4.0 Field Investigations

4.1 Technical Approach

The purpose of the proposed field investigation at Range K is to define the nature and extent of contamination associated with the detection of cis, and trans; 1-2, DCE in the groundwater sample collected from monitoring well RNG-203-MW01, and the vinyl chloride detected in the groundwater sample collected from monitoring well RNG-203-MW04. The delineation of contamination in the residuum aquifer will be addressed by the installation of an additional seven residuum groundwater monitoring wells upgradient, crossgradient, and downgradient of RNG-203-MW01 and RNG-203-MW04. To determine if the contaminants have migrated vertically, IT proposes to install four bedrock monitoring wells located hydraulically downgradient of RNG-203-MW01. If contamination is found in any of these newly installed wells, an evaluation of the data will determine if additional phases of work may be required to complete the RI. Two soil borings will be installed within the current delineated boundaries of Range K; additional soils data from within the site boundaries is necessary for the purpose of completing a streamlined risk assessment for the evaluation of human health risks as well as an ecological risk assessment.

Surface water and sediment samples are not currently proposed, however, if ponded water is observed during the course of field investigation, surface and sediment samples may be collected from that location.

4.2 UXO Survey Requirements and Utility Clearances

Range K, Former Agent Training Area is located on Pelham Range, which is an active range. The presence of UXO is possible at Range K. Therefore, IT will conduct UXO avoidance activities, including surface sweeps and downhole surveys of soil borings in addition to conducting utility clearances before installing soil borings. UXO avoidance activities will follow guidelines outlined in the Range K, Parcel 203(7) UXO Safety Plan Attachment.

4.2.1 Surface UXO Survey

An UXO sweep will be conducted over areas that will be included in the sampling and surveying activities to identify UXO on or near the surface that may present a hazard to on-site workers during field activities. Low-sensitivity magnetometers will be used to locate surface and shallow-buried metal objects. UXO located on the surface will be identified and conspicuously marked for easy avoidance. UXO personnel requirements, procedures, and detailed descriptions

of the geophysical equipment to be used are provided in Chapter 4.0 and Appendix E of the approved SAP (IT, 2000a).

4.2.2 Downhole UXO Survey

During the soil boring and downhole sampling activities, a downhole UXO survey will be performed to determine if buried metallic objects are present. UXO monitoring as described in Chapter 4.0 of the SAP (IT, 2000a) will continue until undisturbed soils are encountered or the borehole has been advanced to 12 feet bgs, whichever is reached first.

4.2.3 Utility Clearances

After the UXO surface survey has cleared the area to be sampled and prior to performing any intrusive sampling, a utility clearance will be performed at all locations where soil and groundwater samples will be collected, using the procedure outlined in Section 4.2.6 of the SAP. The site manager will mark the proposed locations with stakes, coordinate with the appropriate utility companies to clear the proposed locations for utilities, and obtain digging permits. Once the locations are approved (for both UXO and utility avoidance) for intrusive sampling, the stakes will be labeled as cleared.

4.3 Environmental Sampling

The environmental sampling program during the RI for Range K, Parcel 203(7), includes the collection of surface and subsurface soil and groundwater samples for chemical analyses. The proposed sampling is intended to provide sufficient data to complete the RI; however if additional contaminants are detected, additional phases of groundwater monitoring well installation and sampling may be required. In addition, if ponded water is observed during field investigations, surface water and sediment samples may be collected from the ponded depressions.

4.3.1 Surface Soil Sampling

At seven monitoring well locations (RNG-203-MW05, RNG-203-MW06, RNG-203-MW08, RNG-203-MW10, RNG-203-MW12, RNG-203-MW14, and RNG-203-MW15), a surface soil sample will be collected for chemical analysis. Two additional soil borings will be completed within the fenced area of Range K: RNG-203-GP01 and RNG-203-GP02. Surface soil samples will be collected at the boring locations.

A surface soil sample will be collected at each of the proposed locations for the purpose of providing supporting data for ecological and human health risk assessments. Surface soil

samples from these boring locations will be collected using the direct-push methodology specified in Section 4.7.1.1 of the SAP (IT, 2000a).

A complete listing of chemical analytical parameters for each sample type are found on Table 4-1 and proposed boring and sample locations are illustrated in Figure 4-1.

4.3.1.1 Sample Locations and Rationale

The rationale for the proposed groundwater monitoring wells and soil boring locations and the associated surface and subsurface soil samples is listed in Table 4-1. The assigned sample numbers and the associated field QA/QC sample requirements are summarized in Table 4-2.

4.3.1.2 Sample Collection

Surface soil samples will be collected from the upper 1 foot of soil by direct-push methodology as specified in Section 4.7.1.1 of the SAP. Collected soil samples will be screened using a PID in accordance with Section 4.15 of the SAP. Sample containers, sample volumes, preservatives, and holding times for the analyses required are listed in Section 5.0, Table 5-1 of the QAP. Sample documentation and chain-of-custodies (COC) will be recorded as specified in Section 4.13 of the SAP. The samples will be analyzed for the parameters listed in Table 4-1 of this RI field sampling plan.

4.3.2 Subsurface Soil Sampling

Subsurface soil samples will be collected during the RI from seven proposed residuum monitoring wells (RNG-203-MW05, RNG-203-MW06, RNG-203-MW08, RNG-203-MW10, RNG-203-MW12, RNG-202-MW14, and RNG-203-MW15), and two temporary soil borings (RNG-203-GP01 and RNG-203-GP02) (Figure 4-1).

Sample documentation and COCs will be recorded as specified in Section 4.1.3 of the SAP and analyzed for the parameters listed in Table 4-1.

4.3.2.1 Sample Locations and Rationale

Subsurface soil sampling rationale is presented in Table 4-1. A total of nine subsurface soil samples will be collected in this RI. Subsurface soil sample designations and required QA/QC sample requirements are summarized in Table 4-2. If contaminant sources are identified in the fenced area (Figure 5-1) after evaluation of the sample data, additional intrusive sampling may be performed.

