	2.80E+01	3.21E+01	3.83E+01	N (a)
Cobalt	7 / 7	100	4.03E+00	8.73E+01	1.19E+00	1.28E+00	NP	1.76E+01	6.96E+01	1.75E+01	N (c)
Copper	7 / 7	100	1.69E+01	9.90E+01	9.05E-01	9.78E-01	L	4.43E+01	9.66E+01	1.94E+01	N (c)
Iron	7 / 7	100	2.58E+04	5.74E+04	1.15E+01	1.25E+01	N	4.19E+04	5.12E+04	4.48E+04	N (c)
Lead	7 / 7	100	1.25E+01	3.83E+01	2.31E-01	2.49E-01	L	2.00E+01	NA	3.85E+01	N (a)
Magnesium	7 / 7	100	3.58E+02	1.03E+03	1.81E+01	1.96E+01	L	6.87E+02	1.08E+03	7.66E+02	N (d)
Manganese	7 / 7	100	3.29E+01	6.88E+02	4.49E-01	4.85E-01	L	1.83E+02	5.65E+02	1.36E+03	N (a)
Mercury	3 / 5	60	3.33E-02	7.08E-02	2.95E-02	3.12E-02	L	3.50E-02	8.11E-02	7.00E-02	N (c)
Nickel	7 / 7	100	6.76E+00	3.07E+01	6.35E-01	6.86E-01	N	1.97E+01	2.55E+01	1.29E+01	N (c)
Potassium	6 / 6	100	7.32E+02	1.89E+03	8.26E+01	8.92E+01	N	1.34E+03	1.74E+03	7.11E+02	N (d)
Selenium	4 / 6	67	2.34E+00	4.15E+00	5.40E-01	5.84E-01	N	2.33E+00	3.74E+00	4.70E-01	N (c)
Sodium	4 / 7	57	2.44E+01	5.88E+01	2.08E+01	2.24E+01	L	2.58E+01	5.64E+01	7.02E+02	N (d)
Thallium	3 / 7	43	8.25E-01	2.04E+00	7.00E-01	7.56E-01	NP	8.50E-01	2.05E+00	1.40E+00	N (b)
Vanadium	7 / 7	100	3.16E+01	6.55E+01	9.08E-01	9.80E-01	N	5.02E+01	5.95E+01	6.49E+01	N (c)
Zinc	7 / 7	100	4.72E+01	1.23E+02	3.33E-01	3.59E-01	L	7.35E+01	1.18E+02	3.49E+01	N (c)
Volatile Organic Compounds											
1,1,2,2-Tetrachloroethane	1 / 7	14	1.20E-03	1.20E-03	2.80E-04	3.70E-04	NP	3.14E-04	9.74E-04		Y
Acetone	2 / 3	67	5.80E-03	9.90E-03	2.50E-03	2.80E-03	NA	5.65E-03	NA		Y
Chemical Agent Breakdown											
Methylphosphonic Acid	1 / 7	14	5.00E-02	5.00E-02	4.90E-02	5.30E-02	NP	2.94E-02	4.48E-02		Y

Table 6-59

Selection of Site-Related Chemicals for Subsurface Soil [a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

mg/kg = milligrams 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 8 to 12 feet below ground surface.

[b] N = Normal distribution, L = Lognormal distribution, NP = Nonparametric distribution; distribution is not determined for data sets containing fewer than 5 samples.

[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.
UCL is not estimated for lead.

[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) = essential nutrient.

Table 6-60

Selection of Chemicals of Potential Concern for Surface Soil[a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				Applicable SSSL (mg/kg) Construction Worker			
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?
Semivolatile Organic Compounds													
Benzo(a)anthracene	3.80E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Benzo(a)pyrene	3.70E-01	NA	NA	3.85E-01	N	NA	NA	5.81E+00	N	NA	NA	4.62E+00	N
Benzo(b)fluoranthene	5.80E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Benzo(ghi)perylene	3.00E-01	3.03E+03	N	NA	NA	1.82E+04	N	NA	NA	1.46E+03	N	NA	NA
Benzo(k)fluoranthene	2.30E-01	NA	NA	3.85E+01	N	NA	NA	5.81E+02	N	NA	NA	4.62E+02	N
Carbazole	7.70E-02	NA	NA	1.42E+02	N	NA	NA	2.12E+03	N	NA	NA	1.70E+03	N
Chrysene	4.90E-01	NA	NA	3.86E+02	N	NA	NA	5.90E+03	N	NA	NA	4.71E+03	N
Fluoranthene	8.60E-01	4.05E+03	N	NA	NA	2.43E+04	N	NA	NA	1.94E+03	N	NA	NA
Indeno(1,2,3-cd)pyrene	3.20E-01	NA	NA	3.85E+00	N	NA	NA	5.81E+01	N	NA	NA	4.62E+01	N
Phenanthrene	3.70E-01	3.03E+04	N	NA	NA	1.82E+05	N	NA	NA	1.46E+04	N	NA	NA
Pyrene	8.30E-01	3.05E+03	N	NA	NA	1.85E+04	N	NA	NA	1.48E+03	N	NA	NA
Volatile Organic Compounds													
1,1,2,2-Tetrachloroethane	1.10E-01	6.09E+03	N	1.39E+01	N	3.68E+04	N	2.15E+02	N	2.96E+03	N	1.69E+02	N
1,1,2-Trichloroethane	1.20E-02	4.07E+02	N	4.90E+01	N	2.47E+03	N	7.60E+02	N	1.99E+02	N	6.00E+02	N
2-Butanone	6.40E-03	5.86E+04	N	NA	NA	3.70E+05	N	NA	NA	2.86E+04	N	NA	NA
4-Methyl-2-pentanone	2.60E-03	7.53E+03	N	NA	NA	4.94E+04	N	NA	NA	3.69E+03	N	NA	NA
Acetone	4.00E-01	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA
Cis-1,2-Dichloroethene	2.40E-03	1.02E+03	N	NA	NA	6.19E+03	N	NA	NA	4.98E+02	N	NA	NA
p-Cymene	2.80E-02	2.03E+04	N	NA	NA	1.23E+05	N	NA	NA	9.93E+03	N	NA	NA
Toluene	2.30E-03	1.96E+04	N	NA	NA	1.24E+05	N	NA	NA	9.62E+03	N	NA	NA
Trichloroethene	5.10E-02	6.10E+02	N	2.56E+02	N	3.70E+03	N	3.93E+03	N	2.98E+02	N	3.13E+03	N