Table 4-1

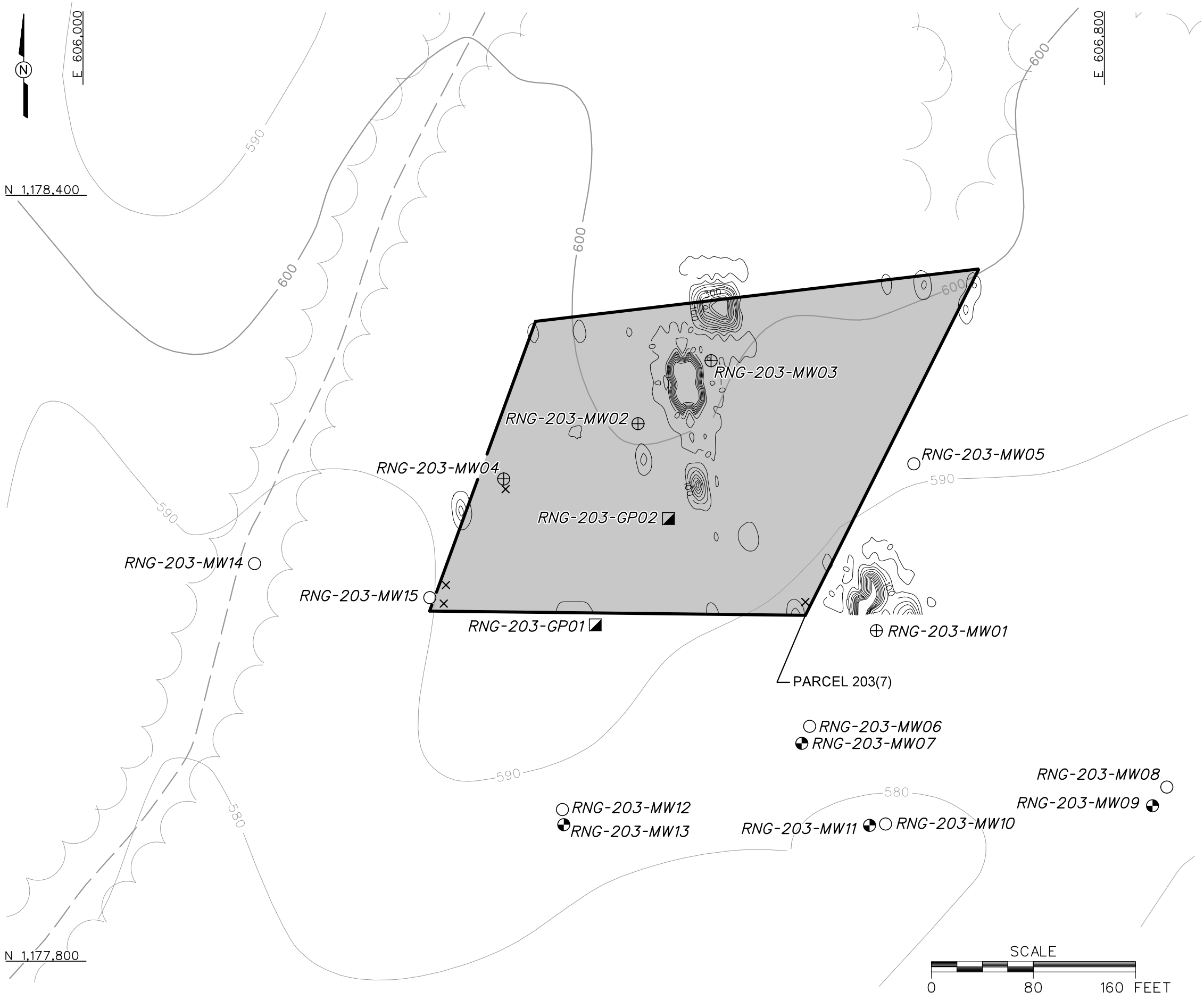
Sampling Locations and Rationale
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Media	Sample Location Rationale
RNG-203-MW05	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitoring well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically upgradient and about 150 feet north of RNG-203-MW01. Sample data will indicate if contaminant releases into the environment have occurred from use of this area and if contaminated soils or groundwater exist at this site. Soil sample data will also be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes and for human health risk evaluation. The monitoring well location will also be used to further establish local groundwater flow patterns and site-specific geology. Estimated well depth is 35 feet bgs.
RNG-203-MW06	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitoring well for surface soil, subsurface soil, and groundwater samples to be placed approximately 150 feet to the southwest of RNG-203-MW01. Sample data will determine the presence or absence of DCE at this location in the residuum aquifer. This location is believed to be hydraulically downgradient of RNG-203-MW01. Soil data will also be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes as well as for human health risk evaluation. The monitoring well data will also be used to further establish local groundwater flow patterns and site-specific geology. Estimated well depth is 35 feet bgs.
RNG-203-MW07	Groundwater	Soil boring and bedrock monitoring well for groundwater samples. Well location will be approximately 60 - 80 feet south and hydraulically downgradient of existing RNG-203-MW01.Groundwater sample data will determine the presence or absence of contaminants including DCE at this location in the bedrock aquifer. The soils data will be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes and to evaluate the risk to human health. The monitoring well will also provide additional information on the site groundwater flow patterns and geology. Estimated well depth is 50 to 80 feet bgs.
RNG-203-MW08	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitoring well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically crossgradient and approximately 250 feet southeast of RNG-203-MW01. Sample data will indicate if contaminant releases into the environment have occurred from use of this area or if DCE from the RNG-203-MW01 vicinity has migrated to this area. Soil sample data will also be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes and for human health risk evaluation. The monitoring well data will also be used to further establish local groundwater flow patterns and site-specific geology. Estimated well depth is 35 feet bgs.
RNG-203-MW09	Groundwater	Soil boring and bedrock monitoring well for groundwater samples only. The well will be paired with shallow well RNG-203-MW08 and located approximately 250 feet southeast of RNG-203-MW01. Sample groundwater data will determine the presence or absence of contaminants including DCE at this location in the bedrock aquifer. Since the well is closely located to RNG-203-MW08, soil samples will not be collected here. The monitoring well will also provide additional information on the site groundwater flow patterns and geology. Estimated well depth is 50 to 80 feet bgs.
RNG-203-MW10	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitoring well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically downgradient and about 150 feet south of RNG-203-MW01. This well is paired with deep well RNG-203-MW11. Sample data will indicate if contaminant releases into the environment have occurred from use of this area and if DCE has migrated in the residuum aquifer. Soil sample data will also be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes and for human health risk evaluation. The monitoring well location will also be used to further establish local groundwater flow patterns and site-specific geology. Estimated well depth is 35 feet bgs.