Table 6-60

Selection of Chemicals of Potential Concern for Surface Soil[a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) On-Site Resident				Applicable SSSL (mg/kg) Venison Consumer				Source-Term Concentration [b] (mg/kg)
		Noncancer	COPC?	Cancer	COPC?	Noncancer	COPC?	Cancer	COPC?	
Semivolatile Organic Compounds										
Benzo(a)anthracene	3.80E-01	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Benzo(a)pyrene	3.70E-01	NA	NA	8.51E-02	Y	NA	NA	NA	NA	3.13E-01
Benzo(b)fluoranthene	5.80E-01	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Benzo(ghi)perylene	3.00E-01	2.32E+02	N	NA	NA	NA	NA	NA	NA	
Benzo(k)fluoranthene	2.30E-01	NA	NA	8.51E+00	N	NA	NA	NA	NA	
Carbazole	7.70E-02	NA	NA	3.11E+01	N	NA	NA	NA	NA	
Chrysene	4.90E-01	NA	NA	8.61E+01	N	NA	NA	NA	NA	
Fluoranthene	8.60E-01	3.09E+02	N	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	3.20E-01	NA	NA	8.51E-01	N	NA	NA	NA	NA	
Phenanthrene	3.70E-01	2.32E+03	N	NA	NA	NA	NA	NA	NA	
Pyrene	8.30E-01	2.33E+02	N	NA	NA	NA	NA	NA	NA	
Volatile Organic Compounds										
1,1,2,2-Tetrachloroethane	1.10E-01	4.65E+02	N	3.13E+00	N	NA	NA	NA	NA	
1,1,2-Trichloroethane	1.20E-02	3.11E+01	N	1.11E+01	N	NA	NA	NA	NA	
2-Butanone	6.40E-03	4.66E+03	N	NA	NA	NA	NA	NA	NA	
4-Methyl-2-pentanone	2.60E-03	6.21E+02	N	NA	NA	NA	NA	NA	NA	
Acetone	4.00E-01	7.76E+02	N	NA	NA	NA	NA	NA	NA	
Cis-1,2-Dichloroethene	2.40E-03	7.77E+01	N	NA	NA	NA	NA	NA	NA	
p-Cymene	2.80E-02	1.55E+03	N	NA	NA	NA	NA	NA	NA	
Toluene	2.30E-03	1.55E+03	N	NA	NA	NA	NA	NA	NA	
Trichloroethene	5.10E-02	4.66E+01	N	5.72E+01	N	NA	NA	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 1 foot bgs.
[b] The 95% UCL or maximum concentration, whichever is lower, is selected as the source-term concentration. for those chemicals selected as COPCs.

Table 6-61

Selection of Chemicals of Potential Concern for Subsurface Soil[a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Site-Related Chemical	Maximum Detected Concentration (mg/kg)	Applicable SSSL (mg/kg) Groundskeeper				Applicable SSSL (mg/kg) Recreational Site User				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?
Volatile Organic Compounds																	
1,1,2,2-Tetrachloroethane	1.20E-03	6.09E+03	N	1.39E+01	N	3.68E+04	N	2.15E+02	N	2.96E+03	N	1.69E+02	N	4.65E+02	N	3.13E+00	N
Acetone	9.90E-03	1.02E+04	N	NA	NA	6.16E+04	N	NA	NA	4.95E+03	N	NA	NA	7.76E+02	N	NA	NA
Chemical Agent Breakdown																	
Methylphosphonic Acid	5.00E-02	8.13E+03	N	NA	NA	4.94E+04	N	NA	NA	3.97E+03	N	NA	NA	6.21E+02	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] Subsurface soil is defined as soil from 1 to 12 feet bgs.

Table 6-62

Selection of Chemicals of Potential Concern for Total Soil
Future Land Use
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Chemical	Groundskeeper COPC			Recreational Site-User COPC			Construction Worker COPC			On-site Resident COPC		
	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration	Surface Soil Source-Term Concentration	Subsurface Soil Source-Term Concentration	Total Soil Source-Term Concentration
Semivolatile Organic Compounds												
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.13E-01	NA	3.13E-01

COPC = Chemical of potential concern.
NA = not applicable; the source-term concentration is presented only if the chemical is selected as a COPC.

Table 6-63

Cancer Risk and Noncancer Hazard Estimates Across All Media
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Medium	Recreational Site User		Groundskeeper		Construction Worker		On-Site Resident	
	HI	ILCR	HI	ILCR	HI	ILCR	HI	ILCR
Surface Soil[a]	NA	NA	NE	NE	NE	NE	NE	NE
Venison Consumption	NA	NA	NE	NE	NE	NE	NE	NE
Total Soil[b]	NA	NA	NA	NA	NA	NA	NA	3.68E-06
Groundwater	NE	NE	9.18E-01	1.61E-04	9.18E-01	6.33E-06	6.05E+00	1.05E-03
Surface Water	NA	NA	NE	NE	NE	NE	NE	NE
Sediment	NA	NA	NE	NE	NE	NE	NE	NE
Total HI / ILCR: Current Site Use	**NA**	**NA**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Total HI / ILCR: Future Site Use	**NA**	**NA**	**9.18E-01**	**1.61E-04**	**9.18E-01**	**6.33E-06**	**6.05E+00**	**1.05E-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 6-64

Cancer Risk and Noncancer Hazard Estimates for the On-Site Resident Exposed to Total Soil
Future Land Use
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

COPC	Source-Term Concentration (mg/kg)	Total Noncancer Hazard / Cancer Risk On-Site Resident HI	ILCR
Semivolatile Organic Compounds			
Benzo(a)pyrene	3.13E-01	NA	3.68E-06
Total HI / ILCR		**NA**	**3.68E-06**

COPC = Chemical of potential concern
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Former Detection and Identification Area, Parcel 180(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	B(a)P, B(b)F, Di(a,h)A[d]	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Acceptable	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	B(a)A, B(a)P, B(b)F, Di(a,h)A, I(1,2,3-)P[d]	B(a)P[d]	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Training Area T-5, Parcel 182(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Acceptable	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Blacktop Training Area, Parcel 511(7) and 512(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Acceptable	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Dog Training Area, Parcel 513(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Acceptable	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	B(a)P[d]	Acceptable	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Old Burn Pit, Parcel 514(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Acceptable	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	B(a)P[d]	Acceptable	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Dog Kennel Area, Parcel 516(7)					
Risk Consideration	**Surface Soil**	**Subsurface Soil**	**Groundwater**	**Sediment**	**Surface Water**
Recreational Site User					
Cancer risk[b]	Acceptable	NE	NE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	NE	NE	Acceptable	Acceptable
Groundskeeper					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
Construction Worker					
Cancer risk[b]	Barium[d]	Acceptable	Acceptable	NE	NE
Noncancer hazard[c]	Acceptable	Acceptable	Acceptable	NE	NE
On Site Resident					
Cancer risk[b]	Acceptable	Acceptable	1,1,2,2-TCA, 1,1,2-TCA, 1,1-DCE, carbon tetrachloride, TCE	Acceptable	Acceptable
Noncancer hazard[c]	Acceptable	Acceptable	1,1,2,2-TCA, acetone, carbon tetrachloride, TCE	Acceptable	Acceptable

Table 6-65

Risk Summary by Sample Medium and Receptor[a]
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

NE = Not evaluated: receptor not exposed to this medium.
B(a)A = benzo(a)anthracene; B(a)P = benzo(a)pyrene, B(b)F = benzo(b)fluoranthene, Di(a,h)A = dibenzo(a,h)anthracene, I(1,2,3-)P = indeno(1,2,3-cd)pyrene, 1,1,2,2-TCA = 1,1,2,2-tetrachloroethane, 1,1-DCE = 1,1-dichloroethene, TCE = trichloroethene, 1,1,2-TCA = 1,1,2-trichloroethane.
[a]Cancer risk and noncancer hazard are presented as "acceptable" (see footnotes b and c), or the chemicals of concern for unacceptable results are listed.
[b]Cancer risk is termed "acceptable" if the total ILCR summed across all relevant media rounded to one significant figure does not exceed 1E-4.
[c]Noncancer hazard is termed "acceptable" if the total HI for all target organs summed across all relevant media rounded to one significant figure does not exceed the threshold level of 1.
[d]Risk or hazard estimates for soil contribute to unacceptable estimates *only* if exposure to groundwater developed as a potable source – considered a very unlikely scenario – is included.