Table 4-1

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

Sample Location	Sample Media	Sample Location Rationale
RNG-203-MW11	Groundwater	Bedrock monitoring well for groundwater sampling only. This well is located approximately 150 south and downgradient of RNG-203-MW01. It is paired with residuum well RNG-203-MW10. Sample groundwater data will determine the presence or absence of contaminants including DCE in the bedrock aquifer. Soils samples will not be collected here since it is closely located to RNG-203-MW10 in a paired cluster. The monitoring well will also provide additional information on the site groundwater flow patterns and geology. Estimated well depth is 50 to 80 feet bgs.
RNG-203-MW12	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitoring well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically downgradient and southeast approximately 250 -300 feet of RNG-203-MW01. The well is paired with deep well RNG-203-MW13. Sample data will indicate if contaminant releases into the environment have occurred from use of this area and if DCE has migrated in the residuum aquifer in a downgradient direction. Soil sample data will also be used to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes and for human health risk evaluation. The monitoring well location will also be used to further establish local groundwater flow direction and site-specific geology. Estimated well depth is 30-to 50 feet bgs.
RNG-203-MW13	Groundwater	Soil boring and bedrock monitoring well for groundwater samples only. This deep will is paired with RNG-203-MW12 and located southeast and downgradient of RNG-203-MW01. Sample groundwater data will determine the presence or absence of contaminants including DCE at this location in the bedrock aquifer. Soil samples will not be collected here since this well is closely located to RNG-203-MW12 in a paired cluster. The monitoring well will also provide additional information on the site groundwater flow patterns and geology. Estimated well depth is 50 to 80 feet bgs.
RNG-203-MW14	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitor well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically downgradient and southwest approximately 200 feet of RNG-203-MW04. Sample data will further delineate the horizontal extent of the vinyl chloride detected in RNG-203-MW04.
RNG-203-MW15	Surface soil, subsurface soil, and groundwater	Soil boring and residuum monitor well for surface soil, subsurface soil, and groundwater samples to be placed hydraulically downgradient and south approximately 100 feet of RNG-203-MW04. Sample data will further delineate the horizontal extent of the vinyl chloride detected in RNG-203-MW04.
RNG-203-GP01	Surface soil, subsurface soil	Soil boring for surface and subsurface soil samples only. This boring is located within the fenced boundary of Range K to better define surface and subsurface soils in this area. Sample results will provide additional data for geographical coverage of parcel area to support potential remedial alternatives if required. Soil analytical data will be used in the development of a human health risk evaluation and to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes. Boring depth is 12 feet.
RNG-203-GP02	Surface soil, subsurface soil	Soil boring for surface and subsurface soil samples only. This boring is located within the fenced boundary of Range K to better define surface and subsurface soils in this area. Sample results will provide additional data for geographical coverage of parcel area to support potential remedial alternatives if required. Soil analytical data will be used in the development of a human health risk evaluation and to assess potential impacts to terrestrial biota that might utilize the site for food and/or habitat purposes. Boring depth is 12 feet.



LEGEND

- UNIMPROVED ROADS AND PARKING
- TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 10 FOOT)
- TREES / TREELINE
- PARCEL BOUNDARY
- SURFACE DEBRIS (USAEC 1992)
- EXISTING RESIDUUM MONITORING WELL LOCATION
- TIME DOMAIN ELECTROMAGNETIC SURVEY CONTOURS (mV)
- PROPOSED RESIDUUM MONITORING WELL LOCATION
- PROPOSED BEDROCK MONITORING WELL LOCATION
- PROPOSED SURFACE AND SUBSURFACE SOIL SAMPLE LOCATION

NOTES:

1. GEOPHYSICAL CONTOUR DATA SUPPLIED BY SAIC. LOCATIONS ARE APPROXIMATE.
2. TOPOGRAPHIC DATA SUPPLIED BY USACE AND IS NOT CONFIRMED BY FIELD SURVEY.

FIGURE 4-1
PROPOSED SAMPLE AND MONITORING WELL LOCATIONS
RANGE K
FORMER AGENT TRAINING AREA
PARCEL 203(7)

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DWG. NO.: ...\774645es.650 | PROJ. NO.: 774645
INITIATOR: C. RHODES | PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY: | ENGR. CHCK. BY: J. JENKINS
DATE LAST REV.: | DRAWN BY:
STARTING DATE: 10/31/00 | DRAWN BY: D. BILLINGSLEY
03/02/01 10:54:44 AM DBILLING c:\cadd\design\774645es.650

Table 4-2

Surface Soil and Subsurface Soil Sample Designations and QA/QC Sample Quantities
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples			Analytical Suite
			Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW05	RNG-203-MW05-SS-RG0011-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW05-DS-RG0012-REG	a				
RNG-203-MW06	RNG-203-MW06-SS-RG0013-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW06-DS-RG0014-REG	a				
RNG-203-MW08	RNG-203-MW08-SS-RG0015-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW08-DS-RG0016-REG	a				
RNG-203-MW10	RNG-203-MW10-SS-RG0017-REG	0-1	RNG-203-MW10-SS-RG0018-FD			TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW10-DS-RG0019-REG	a				
RNG-203-MW12	RNG-203-MW12-SS-RG0020-REG	0-1			RNG-203-MW-SS-RG0020-MS RNG-203-MW-SS-RG0020-MSD	TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW12-DS-RG0021-REG	a				
RNG-203-MW14	RNG-203-MW14-SS-RG0022-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW14-DS-RG0023-REG	a				
RNG-203-MW15	RNG-203-MW15-SS-RG0024-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-MW15-DS-RG0025-REG	a				
RNG-203-GP01	RNG-203-GP01-SS-RG0026-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-GP01-DS-RG0027-REG	a				
RNG-203-GP02	RNG-203-GP02-SS-RG0028-REG	0-1				TCL VOCs, TCL SVOCs, TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products
	RNG-203-GP02-DS-RG0029-REG	a				

a Actual sample depth selected for analysis will be at the discretion of the site geologist and will be based on field observation.

CL - Chlorinated.
CWM BD - chemical warefare material breakdown.
FD - Field duplicate.
FS - Field split.
MS/MSD - Matrix spike/matrix spike duplicate.
OP - Organophosphate.
PCBs - Polychlorinated biphenyls.
QA/QC - Quality assurance/quality control.
REG - Field sample.
SVOC - Semivolatile organic compound.
TAL - Target analyte list.
TCL - Target compound list.
VOC - Volatile organic compound.

4.3.2.2 Sample Collection

Subsurface soil samples will be collected from seven residuum monitoring well boreholes and two temporary soil borings using direct-push sampling methods to depths of 12 feet bgs as specified in Section 4.7.1.1 of the SAP. Subsurface soil samples will be collected and logged continuously to 12 feet bgs. A detailed lithological log of each borehole will be recorded by the on-site geologist. Samples from the entire length of the temporary borings (12 feet bgs) will be collected for headspace screening using a PID as specified in Section 4.15 of the SAP. Typically, the soil sample from each boring exhibiting the highest reading on a PID (above background) will be sent to the laboratory for analysis. If none of the samples indicate readings exceeding background using the PID, the deepest sample interval above the groundwater table to 12 feet bgs will be submitted to the laboratory for analyses. Subsurface soil samples will be selected for analyses from any depth interval if the on-site geologist suspects PSSCs at the depth interval. Site conditions such as lithology may also determine the actual sample depth interval submitted for analyses. More than one subsurface soil sample may be collected if field measurements and observations indicate PSSCs and/or additional sample data would provide insight to the existence of PSSCs. Subsurface soil sample designations, depths, and required QA/QC sample quantities are listed in Table 4-2.

Temporary borings will be properly abandoned at the completion of soil sampling using hydrated bentonite chips. The borehole abandonment procedures are specified in Section 4.7.2 of the SAP (IT, 2000a).

Sample documentation and COC will be recorded as specified in Section 4.13 of the SAP. Sample containers, sample volumes, preservatives, and holding times for the analyses required in this RI WP are listed in Chapter 5.0, Table 5-1 of the QAP. The samples will be analyzed for the parameters listed in Table 4-1 of this RI field sampling plan.

4.3.3 Monitoring Well Installation

Seven residuum and four bedrock monitoring wells are proposed at Range K (Figure 4-1). The monitoring wells will be installed using a combination of hollow-stem auger and air-rotary drilling methods. A drill rig able to employ both methods will be used, if possible, to minimize mobilization costs. The wells will be installed to provide additional information on water quality and groundwater flow in both the residuum and bedrock aquifers. The SI, performed by IT in 2000, indicated the presence of cis-1,2-dichloroethene and trans-1,2-dichloroethene in RNG-

203-MW01 and vinyl chloride in RNG-203-MW04. The additional wells are proposed to determine the extent of cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride present at Range K in the residuum aquifer and to investigate the presence or absence of cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride in the deeper bedrock aquifers. Bedrock monitoring wells will be drilled using air-rotary drilling methods, and the screened section of each well will be placed a minimum of 15 feet into competent bedrock. The monitoring wells will be installed and developed as specified in Section 4.8 and Appendix C of the SAP.

4.3.3.1 Monitoring Well Locations and Rationale

Groundwater samples collected from monitoring well RNG-203-MW01 and RNG-203-MW04 at Range K by IT in 2000 were found to contain organic and inorganic compounds. Newly proposed monitoring wells (Figure 5-1) will be located to define the lateral and vertical extent of groundwater contamination. Four well 'clusters', consisting of a bedrock and a residuum well, are proposed hydraulically downgradient of RNG-203-MW01. In addition, two residuum wells are proposed hydraulically downgradient of RNG-203-MW04.

Seven proposed residuum monitoring wells, RNG-203-MW05, RNG-203-MW06, RNG-203-MW08, RNG-203-MW10, RNG-203-MW12, RNG-203-MW14, and RNG-203-MW15, will be installed to further characterize the local groundwater flow and delineate the lateral extent of contamination in the residuum aquifer.

Four proposed bedrock monitoring wells, RNG-203-MW07, RNG-203-MW09, RNG-203-MW11, and RNG-203-MW13, will be installed in order to establish the presence or absence of groundwater contamination in the deeper groundwater zones at the site.

The locations of the existing and proposed monitoring wells are presented on Figure 4-1, and Table 4-1 presents proposed monitoring well sampling rationale. The exact location of each proposed monitoring well will be determined in the field by the on-site geologist, based on actual field conditions.