Table 7-1

Feeding Guilds and Exposure Pathways
Training Area T-5 Sites
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[a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Constituents	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	2.30E+04	8.46E+03	1.71E+04	7 / 7	460	341.03	5
Arsenic	1.37E+01	1.00E+01	3.83E+01	5.16E+00	1.48E+01	7 / 7	3.83	1.48	5
Barium	1.24E+02	1.65E+02	1.30E+02	3.39E+01	7.16E+01	7 / 7	0.79	0.43	1,5
Beryllium	8.00E-01	1.10E+00	1.31E+00	4.81E-01	1.01E+00	4 / 5	1.19	0.92	5
Cadmium	2.90E-01	1.60E+00	2.25E+00	2.25E+00	8.57E-01	1 / 7	1.41	0.54	**YES**
Calcium	1.72E+03	NA	1.18E+03	2.01E+02	5.68E+02	7 / 7	ND	ND	2,3,5
Chromium	3.70E+01	4.00E-01	6.36E+01	1.42E+01	2.84E+01	7 / 7	159	71.04	5
Cobalt	1.52E+01	2.00E+01	3.00E+01	3.60E+00	1.20E+01	7 / 7	1.50	0.60	5
Copper	1.27E+01	4.00E+01	4.35E+01	1.09E+01	2.00E+01	7 / 7	1.09	0.50	**YES**
Iron	3.42E+04	2.00E+02	1.32E+05	1.74E+04	4.81E+04	7 / 7	660	240.43	5
Lead	4.01E+01	5.00E+01	4.12E+01	1.68E+01	3.09E+01	7 / 7	0.82	0.62	1,4
Magnesium	1.03E+03	4.40E+05	1.00E+03	4.70E+02	7.34E+02	7 / 7	0.0023	0.0017	1,2,3,5
Manganese	1.58E+03	1.00E+02	1.15E+03	7.82E+01	6.21E+02	7 / 7	11.50	6.21	3,4
Mercury	8.00E-02	1.00E-01	6.32E-02	3.10E-02	3.55E-02	5 / 7	0.63	0.35	1,3,4
Nickel	1.03E+01	3.00E+01	2.36E+01	5.28E+00	1.36E+01	7 / 7	0.79	0.45	1,5
Potassium	8.00E+02	NA	9.62E+02	5.75E+02	7.50E+02	7 / 7	ND	ND	2,5
Selenium	4.80E-01	8.10E-01	3.40E+00	6.37E-01	1.39E+00	5 / 7	4.20	1.72	5
Thallium	3.43E+00	1.00E+00	1.28E+00	1.28E+00	4.92E-01	1 / 7	1.28	0.49	3
Vanadium	5.88E+01	2.00E+00	9.51E+01	2.43E+01	4.63E+01	7 / 7	47.55	23.15	5
Zinc	4.06E+01	5.00E+01	1.09E+02	2.99E+01	5.63E+01	7 / 7	2.18	1.13	**YES**
Semivolatile Organic Compounds									
Acenaphthylene	NA	6.82E+02	1.70E-01	1.70E-01	6.27E-02	1 / 7	0.00025	0.00009	1
Anthracene	NA	1.00E-01	4.50E-01	9.60E-02	1.02E-01	2 / 7	4.50	1.02	**YES**
Benzo(a)anthracene	NA	5.21E+00	3.30E+00	6.20E-01	5.80E-01	2 / 7	0.63	0.11	1
Benzo(a)pyrene	NA	1.00E-01	2.80E+00	6.80E-01	5.16E-01	2 / 7	28.00	5.16	**YES**
Benzo(b)fluoranthene	NA	5.98E+01	4.50E+00	1.20E+00	8.41E-01	2 / 7	0.0753	0.0141	1
Benzo(ghi)perylene	NA	1.19E+02	1.50E+00	7.60E-01	3.40E-01	2 / 7	0.0126	0.0029	1
Benzo(k)fluoranthene	NA	1.48E+02	1.50E+00	4.20E-01	2.95E-01	2 / 7	0.0101	0.0020	1
Carbazole	NA	NA	1.10E-01	7.40E-02	4.71E-02	2 / 7	ND	ND	6
Chrysene	NA	4.73E+00	3.60E+00	9.00E-01	6.63E-01	2 / 7	0.76	0.14	1
Dibenz(a,h)anthracene	NA	1.84E+01	4.60E-01	1.80E-01	1.11E-01	2 / 7	0.025	0.006	1
Fluoranthene	NA	1.00E-01	7.70E+00	1.40E+00	1.32E+00	2 / 7	77.00	13.23	**YES**
Indeno(1,2,3-cd)pyrene	NA	1.09E+02	1.80E+00	7.80E-01	3.88E-01	2 / 7	0.017	0.004	1
Phenanthrene	NA	1.00E-01	1.50E+00	7.30E-01	3.40E-01	2 / 7	15	3.40	**YES**
Pyrene	NA	1.00E-01	5.50E+00	1.50E+00	1.02E+00	2 / 7	55	10.22	**YES**

Table 7-2

Constituents of Potential Ecological Concern in Surface Soil[a]
Former Detection and Identification Area, Parcel 180(7)
Fort McClellan, Calhoun County, Alabama

Constituents	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Volatile Organic Compounds									
2-Butanone	NA	8.96E+01	1.50E-02	1.20E-02	8.29E-03	4 / 7	0.00017	0.00009	1
Acetone	NA	2.50E+00	3.40E-01	5.80E-02	2.10E-01	5 / 5	0.14	0.084	1
CWM Breakdown Products									
Methylphosphonic Acid	NA	NA	6.00E-02	6.00E-02	3.04E-02	1 / 7	ND	ND	6

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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.

NA - Not available. ND - Not determined.