4.3.3.2 Residuum Monitoring Wells

Seven residuum monitoring well boreholes will be drilled and installed using 6 5/8-inch ID hollow-stem augers. Residuum monitoring wells will be drilled to a minimum of 20 feet below the first groundwater-bearing zone, estimated to range from 20 to 30 bgs, or to the top of

bedrock, whichever is encountered first. Samples will be collected at 5-foot intervals from 12 feet bgs (or at direct push sample refusal) to the total well depth by the on-site geologist (to record lithologic information). The well casing will consist of new 2-inch ID, Schedule 40, threaded, flush-joint, PVC pipe. Attached to the bottom of the well casing will be a section of new threaded, flush-joint, 0.010-inch continuous wrap PVC well screen, 10 to 20 feet long. After the casing and screen materials are lowered into the boring, a filter pack will be installed around the well screen. The filter pack will be tremied into place from the bottom of the sump to approximately 5 feet above the top of the screen. The filter pack will consist of 20/40 silica sand. A bentonite seal approximately 5 feet thick will be placed above the filter pack. The remaining annular space will be grouted with a bentonite-cement mixture and tremied in place with a side discharge tremie from the top of the bentonite seal to ground surface. The residuum monitoring wells will be developed as specified in Section 4.8 and Appendix C of the SAP. Groundwater samples will not be collected from residuum wells for a period of at least 14 days after well development. Investigation-derived waste (IDW) will be containerized and staged in accordance with Section 5.7 of this RI field sampling plan.

4.3.3.3 Bedrock Monitoring Wells

Four bedrock monitoring wells will be installed using a combination of coring and air rotary drill rig techniques. Estimated well depths are expected to be less than 100 feet and are presented in Table 4-1.

An air rotary rig with a 12-inch percussion bit or rotary bit will be used to drill the borehole from land surface to a target depth of 5 feet into competent bedrock or 5 feet below the bottom of the adjacent residuum monitoring well. The compressor on the drill rig will be equipped with an air filter between the compressor and the drill bit. Since the bedrock well will be installed adjacent to a proposed residuum well where lithology will be characterized, no residuum sampling will be performed at the bedrock well location for the purpose of characterizing residuum lithology.

Eight-inch inside diameter carbon steel International Pipe Standard outer casing will be installed into the borehole from land surface to the target depth. A minimum of 2-inch annular space between the outer casing and borehole wall will be required. The eight-inch carbon steel outer casing will be grouted in-place using a tremie pipe suspended in the annulus outside of the casing. Bentonite-cement grout will be mixed using approximately 6.5 to 7 gallons of water, and approximately 5 pounds of bentonite per 94-pound bag of Type I Portland cement. After the grout has cured a minimum of 48 hours, the borehole will be advanced with a PQ diamond

tipped wireline core barrel from the bottom of the steel casing to the projected well completion depth. Bedrock cores will be described following methodology outlined in Corps of Engineers South Atlantic Division Manual DM 1110-1-1 (USACE, 1983). Proposed well completion depths are summarized in Table 4-1. Upon completion of the coring, the borehole will be reamed with a 7 7/8-inch air percussion bit from the bottom of the steel casing to the projected well completion depth.

Four-inch monitoring wells will be installed inside the outer casing at each proposed well location. The well casing will consist of new, 4-inch ID, Schedule 80, threaded, flush-joint, PVC pipe. Attached to the bottom of the well casing will be a section of new threaded, flush joint 0.010-inch continuous wrap PVC well screen, 10 to 20 feet long. A 5-foot sump may be installed at the discretion of the on-site geologist based on actual site conditions and bedrock characteristics. After the casing and screen materials are lowered into the boring, a filter pack will be installed around the well screen. The filter pack will be tremied into place from the bottom of the well, (or sump) to approximately 5 feet above the top of the screen. The filter pack will consist of 20/40 silica sand. A bentonite seal, approximately 5 feet thick, will be placed above the filter pack. The remaining annular space will be grouted with a bentonite-cement mixture (described above) and tremied in place with a side discharge tremie from the top of the bentonite seal to ground surface. The bedrock monitoring wells will be developed as specified in Section 4.8 and Appendix C of the SAP. Groundwater samples will not be collected from bedrock wells for a period of at least 14 days after well development. IDW will be containerized and staged in accordance with Section 5.7 of the SFSP.

4.3.4 Monitoring Well Groundwater Sampling

Groundwater samples will be collected from four existing wells (RNG-203-MW01 through RNG-203-MW04) and eleven proposed permanent monitoring wells (RNG-203-MW05 through RNG-203-MW15) at Range K. Chemical analytical parameters are listed in Table 4-1, and field parameters made at the time of sample collection are detailed in Section 4.9.14 of the SAP.

4.3.4.1 Monitoring Well Sample Locations and Rationale

The existing and proposed groundwater monitoring wells are depicted in Figure 4-1. The rationale for the location of each well is described in Table 4-1. The well locations were chosen to delineate the boundaries of the contaminants found in RNG-203-MW01 and RNG-203-MW04.

4.3.4.2 Monitoring Well Sample Collection

Prior to sampling monitoring wells, static water levels will be measured from the 15 monitoring wells to be sampled as part of the this RI. Groundwater elevations will be used to define the groundwater flow in the residuum and bedrock aquifers. Water levels will be measured as outlined in Section 4.18 of the SAP. Groundwater samples will be collected from the existing and proposed permanent monitoring wells for the parameters listed in Table 4-1. Groundwater samples will be collected in accordance with the procedures outlined in Section 4.9.1.4 of the SAP.

Sample documentation and COC will be recorded as specified in Section 4.13 of the SAP. Sample containers, sample volumes, preservatives, and holding times for the analyses required in this RI field sampling plan are listed in Section 5.0, Table 5-1 of the QAP (IT, 2000a). Table 4-3 lists groundwater sample designations and associated QA/QC sample designations and quantities.

4.3.5 Slug Tests

The hydraulic conductivity of the geologic material underlying Range K, Parcel 203(7) will be estimated by performing slug tests in six permanent monitoring wells. Rising head (slug out) and/or falling head (slug in) tests will be conducted and drawdown measurements taken with a pressure transducer and data logger from selected monitoring wells. Slug tests will be conducted in accordance with the procedures outlined in Section 5.16.1 of the SAP (IT, 2000). Slug tests will be performed after groundwater sampling has been completed.

4.3.6 Surface Water and Sediment Sampling (Contingency)

At this time, there are no surface water and sediment samples designated to be collected. If, however, there is standing water or other obvious surface water features serving as collection ponds for site drainage, a sample may be collected at the discretion of the on-site field geologist or site manager. Chemical analytical data from surface water and sediment from standing ponds or drainage ditches that may be used as a water source for small animals and may be useful for the purposes of supporting an ecological risk assessment. If collected, surface water and sediment will be collected in accordance with procedures specified in Section 4.9.1.2 and 4.9.1.3 of the SAP.

4.4 Decontamination Requirements

Table 4-3

Groundwater Sample Designations and QA/QC Sample Quantities
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples			Analytical Suite
			Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW01	RNG-203-MW01-GW-RG3007-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW02	RNG-203-MW02-GW-RG3008-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW03	RNG-203-MW03-GW-RG3009-REG	a	RNG-203-MW03-GW-RG3010-FD			TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW04	RNG-203-MW04-GW-RG3011-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW05	RNG-203-MW05-GW-RG3012-REG	a	RNG-203-MW05-GW-RG3013-FD			TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW06	RNG-203-MW06-GW-RG3014-REG	a			RNG-203-MW06-GW-RG3014-MS/MSD	TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW07	RNG-203-MW07-GW-RG3015-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW08	RNG-203-MW08-GW-RG3016-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW09	RNG-203-MW09-GW-RG3017-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW10	RNG-203-MW10-GW-RG3018-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS

Table 4-3

Groundwater Sample Designations and QA/QC Sample Quantities
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples			Analytical Suite
			Field Duplicates	Field Splits	MS/MSD	
RNG-203-MW11	RNG-203-MW11-GW-RG3019-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW12	RNG-203-MW12-GW-RG3020-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW13	RNG-203-MW13-GW-RG3021-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW14	RNG-203-MW14-GW-RG3022-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS
RNG-203-MW15	RNG-203-MW15-GW-RG3023-REG	a				TCL VOCs, TCL SVOCs, dissolved and total TAL, Metals, nitroexplosives, CL pesticides, OP pesticides, CL Herbicides, PCBs, CWM BD products, TOC, Nitrate/Nitrite, sulfate, sulfite, hardness, TDS, TSS

a Sample depth will depend on where specific first water is encountered to collect a water sample.

[a] Sample depth will depend on where sufficient first water is encountered to collect a water sample.

CL - Chlorinated.
CWM - Chemical warfare material.
FD - Field duplicate.
FS - Field split.
MS/MSD - Matrix spike/matrix spike duplicate.
OP - Organophosphate.
PCB - Polychlorinated biphenyl.
QA/QC - Quality assurance/quality control.
REG - Field sample.
SVOC - Semivolatile organic compound.
TAL - Target analyte list.
TCL - Target compound list.
TDS - Total dissolved solids.

Table 4-3

Groundwater Sample Designations and QA/QC Sample Quantities
Range K, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Sample Designation	Sample Depth (ft)	QA/QC Samples			Analytical Suite
			Field Duplicates	Field Splits	MS/MSD	

TOC - Total organic carbon.
TSS - Total suspended solids.
VOC - Volatile organic compound.

Decontamination will be performed on sampling and nonsampling equipment primarily to ensure that contaminants are not introduced into samples from location to location. Decontamination of sampling equipment will be performed in accordance with the requirements presented in Section 4.10.1.1 of the SAP. Decontamination of nonsampling equipment will be performed in accordance with the requirements presented in Section 4.10.1.2 of the SAP.

4.5 Surveying of Sample Locations

Sampling locations will be marked with pin flags, stakes, and/or flagging and will be surveyed using either GPS or conventional civil survey techniques, as necessary to obtain the required level of accuracy. Horizontal coordinates will be referenced to the U.S. State Plane coordinate system, Alabama East Zone, North American Datum 1983. Elevations will be referenced to the North American Vertical Datum of 1988.

Horizontal coordinates for soil, sediment, and surface water locations will be recorded using a GPS to provide accuracy within 1 meter. Because of the need to use monitoring wells to determine water levels, a higher level of accuracy is required. Monitoring wells will be surveyed to an accuracy of 0.1 foot for horizontal coordinates and 0.01 foot for elevations, using survey-grade GPS techniques and/or conventional civil survey techniques, as required. Procedures to be used for GPS surveying are described in Section 4.3 of the SAP. Conventional land survey requirements are presented in Section 4.19 of the SAP.

4.6 Analytical Program

Definitive samples collected at the locations specified in this chapter will be analyzed for various chemical constituents (including agent breakdown products) and physical properties based on the PSSCs historically used at the site and EPA, ADEM, FTMC, and USACE requirements. Definitive target analyses for soil and water samples collected from the Range K site consist of the following list of analytical suites:

- TCL VOCs by EPA Method 5035/8260B
- TCL SVOCs by EPA Method 8270C
- TAL metals by EPA Method 6010B/7000
- Agent breakdown products by EPA Method 8270 (modified) and Method 8321
- Nitroexplosives by EPA Method 8330
- Chlorinated pesticides by Method 8081A
- Chlorinated herbicides by Method 8151A
- Organophosphate pesticides by Method 8141A
- PCBs by Method 8082.

Groundwater samples will also be analyzed for the following parameters to provide data in support of potential remedial design alternatives:

- Dissolved and total TAL metals by Method 6010B/7000
- Total organic carbon by Method 9060
- Nitrate/nitrite by Method 353.1
- Sulfate/sulfite by Method 300/376.1
- Hardness by Method 130.2
- Total dissolved solids/total suspended solids by Method 160.1/160.2.