Table 7-3

Constituents of Potential Ecological Concern in Surface Soil[a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	2.16E+04	6.37E+03	1.33E+04	17 / 17	432.00	266.53	5
Arsenic	1.37E+01	1.00E+01	1.37E+01	3.49E+00	8.12E+00	17 / 17	1.37	0.81	3,5
Barium	1.24E+02	1.65E+02	2.04E+02	1.25E+01	8.61E+01	17 / 17	1.24	0.52	5
Beryllium	8.00E-01	1.10E+00	2.41E+00	3.84E-01	8.26E-01	12 / 16	2.19	0.75	5
Calcium	1.72E+03	NA	3.61E+03	9.15E+01	9.07E+02	15 / 15	ND	ND	2,5
Chromium	3.70E+01	4.00E-01	4.10E+01	1.21E+01	1.72E+01	17 / 17	102.50	43.10	5
Cobalt	1.52E+01	2.00E+01	2.01E+01	1.80E+00	1.01E+01	17 / 17	1.01	0.50	5
Copper	1.27E+01	4.00E+01	1.99E+02	6.08E+00	2.84E+01	17 / 17	4.98	0.71	**YES**
Iron	3.42E+04	2.00E+02	3.11E+04	8.90E+03	1.73E+04	17 / 17	155.50	86.65	3,5
Lead	4.01E+01	5.00E+01	6.62E+01	8.83E+00	2.16E+01	17 / 17	1.32	0.43	4
Magnesium	1.03E+03	4.40E+05	1.31E+03	2.54E+02	7.53E+02	17 / 17	0.0030	0.0017	1,2,5
Manganese	1.58E+03	1.00E+02	5.04E+03	5.02E+01	1.08E+03	17 / 17	50.40	10.80	4
Mercury	8.00E-02	1.00E-01	1.07E-01	3.10E-02	3.25E-02	6 / 17	1.07	0.33	4
Nickel	1.03E+01	3.00E+01	3.06E+01	5.39E+00	1.36E+01	13 / 13	1.02	0.45	5
Potassium	8.00E+02	NA	1.40E+03	3.48E+02	6.64E+02	17 / 17	ND	ND	2,5
Selenium	4.80E-01	8.10E-01	8.59E-01	8.59E-01	3.18E-01	1 / 14	1.06	0.39	5
Silver	3.60E-01	2.00E+00	1.32E+00	1.32E+00	6.92E-01	1 / 17	0.66	0.35	1,5
Sodium	6.34E+02	NA	4.86E+01	3.24E+01	2.24E+01	5 / 13	ND	ND	2,3
Vanadium	5.88E+01	2.00E+00	3.73E+01	1.67E+01	2.57E+01	17 / 17	18.65	12.83	3,5
Zinc	4.06E+01	5.00E+01	1.17E+03	2.58E+01	1.12E+02	17 / 17	23.40	2.24	**YES**
Semivolatile Organic Compounds									
Bis(2-Ethylhexyl)phthalate	NA	9.26E-01	8.40E-02	8.40E-02	4.03E-02	1 / 17	0.091	0.044	1
Volatile Organic Compounds									
2-Butanone	NA	8.96E+01	9.70E-02	8.50E-03	3.30E-02	13 / 15	0.0011	0.0004	1
Acetone	NA	2.50E+00	8.80E-01	2.30E-02	3.22E-01	12 / 12	0.35	0.13	1
p-Cymene	NA	NA	3.10E-02	7.90E-03	4.68E-03	4 / 17	ND	ND	6
sec-Butylbenzene	NA	NA	1.30E-03	1.30E-03	8.79E-04	1 / 17	ND	ND	6
Toluene	NA	5.00E-02	1.40E-02	1.40E-03	3.33E-03	6 / 17	0.28	0.067	1
Trichlorofluoromethane	NA	1.00E-01	1.60E-03	1.60E-03	8.69E-04	1 / 16	0.016	0.009	1

Table 7-3

Constituents of Potential Ecological Concern in Surface Soil[a]
Training Area T-5, Parcel 182(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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.

NA - Not available. ND - Not determined.

Table 7-4

Constituents of Potential Ecological Concern in Surface Soil[a]
Blacktop Training Area, Parcel 511(7) and Fenced Yard in Blacktop Training Area, Parcel 512(7)
Fort McClellan, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	2.66E+04	7.80E+03	1.50E+04	9 / 9	532.00	299.02	5
Arsenic	1.37E+01	1.00E+01	1.14E+01	2.89E+00	7.64E+00	9 / 9	1.14	0.76	3,5
Barium	1.24E+02	1.65E+02	1.06E+02	3.91E+01	6.20E+01	9 / 9	0.64	0.38	1,3
Beryllium	8.00E-01	1.10E+00	7.18E-01	4.65E-01	3.65E-01	4 / 8	0.65	0.33	1,3,5
Cadmium	2.90E-01	1.60E+00	2.72E+00	1.16E+00	8.52E-01	3 / 9	1.70	0.53	**YES**
Calcium	1.72E+03	NA	7.75E+03	5.16E+02	2.10E+03	9 / 9	ND	ND	2,5
Chromium	3.70E+01	4.00E-01	3.14E+01	1.48E+01	2.21E+01	9 / 9	78.50	55.28	3,5
Cobalt	1.52E+01	2.00E+01	6.72E+00	3.17E+00	4.46E+00	9 / 9	0.34	0.22	1,3,5
Copper	1.27E+01	4.00E+01	1.19E+02	8.37E+00	2.50E+01	9 / 9	2.98	0.63	**YES**
Iron	3.42E+04	2.00E+02	2.96E+04	1.08E+04	2.09E+04	9 / 9	148.00	104.44	3,5
Lead	4.01E+01	5.00E+01	3.19E+01	8.00E+00	1.57E+01	9 / 9	0.64	0.31	1,3
Magnesium	1.03E+03	4.40E+05	4.65E+03	2.81E+02	1.56E+03	9 / 9	0.011	0.0035	1,2,5
Manganese	1.58E+03	1.00E+02	5.79E+02	4.37E+01	1.80E+02	9 / 9	5.79	1.80	3
Mercury	8.00E-02	1.00E-01	3.92E-02	3.92E-02	1.74E-02	1 / 8	0.39	0.17	1,3
Nickel	1.03E+01	3.00E+01	9.42E+00	5.43E+00	7.02E+00	9 / 9	0.31	0.23	1,3,5
Potassium	8.00E+02	NA	2.09E+03	2.49E+02	9.76E+02	9 / 9	ND	ND	2,5
Selenium	4.80E-01	8.10E-01	1.69E+00	6.72E-01	6.03E-01	3 / 8	2.09	0.74	5
Sodium	6.34E+02	NA	2.25E+01	2.25E+01	1.44E+01	1 / 3	ND	ND	2,3
Vanadium	5.88E+01	2.00E+00	4.99E+01	1.94E+01	3.25E+01	9 / 9	24.95	16.24	3,5
Zinc	4.06E+01	5.00E+01	1.26E+02	1.89E+01	4.10E+01	9 / 9	2.52	0.82	**YES**
Semivolatile Organic Compounds									
Acenaphthylene	1.21E+00	6.82E+02	1.30E-01	1.30E-01	5.76E-02	1 / 9	0.00019	0.00008	1,3
Anthracene	2.10E+00	1.00E-01	7.90E-02	7.90E-02	4.14E-02	1 / 9	0.79	0.41	1,3
Benzo(a)anthracene	3.13E+00	5.21E+00	4.10E-01	1.80E-01	8.97E-02	2 / 9	0.079	0.017	1,3
Benzo(a)pyrene	3.16E+00	1.00E-01	5.70E-01	1.20E-01	1.21E-01	3 / 9	5.70	1.21	3
Benzo(b)fluoranthene	3.90E+00	5.98E+01	8.10E-01	7.90E-02	1.77E-01	4 / 9	0.0135	0.0030	1,3
Benzo(ghi)perylene	1.64E+00	1.19E+02	3.50E-01	8.30E-02	8.03E-02	3 / 9	0.0029	0.00068	1,3
Benzo(k)fluoranthene	2.72E+00	1.48E+02	2.30E-01	8.70E-02	6.09E-02	2 / 9	0.0016	0.00041	1,3
Bis(2-Ethylhexyl)phthalate	NA	9.26E-01	1.60E-01	1.60E-01	4.39E-02	1 / 9	0.17	0.047	1
Chrysene	3.33E+00	4.73E+00	4.00E-01	2.10E-01	9.20E-02	2 / 9	0.085	0.019	1,3
Dibenz(a,h)anthracene	9.90E-01	1.84E+01	1.20E-01	1.20E-01	3.99E-02	1 / 9	0.0065	0.0022	1,3
Fluoranthene	7.16E+00	1.00E-01	9.50E-01	7.90E-02	2.10E-01	4 / 9	9.50	2.10	3
Indeno(1,2,3-cd)pyrene	1.72E+00	1.09E+02	3.70E-01	8.70E-02	8.62E-02	3 / 9	0.0034	0.00079	1,3
Phenanthrene	5.46E+00	1.00E-01	2.20E-01	2.20E-01	5.38E-02	1 / 9	2.20	0.54	3
Pyrene	5.58E+00	1.00E-01	7.20E-01	7.30E-02	1.62E-01	4 / 9	7.20	1.62	3