The samples will be analyzed using EPA SW-846 Update III method where applicable, as presented in Table 4-4 this RI field sampling plan and Table 6-1 of the QAP. Data will be reported and evaluated in accordance with CESAS Level B criteria (USACE, 1994) and the stipulated requirements for the generation of definitive data (Section 3.1.2 of the QAP). Chemical data will be reported via hard copy data packages by the laboratory using CLP-like forms. These packages will be validated in accordance with EPA National Functional Guidelines by Level III criteria.

4.7 Sample Preservation, Packaging, and Shipping

Sample preservation, packaging, and shipping will follow the procedures specified in Section 4.13.2 of the SAP. Completed analysis request/COC records will be secured and included with each shipment of coolers to both laboratories.

The samples will be shipped to the following laboratory:

EMAX
Attention: Sample Receiving/ Elizabeth McIntyre
Emax Laboratories Inc.
630 Maple Avenue
Torrence, California 90503
Telephone: (310) 618-8889
Fax: (310) 618-0818.

4.8 Investigation-Derived Waste Management

Management and disposal of the IDW will follow procedures and requirements as described in Appendix D of the SAP (IT, 2000a). The IDW expected to be generated at Range K will include drill cuttings, purge water from permanent monitoring well development and sampling activities, decontamination fluids, and disposable personal protective equipment. The IDW will be

Table 4-4

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

				Field Samples			QA/QC Samples[a]				EMAX	QA Lab
Parameters	Analysis Method	Sample Matrix	TAT Needed	No. of Sample Points	No. of Events	No. of Field Samples	Field Dups (10%)	MS/MSD (5%)	Trip Blank (1/ship)	Eq. Rinse (1/wk/matrix)	Total No. Analysis	Total No. Analysis
Range K, Former Agent Training Area, Parcel 203(7): 15 groundwater samples, 9 surface soil samples, 9 subsurface soil samples												
TCL VOCs	8260B	water	normal	15	1	15	2	1		1	20	#REF!
TCL SVOCs	8270C	water	normal	15	1	15	2	1		1	20	#REF!
Diss and TAL Metals	6010B/7000	water	normal	15	1	15	2	1		1	20	#REF!
Nitroexplosives	8330	water	normal	15	1	15	2	1		1	20	1
CWM BD Products	8321/8270M	water	normal	15	1	15	2	1		1	20	1
Cl Pesticides	8081A	water	normal	15	1	15	2	1		1	20	#REF!
Cl Herbicides	8151A	water	normal	15	1	15	2	1		1	20	#REF!
OP Pesticides	8141A	water	normal	15	1	15	2	1		1	20	#REF!
PCBs	8082	water	normal	15	1	15	2	1		1	20	1
TOC	9060	water	normal	15	1	15	2	1		1	20	1
Nitrate/Nitrite	353.1	water	normal	15	1	15	2	1		1	20	#REF!
Sulfate	300	water	normal	15	1	15	2	1		1	20	#REF!
Sulfite	376.1	water	normal	15	1	15	2	1		1	20	1
Hardness	130.2	water	normal	15	1	15	2	1		1	20	1
TDS	160.1	water	normal	15	1	15	2	1		1	20	1
TSS	160.2	water	normal	15	1	15	2	1		1	20	1
TCL VOCs	8260B	soil	normal	9	1	9	2	1		1	14	#REF!
TCL SVOCs	8270C	soil	normal	9	1	9	2	1		1	14	#REF!
TAL Metals	6010B/7000	soil	normal	9	1	9	2	1		1	14	#REF!
Nitroexplosives	8330	soil	normal	9	1	9	2	1		1	14	#REF!
CWM BD Products	8321/8270M	soil	normal	9	1	9	2	1		1	14	#REF!
Cl Pesticides	8081A	soil	normal	9	1	9	2	1		1	14	#REF!
Cl Herbicides	8151A	soil	normal	9	1	9	2	1		1	14	#REF!
OP Pesticides	8141A	soil	normal	9	1	9	2	1		1	14	#REF!
PCBs	8082	soil	normal	9	1	9	2	1			13	#REF!
			Range K, Former Agent Training Area Subtotal:			321	50	25	0	24	420	#REF!

Table 4-4

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

[a]Field duplicate, and MS/MSD samples were calculated as a percentage of the field samples collected per site and were rounded to the nearest whole number.
Trip blank samples will be collected in association with water matrix samples for VOC analysis only. Assumed four field samples per day to estimate trip blanks. Equipment blanks will be collected once per event whenever sampling equipment is field decontaminated and re-used. They will be repeated weekly for sampling events that are anticipated to last more than 1 week. Assumed 20 field samples will be collected per week to estimate number of equipment blanks.

Ship samples to: EMAX Laboratories, Inc.
Attention: Sample Receiving / Elizabeth McIntyre
630 Maple Avenue
Torrance, California 90503
Tel: (310) 618-8889
Fax: (310) 618-0818

ASTM- American Society for Testing and Materials.
CL - Chlorinated.
CWM BD - Chemical warfare material breakdown.
MS/MSD - Matrix spike/matrix spike duplicate.
OP - Organophosphate.
PCBs - Polychlorinated biphenyls.
QA/QC - Quality assurance/quality control.
SVOC - Semivolatile organic compound.
TAL - Target analyte list.
TCL - Target compound list.
TDS - Total dissolved solids.
TOC - Total organic carbon.
TSS - Total suspended solids.
VOC - Volatile organic compound.

characterized and staged at a secure location designated by the site manager while awaiting final disposal.

4.9 Site-Specific Safety and Health

Safety and health requirements for the RI are provided in the SSHP attachment for the Range K site. The SSHP attachment will be used in conjunction with the installation-wide safety and health plan and the site-specific UXO safety plan.