Table 7-4

Constituents of Potential Ecological Concern in Surface Soil[a]
Blacktop Training Area, Parcel 511(7) and Fenced Yard in Blacktop Training Area, Parcel 512(7)
Fort McClellan, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Volatile Organic Compounds									
2-Butanone	NA	8.96E+01	3.80E-02	7.30E-03	1.06E-02	3 / 6	0.00042	0.00012	1
Acetone	NA	2.50E+00	3.30E-01	7.30E-03	9.21E-02	9 / 9	0.13	0.037	1
Carbon disulfide	NA	9.40E-02	2.60E-03	1.70E-03	1.22E-03	5 / 9	0.028	0.013	1
Naphthalene	NA	1.00E-01	6.40E-03	6.40E-03	2.20E-03	1 / 9	0.064	0.022	1
p-Cymene	NA	NA	7.30E-03	3.10E-03	1.26E-03	2 / 9	ND	ND	6
Toluene	NA	5.00E-02	4.10E-03	2.80E-03	9.89E-04	2 / 9	0.082	0.020	1
Trichlorofluoromethane	NA	1.00E-01	2.60E-03	2.60E-03	4.14E-04	1 / 9	0.026	0.0041	1

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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.

NA - Not available. ND - Not determined.

Table 7-5

Constituents of Potential Ecological Concern in Surface Soil[a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	1.31E+04	3.97E+03	8.98E+03	3 / 3	262.0	179.6	3,5
Arsenic	1.37E+01	1.00E+01	2.59E+01	6.24E+00	1.34E+01	3 / 3	2.59	1.34	5
Barium	1.24E+02	1.65E+02	8.86E+01	2.71E+01	5.63E+01	3 / 3	0.54	0.34	1,3,5
Beryllium	8.00E-01	1.10E+00	6.60E-01	4.01E-01	5.31E-01	2 / 2	0.60	0.48	1,3,5
Cadmium	2.90E-01	1.60E+00	1.77E+00	1.77E+00	7.58E-01	1 / 3	1.11	0.47	7
Calcium	1.72E+03	NA	2.08E+03	1.60E+02	8.71E+02	3 / 3	ND	ND	2,5
Chromium	3.70E+01	4.00E-01	1.83E+01	1.48E+01	1.66E+01	3 / 3	45.75	41.58	3,5
Cobalt	1.52E+01	2.00E+01	7.01E+00	4.75E+00	6.12E+00	3 / 3	0.35	0.31	1,3,5
Copper	1.27E+01	4.00E+01	1.76E+01	7.65E+00	1.31E+01	3 / 3	0.44	0.33	1,5
Iron	3.42E+04	2.00E+02	1.89E+04	1.61E+04	1.75E+04	3 / 3	94.50	87.50	3,5
Lead	4.01E+01	5.00E+01	1.33E+01	9.84E+00	1.14E+01	3 / 3	0.27	0.23	1,3
Magnesium	1.03E+03	4.40E+05	8.30E+02	1.19E+02	4.61E+02	3 / 3	0.0019	0.0010	1,2,3,5
Manganese	1.58E+03	1.00E+02	4.34E+02	2.01E+02	2.90E+02	3 / 3	4.34	2.90	3
Nickel	1.03E+01	3.00E+01	7.67E+00	3.60E+00	5.85E+00	3 / 3	0.26	0.19	1,3,5
Potassium	8.00E+02	NA	7.77E+02	2.03E+02	4.78E+02	3 / 3	ND	ND	2,3,5
Selenium	4.80E-01	8.10E-01	7.74E-01	7.74E-01	4.27E-01	1 / 3	0.96	0.53	1,5
Sodium	6.34E+02	NA	5.28E+01	3.89E+01	4.59E+01	2 / 2	ND	ND	2,3
Vanadium	5.88E+01	2.00E+00	3.31E+01	2.01E+01	2.69E+01	3 / 3	16.55	13.43	3,5
Zinc	4.06E+01	5.00E+01	3.63E+01	2.24E+01	2.96E+01	3 / 3	0.73	0.59	1,3,5
Semivolatile Organic Compounds									
Benzo(a)anthracene	NA	5.21E+00	9.80E-02	9.80E-02	4.95E-02	1 / 3	0.019	0.010	1
Benzo(a)pyrene	NA	1.00E-01	1.10E-01	1.10E-01	5.33E-02	1 / 3	1.10	0.53	7
Benzo(b)fluoranthene	NA	5.98E+01	1.70E-01	1.70E-01	8.00E-02	1 / 3	0.0028	0.0013	1
Benzo(ghi)perylene	NA	1.19E+02	7.80E-02	7.80E-02	4.10E-02	1 / 3	0.00066	0.00034	1
Benzo(k)fluoranthene	NA	1.48E+02	6.20E-02	6.20E-02	3.85E-02	1 / 3	0.00042	0.00026	1
Chrysene	NA	4.73E+00	1.10E-01	1.10E-01	5.38E-02	1 / 3	0.023	0.011	1
Fluoranthene	NA	1.00E-01	2.60E-01	2.60E-01	1.06E-01	1 / 3	2.60	1.06	7
Indeno(1,2,3-cd)pyrene	NA	1.09E+02	8.80E-02	8.80E-02	4.62E-02	1 / 3	0.00081	0.00042	1
Phenanthrene	NA	1.00E-01	1.20E-01	1.20E-01	5.83E-02	1 / 3	1.20	0.58	7
Pyrene	NA	1.00E-01	1.90E-01	1.90E-01	8.22E-02	1 / 3	1.90	0.82	7

Table 7-5

Constituents of Potential Ecological Concern in Surface Soil[a]
Dog Training Area, Parcel 513(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Volatile Organic Compounds									
2-Butanone	NA	8.96E+01	2.70E-02	2.70E-02	1.42E-02	1 / 2	0.00030	0.00016	1
Acetone	NA	2.50E+00	2.40E-01	3.30E-02	1.18E-01	3 / 3	0.096	0.047	1
Chloromethane	NA	1.00E-01	3.70E-03	3.70E-03	1.98E-03	1 / 3	0.037	0.020	1

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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 (see text).

NA - Not available. ND - Not determined.

Table 7-6

Constituents of Potential Ecological Concern in Surface Soil[a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	2.84E+04	1.10E+04	1.78E+04	9 / 9	568.00	355.78	5
Arsenic	1.37E+01	1.00E+01	1.18E+01	4.86E+00	7.85E+00	9 / 9	1.18	0.78	3,5
Barium	1.24E+02	1.65E+02	9.91E+01	4.74E+01	6.43E+01	9 / 9	0.60	0.39	1,3,5
Beryllium	8.00E-01	1.10E+00	8.24E-01	4.93E-01	5.85E-01	5 / 6	0.75	0.53	1,5
Calcium	1.72E+03	NA	1.13E+04	2.27E+02	1.86E+03	9 / 9	ND	ND	2,5
Chromium	3.70E+01	4.00E-01	2.87E+01	1.50E+01	2.19E+01	9 / 9	71.75	54.81	3,5
Cobalt	1.52E+01	2.00E+01	1.35E+01	1.72E+00	7.14E+00	9 / 9	0.68	0.36	1,3,5
Copper	1.27E+01	4.00E+01	5.15E+01	8.50E+00	2.26E+01	9 / 9	1.29	0.57	5
Iron	3.42E+04	2.00E+02	5.43E+04	1.53E+04	3.12E+04	9 / 9	271.50	156.11	5
Lead	4.01E+01	5.00E+01	5.15E+01	9.42E+00	2.08E+01	9 / 9	1.03	0.42	4
Magnesium	1.03E+03	4.40E+05	3.80E+03	5.03E+02	1.04E+03	9 / 9	0.0086	0.0024	1,2,5
Manganese	1.58E+03	1.00E+02	5.70E+02	6.27E+01	2.48E+02	9 / 9	5.70	2.48	3
Mercury	8.00E-02	1.00E-01	5.50E-02	3.70E-02	3.42E-02	4 / 7	0.55	0.34	1,3
Nickel	1.03E+01	3.00E+01	3.69E+01	4.20E+00	1.38E+01	9 / 9	1.23	0.46	5
Potassium	8.00E+02	NA	1.19E+03	4.04E+02	8.35E+02	9 / 9	ND	ND	2,5
Selenium	4.80E-01	8.10E-01	2.64E+00	1.25E+00	1.16E+00	4 / 7	3.26	1.43	5
Sodium	6.34E+02	NA	4.25E+01	2.63E+01	3.13E+01	6 / 7	ND	ND	2,3
Thallium	3.43E+00	1.00E+00	7.06E-01	7.06E-01	4.15E-01	1 / 9	0.71	0.42	1,3
Vanadium	5.88E+01	2.00E+00	5.94E+01	2.39E+01	3.57E+01	9 / 9	29.70	17.84	5
Zinc	4.06E+01	5.00E+01	8.24E+01	2.38E+01	4.87E+01	9 / 9	1.65	0.97	5
Semivolatile Organic Compounds									
Benzo(a)anthracene	NA	5.21E+00	3.80E-01	3.40E-01	1.07E-01	2 / 9	0.073	0.021	1
Benzo(a)pyrene	NA	1.00E-01	3.70E-01	3.30E-01	1.05E-01	2 / 9	3.70	1.05	**YES**
Benzo(b)fluoranthene	NA	5.98E+01	5.80E-01	5.50E-01	1.64E-01	2 / 9	0.0097	0.0027	1
Benzo(ghi)perylene	NA	1.19E+02	3.00E-01	2.50E-01	8.57E-02	2 / 9	0.0025	0.00072	1
Benzo(k)fluoranthene	NA	1.48E+02	2.30E-01	2.10E-01	7.82E-02	2 / 9	0.0016	0.00053	1
Carbazole	NA	NA	7.70E-02	7.70E-02	4.25E-02	1 / 9	ND	ND	6
Chrysene	NA	4.73E+00	4.90E-01	4.70E-01	1.34E-01	2 / 9	0.10	0.028	1
Fluoranthene	NA	1.00E-01	8.60E-01	2.60E-01	2.35E-01	3 / 9	8.60	2.35	**YES**
Indeno(1,2,3-cd)pyrene	NA	1.09E+02	3.20E-01	2.80E-01	9.39E-02	2 / 9	0.0029	0.00086	1
Phenanthrene	NA	1.00E-01	3.70E-01	3.00E-01	1.04E-01	2 / 9	3.70	1.04	**YES**
Pyrene	NA	1.00E-01	8.30E-01	2.10E-01	2.24E-01	3 / 9	8.30	2.24	**YES**

Table 7-6

Constituents of Potential Ecological Concern in Surface Soil[a]
Old Burn Pit, Parcel 514(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	NA	1.00E-01	1.10E-01	1.10E-01	1.24E-02	1 / 9	1.10	0.12	**YES**
1,1,2-Trichloroethane	NA	1.00E-01	1.20E-02	1.20E-02	1.88E-03	1 / 9	0.12	0.019	1
2-Butanone	NA	8.96E+01	6.40E-03	4.90E-03	2.82E-03	2 / 6	0.000071	0.000031	1
4-Methyl-2-pentanone	NA	4.43E+02	2.60E-03	2.60E-03	1.09E-03	1 / 9	0.000006	0.000002	1
Acetone	NA	2.50E+00	4.00E-01	8.10E-02	1.74E-01	6 / 6	0.16	0.069	1
Cis-1,2-Dichloroethene	NA	1.00E-01	2.40E-03	2.40E-03	3.87E-04	1 / 9	0.024	0.0039	1
p-Cymene	NA	NA	2.80E-02	2.00E-03	3.44E-03	2 / 9	ND	ND	6
Toluene	NA	5.00E-02	2.30E-03	2.30E-03	5.13E-04	1 / 9	0.046	0.010	1
Trichloroethene	NA	1.00E-03	5.10E-02	5.10E-02	5.82E-03	1 / 9	51.00	5.82	**YES**

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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.

NA - Not available. ND - Not determined.

Table 7-7

Constituents of Potential Ecological Concern in Surface Soil [a]
Dog Kennel Area, Parcel 516(7)
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[b] (mg/kg)	ESV[c] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[d]
Metals									
Aluminum	1.63E+04	5.00E+01	1.12E+04	9.49E+03	1.04E+04	3 / 3	224.00	207.93	3,5
Arsenic	1.37E+01	1.00E+01	9.55E+00	2.76E+00	5.02E+00	3 / 3	0.96	0.50	1,3,5
Barium	1.24E+02	1.65E+02	3.74E+02	5.32E+01	1.61E+02	3 / 3	2.27	0.98	7
Beryllium	8.00E-01	1.10E+00	8.32E-01	4.16E-01	5.25E-01	2 / 3	0.76	0.48	1,5
Calcium	1.72E+03	NA	2.19E+03	5.74E+02	1.12E+03	3 / 3	ND	ND	2,5
Chromium	3.70E+01	4.00E-01	2.15E+01	9.59E+00	1.74E+01	3 / 3	53.75	43.49	3,5
Cobalt	1.52E+01	2.00E+01	1.45E+01	2.45E+00	5.98E+00	2 / 3	0.73	0.30	1,3,5
Copper	1.27E+01	4.00E+01	8.75E+00	7.12E+00	8.01E+00	3 / 3	0.22	0.20	1,3
Iron	3.42E+04	2.00E+02	2.16E+04	1.02E+04	1.60E+04	3 / 3	108.00	80.17	3,5
Lead	4.01E+01	5.00E+01	1.68E+01	8.57E+00	1.21E+01	3 / 3	0.34	0.24	1,3
Magnesium	1.03E+03	4.40E+05	9.14E+02	4.51E+02	6.22E+02	3 / 3	0.0021	0.0014	1,2,3,5
Manganese	1.58E+03	1.00E+02	5.49E+02	4.55E+01	2.17E+02	3 / 3	5.49	2.17	3
Nickel	1.03E+01	3.00E+01	6.63E+00	5.14E+00	5.65E+00	3 / 3	0.22	0.19	1,3,5
Potassium	8.00E+02	NA	1.22E+03	3.41E+02	6.75E+02	3 / 3	ND	ND	2,5
Selenium	4.80E-01	8.10E-01	9.65E-01	9.65E-01	5.61E-01	1 / 3	1.19	0.69	5
Sodium	6.34E+02	NA	3.75E+01	3.75E+01	2.17E+01	1 / 3	ND	ND	2,3
Vanadium	5.88E+01	2.00E+00	3.00E+01	1.61E+01	2.42E+01	3 / 3	15.00	12.12	3,5
Zinc	4.06E+01	5.00E+01	6.50E+01	2.00E+01	4.26E+01	3 / 3	1.30	0.85	5
Volatile Organic Compounds									
2-Butanone	NA	8.96E+01	1.10E-02	1.10E-02	4.98E-03	1 / 3	0.00012	0.00006	1
Acetone	NA	2.50E+00	2.10E-01	1.90E-02	1.15E-01	2 / 2	0.084	0.046	1
Trichloroethene	NA	1.00E-03	2.10E-03	2.10E-03	7.97E-04	1 / 3	2.10	0.80	7
Trichlorofluoromethane	NA	1.00E-01	3.80E-03	3.80E-03	1.40E-03	1 / 3	0.038	0.014	1

[a] Surface soil is defined as the interval from 0 to 1 foot below ground surface.

[b] Background threshold value (BTV) 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.

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

[d] 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 (see text).

NA - Not available. ND - Not determined.

Table 7-8

Constituents of Potential Ecological Concern in Surface Water
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Constituents	BTV[a] (mg/L)	ESV[b] (mg/L)	Maximum Detected Conc. (mg/L)	Minimum Detected Conc. (mg/L)	Mean Detected Conc. (mg/L)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[c]
Metals									
Aluminum	5.26E+00	8.70E-02	3.95E-01	6.51E-02	1.32E-01	4 / 5	4.54	1.52	3
Barium	7.54E-02	3.90E-03	6.77E-02	2.00E-02	3.23E-02	5 / 5	17.36	8.29	3
Calcium	2.52E+01	1.16E+02	8.22E+00	1.13E+00	4.54E+00	5 / 5	0.071	0.039	1,2,3
Chromium	1.11E-02	1.10E-02	1.38E-02	1.38E-02	5.16E-03	1 / 5	1.25	0.47	4
Iron	1.96E+01	1.00E+00	4.01E-01	5.11E-02	2.20E-01	4 / 4	0.40	0.22	1,3
Magnesium	1.10E+01	8.20E+01	1.72E+00	6.52E-01	1.10E+00	5 / 5	0.021	0.013	1,2,3
Manganese	5.65E-01	8.00E-02	2.56E-01	2.24E-02	7.72E-02	5 / 5	3.20	0.96	3
Mercury	NA	3.00E-06	2.90E-04	2.90E-04	1.05E-04	1 / 5	96.67	35.07	5
Sodium	3.44E+00	6.80E+02	1.36E+00	8.09E-01	1.07E+00	4 / 4	0.0020	0.0016	1,2,3
Volatile Organic Compounds									
Acetone	NA	7.80E+01	9.00E-03	4.60E-03	4.85E-03	2 / 3	0.00012	0.00006	1

[a] Background threshold value (BTV) is two times (2x) the arithmetic mean of background metals (SAIC, 1998).

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

[c] 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.

NA - Not available. ND - Not determined.

Table 7-9

Constituents of Potential Ecological Concern in Sediment
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[a] (mg/kg)	ESV[b] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[c]
Metals									
Aluminum	8.59E+03	NA	5.74E+03	1.96E+03	3.83E+03	5 / 5	ND	ND	3
Arsenic	1.13E+01	7.24E+00	7.03E+00	3.95E+00	4.80E+00	5 / 5	0.97	0.66	1,3
Barium	9.89E+01	NA	7.10E+01	9.78E+00	3.33E+01	5 / 5	ND	ND	3
Beryllium	9.70E-01	NA	4.81E-01	4.81E-01	2.65E-01	1 / 5	ND	ND	3
Cadmium	4.30E-01	1.00E+00	2.57E+00	8.17E-01	9.93E-01	3 / 5	2.57	0.99	5
Calcium	1.11E+03	NA	4.05E+02	4.51E+01	2.53E+02	5 / 5	ND	ND	2,3
Chromium	3.12E+01	5.23E+01	6.18E+01	1.08E+01	2.53E+01	5 / 5	1.18	0.48	7
Cobalt	1.10E+01	5.00E+01	1.12E+01	1.37E+00	3.78E+00	4 / 5	0.22	0.076	1
Copper	1.71E+01	1.87E+01	2.84E+01	1.20E+01	1.85E+01	5 / 5	1.52	0.99	5
Iron	3.53E+04	NA	1.98E+04	1.02E+04	1.45E+04	5 / 5	ND	ND	3
Lead	3.78E+01	3.02E+01	2.25E+01	7.10E+00	1.27E+01	5 / 5	0.75	0.42	1,3
Magnesium	9.06E+02	NA	2.17E+02	7.20E+01	1.47E+02	5 / 5	ND	ND	2,3
Manganese	7.12E+02	NA	6.27E+02	6.00E+01	2.93E+02	5 / 5	ND	ND	3
Nickel	1.30E+01	1.59E+01	5.58E+00	2.12E+00	3.34E+00	5 / 5	0.35	0.21	1,3
Potassium	1.01E+03	NA	2.98E+02	1.09E+02	1.88E+02	4 / 4	ND	ND	2,3
Sodium	6.92E+02	NA	4.54E+01	3.74E+01	2.66E+01	2 / 4	ND	ND	2,3
Vanadium	4.09E+01	NA	3.65E+01	1.23E+01	2.08E+01	5 / 5	ND	ND	3
Zinc	5.27E+01	1.24E+02	6.35E+01	1.29E+01	4.04E+01	5 / 5	0.51	0.33	1,5
Semivolatile Organic Compounds									
Benzo(a)anthracene	NA	3.30E-01	9.90E-02	9.90E-02	4.38E-02	1 / 5	0.30	0.13	1
Benzo(a)pyrene	NA	3.30E-01	1.50E-01	1.50E-01	5.37E-02	1 / 5	0.45	0.16	1
Benzo(b)fluoranthene	NA	6.55E-01	2.30E-01	2.30E-01	7.93E-02	1 / 5	0.35	0.12	1
Benzo(ghi)perylene	NA	6.55E-01	1.40E-01	1.40E-01	4.94E-02	1 / 5	0.21	0.075	1
Benzo(k)fluoranthene	NA	6.55E-01	7.90E-02	7.90E-02	4.12E-02	1 / 5	0.12	0.063	1
Chrysene	NA	3.30E-01	1.20E-01	1.20E-01	4.83E-02	1 / 5	0.36	0.15	1
Fluoranthene	NA	3.30E-01	1.30E-01	1.10E-01	6.82E-02	2 / 5	0.39	0.21	1
Indeno(1,2,3-cd)pyrene	NA	6.55E-01	1.30E-01	1.30E-01	4.99E-02	1 / 5	0.20	0.076	1
Pyrene	NA	3.30E-01	1.20E-01	1.20E-01	5.08E-02	1 / 5	0.36	0.15	1

Table 7-9

Constituents of Potential Ecological Concern in Sediment
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[a] (mg/kg)	ESV[b] (mg/kg)	Maximum Detected Conc. (mg/kg)	Minimum Detected Conc. (mg/kg)	Mean Detected Conc. (mg/kg)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[c]
Volatile Organic Compounds									
2-Butanone	NA	1.37E-01	1.60E-02	1.60E-02	4.39E-03	1 / 5	0.12	0.032	1
Acetone	NA	4.53E-01	1.60E-01	1.00E-02	9.33E-02	3 / 3	0.35	0.21	1
Carbon disulfide	NA	1.34E-01	1.60E-03	1.60E-03	4.41E-04	1 / 5	0.012	0.0033	1

[a] Background threshold value (BTV) is two times (2x) the arithmetic mean of background metals (SAIC, 1998).

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

[c] 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 (see text).

NA - Not available. ND - Not determined.

Table 7-10

Constituents of Potential Ecological Concern in Groundwater
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[a] (mg/L)	ESV[b] (mg/L)	Maximum Detected Conc. (mg/L)	Minimum Detected Conc. (mg/L)	Mean Detected Conc. (mg/L)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[c]
Metals									
Aluminum	2.34E+00	8.70E-02	2.61E+01	5.50E-02	7.78E-01	42 / 66	300.00	8.94	4
Arsenic	1.78E-02	1.90E-01	2.83E-02	1.81E-03	1.63E-03	8 / 58	0.15	0.009	1,4
Barium	1.27E-01	3.90E-03	1.05E+00	4.51E-03	9.52E-02	72 / 72	269.23	24.42	5
Beryllium	1.25E-03	5.30E-04	6.37E-03	6.37E-03	5.66E-04	1 / 74	12.02	1.07	5
Cadmium	2.51E-03	6.60E-04	6.60E-03	6.60E-03	2.53E-03	1 / 73	10.00	3.84	4
Calcium	5.65E+01	1.16E+02	9.37E+01	2.27E-01	3.68E+01	67 / 67	0.81	0.32	1,2,5
Chromium	1.11E-02	1.10E-02	3.53E-02	6.30E-03	3.97E-03	5 / 74	3.21	0.36	5
Cobalt	2.34E-02	3.00E-03	4.95E-02	9.79E-03	7.43E-03	10 / 73	16.50	2.48	5
Copper	2.55E-02	6.54E-03	3.57E-02	1.05E-02	3.74E-03	5 / 72	5.46	0.57	4
Iron	7.04E+00	1.00E+00	5.96E+01	1.32E-02	2.93E+00	68 / 68	59.60	2.93	4
Lead	8.00E-03	1.32E-03	5.71E-02	1.57E-03	1.60E-03	8 / 73	43.26	1.21	5
Magnesium	2.13E+01	8.20E+01	9.65E+00	4.35E-01	3.71E+00	55 / 56	0.12	0.045	1,2,3
Manganese	5.81E-01	8.00E-02	7.07E+00	4.96E-03	9.91E-01	70 / 72	88.38	12.38	5
Mercury	NA	3.00E-06	1.98E-04	1.98E-04	6.13E-05	1 / 73	66.00	20.43	4
Nickel	2.25E-02	8.77E-02	5.05E-02	1.94E-02	1.02E-02	9 / 71	0.58	0.12	1,5
Potassium	7.20E+00	5.30E+01	7.14E+00	7.81E-01	1.38E+00	20 / 46	0.13	0.026	1,2,3
Selenium	NA	5.00E-03	2.33E-03	2.33E-03	1.33E-03	1 / 70	0.47	0.27	1,4
Sodium	1.48E+01	6.80E+02	1.73E+01	8.70E-01	4.50E+00	26 / 26	0.025	0.007	1,2,4
Thallium	1.46E-03	4.00E-03	5.04E-03	5.04E-03	1.93E-03	1 / 71	1.26	0.48	4
Vanadium	1.70E-02	1.90E-02	4.80E-02	5.87E-03	3.43E-03	6 / 74	2.53	0.18	5
Zinc	2.20E-01	5.89E-02	2.61E-01	3.48E-02	2.35E-02	11 / 70	4.43	0.40	4
Semivolatile Organic Compounds									
4-Methylphenol	NA	4.89E-01	6.90E-03	6.90E-03	1.99E-03	1 / 69	0.014	0.0041	1
Bis(2-Ethylhexyl)phthalate	NA	3.00E-04	1.20E-01	4.50E-02	9.15E-03	4 / 69	400.00	30.49	7
Diethyl phthalate	NA	5.21E-01	8.50E-03	8.50E-03	2.90E-03	1 / 69	0.016	0.0056	1
Phenol	NA	2.56E-01	1.30E-02	1.30E-02	2.18E-03	1 / 69	0.051	0.0085	1

Table 7-10

Constituents of Potential Ecological Concern in Groundwater
Training Area T-5 Sites
Fort McClellan, Calhoun County, Alabama

Constituent	BTV[a] (mg/L)	ESV[b] (mg/L)	Maximum Detected Conc. (mg/L)	Minimum Detected Conc. (mg/L)	Mean Detected Conc. (mg/L)	Frequency of Detection	Maximum Hazard Quotient	Mean Hazard Quotient	COPEC[c]
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	NA	2.40E-01	2.90E-01	3.10E-04	1.13E-02	17 / 102	1.21	0.047	7
1,1,2-Trichloroethane	NA	9.40E-01	2.30E-03	3.80E-04	1.99E-04	9 / 102	0.0024	0.00021	1
1,1-Dichloroethene	NA	3.03E-01	6.50E-04	6.50E-04	9.80E-05	1 / 102	0.0021	0.00032	1
1,2,4-Trimethylbenzene	NA	NA	3.30E-04	3.30E-04	9.85E-05	1 / 102	ND	ND	6
1,2-Dichloroethane	NA	2.00E+00	6.60E-04	6.60E-04	1.10E-04	1 / 102	0.00033	0.00005	1
1,2-Dimethylbenzene	NA	NA	2.30E-04	2.30E-04	8.03E-05	1 / 102	ND	ND	6
2-Butanone	NA	7.10E+00	1.40E-02	5.70E-03	6.37E-03	4 / 9	0.0020	0.00090	1
4-Methyl-2-pentanone	NA	3.68E+00	7.70E-03	3.90E-03	6.76E-04	2 / 97	0.0021	0.00018	1
Acetone	NA	7.80E+01	2.00E+01	1.90E-03	2.30E+00	16 / 18	0.26	0.029	1
Bromodichloromethane	NA	1.10E+01	1.50E-03	1.50E-03	1.05E-04	1 / 102	0.00014	0.00001	1
Carbon disulfide	NA	8.40E-02	5.30E-04	1.50E-04	8.62E-05	3 / 100	0.0063	0.0010	1
Carbon tetrachloride	NA	3.52E-01	5.90E-02	2.20E-04	1.83E-03	8 / 102	0.17	0.0052	1
Chloroform	NA	2.89E-01	1.40E-02	1.80E-04	1.33E-03	50 / 99	0.0484	0.0046	1
Cis-1,2-Dichloroethene	NA	1.16E+01	7.00E-03	1.50E-04	2.34E-04	16 / 102	0.00060	0.00002	1
Dibromochloromethane	NA	6.40E+00	6.50E-04	6.50E-04	1.13E-04	1 / 102	0.00010	0.00002	1
Methylene chloride	NA	1.93E+00	3.90E-04	2.10E-04	1.13E-04	4 / 79	0.00020	0.00006	1
p-Cymene	NA	NA	6.00E-04	6.00E-04	1.20E-04	1 / 102	ND	ND	6
Tetrachloroethene	NA	8.40E-02	1.80E-03	2.10E-04	2.12E-04	10 / 102	0.0214	0.0025	1
Toluene	NA	1.75E-01	1.40E-03	2.20E-04	1.00E-04	6 / 102	0.0080	0.00057	1
Trans-1,2-Dichloroethene	NA	1.35E+00	9.30E-03	7.00E-04	2.01E-04	3 / 102	0.0069	0.00015	1
Trichloroethene	NA	2.19E+01	1.10E-01	1.70E-04	8.09E-03	46 / 102	0.0050	0.00037	1

[a] Background threshold value (BTV) 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).

[c] Rationale for exclusion as a constituent of potential ecological concern (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 (see text).

NA - Not available. ND - Not determined.