5.0 Project Schedule

The project schedule for the RI activities will be provided by the IT Project Manager to the BRAC Cleanup Team and will be in accordance with the work plan.

6.0 References

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ATTACHMENT 1

LIST OF ABBREVIATIONS AND ACRONYMS

List of Abbreviations and Acronyms

2,4-D	2,4-dichlorophenoxyacetic acid
2,4,5-T	2,4,5-trichlorophenoxyacetic acid
2,4,5-TP	silvex
3D	3D International Environmental Group
Abs	skin absorption
AC	hydrogen cyanide
AcB2	Anniston and Allen gravelly loams, 2 to 6 percent slopes, eroded
AcC2	Anniston and Allen gravelly loams, 6 to 10 percent slopes, eroded
AcD2	Anniston and Allen gravelly loams, 10 to 15 percent slopes, eroded
AcE2	Anniston and Allen gravelly loams, 15 to 25 percent slopes, eroded
ACGIH	American Conference of Governmental Industrial Hygienists
ADEM	Alabama Department of Environmental Management
AEL	airborne exposure limit
AHA	ammunition holding area
AL	Alabama
amb.	amber
ANAD	Anniston Army Depot
APT	armor-piercing tracer
ASP	ammunition supply point
ASR	Archives Search Report
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
'B'	Analyte detected in laboratory or field blank at concentration greater than the reporting limit (and greater than zero)
BCT	BRAC Cleanup Team
BEHP	bis(2-ethylhexyl)phthalate
BFB	bromofluorobenzene
BG	Bacillus globigii
bgs	below ground surface
BHC	betahexachlorocyclohexane
bkg	background
bls	below land surface
BOD	biological oxygen demand
BRAC	Base Realignment and Closure
Braun	Braun Intertec Corporation
BTEX	benzene, toluene, ethyl benzene, and xylenes
BTOC	below top of casing
BW	biological warfare
BZ	breathing zone; 3-quinuclidinyl benzilate
C	ceiling limit value
Ca	carcinogen
CCAL	continuing calibration
CCB	continuing calibration blank
CD	compact disc
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESAS	Corps of Engineers South Atlantic Savannah
CG	carbonyl chloride (phosgene)
CFC	chlorofluorocarbon
ch	inorganic clays of high plasticity
CHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
CK	cyanogen chloride
cl	inorganic clays of low to medium plasticity
Cl.	chlorinated
CLP	Contract Laboratory Program
CN	chloroacetophenone
CNB	chloroacetophenone, benzene, and carbon tetrachloride
CNS	chloroacetophenone, chloropicrin, and chloroform
Co-60	cobalt-60
COC	chain of custody
COE	Corps of Engineers
Con	skin or eye contact
CRL	certified reporting limit
CRZ	contamination reduction zone
Cs-137	cesium-137
CS	ortho-chlorobenzylidene-malononitrile
CSEM	conceptual site exposure model
ctr.	container
CWA	chemical warfare agent
CWM	chemical warfare material; clear, wide mouth
CX	dichloroformoxime
D	duplicate; dilution
DANC	decontamination agent, non-corrosive
°C	degrees Celsius
°F	degrees Fahrenheit
DCE	dichloroethene
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane
DEH	Directorate of Engineering and Housing
DEP	depositional soil
DI	deionized
DIMP	di-isopropylmethylphosphonate
DMMP	dimethylmethylphosphonate
DOD	U.S. Department of Defense
DP	direct-push
DPDO	Defense Property Disposal Office
DPT	direct-push technology
DQO	data quality objective
DRMO	Defense Reutilization and Marketing Office
DRO	diesel range organics
DS	deep (subsurface) soil
DS2	Decontamination Solution Number 2
E&E	Ecology and Environment, Inc.
EBS	environmental baseline survey
Elev.	elevation
EM	electromagnetic
EM31	Geonics Limited EM31 Terrain Conductivity Meter
EM61	Geonics Limited EM61 High-Resolution Metal Detector
EOD	explosive ordnance disposal
EODT	explosive ordnance disposal team
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
EPIC	Environmental Photographic Interpretation Center
ER	equipment rinsate
ESE	Environmental Science and Engineering, Inc.
ESV	ecological screening value
Exp.	explosives
E-W	east to west
EZ	exclusion zone
FB	field blank
FD	field duplicate
FedEx	Federal Express, Inc.
FFE	field flame expedient
Fil	filtered
Flt	filtered
FMP 1300	Former Motor Pool 1300
Foster Wheeler	Foster Wheeler Environmental Corporation
Frtn	fraction
FS	field split
ft	feet
ft/ft	feet per foot
FTA	Fire Training Area
FTMC	Fort McClellan
g	gram
G-856	Geometrics, Inc. G-856 magnetometer
G-858G	Geometrics, Inc. G-858G magnetic gradiometer
gal	gallon
gal/min	gallons per minute
GB	sarin
gc	clay gravels; gravel-sand-clay mixtures
GC	gas chromatograph
GC/MS	gas chromatograph/mass spectrometer
GFAA	graphite furnace atomic absorption
gm	silty gravels; gravel-sand-silt mixtures
gp	poorly graded gravels; gravel-sand mixtures
gpm	gallons per minute
GPR	ground-penetrating radar
GPS	global positioning system
GS	ground scar
GSA	General Services Administration
GSBP	Ground Scar Boiler Plant
GSSI	Geophysical Survey Systems, Inc.
GST	ground stain

List of Abbreviations and Acronyms *(Continued)*

GW	groundwater
gw	well-graded gravels; gravel-sand mixtures
HA	hand auger
HCl	hydrochloric acid
HD	distilled mustard
HDPE	high-density polyethylene
Herb.	herbicides
HNO_3	nitric acid
hr	hour
H&S	health and safety
HSA	hollow-stem auger
HTRW	hazardous, toxic, and radioactive waste
'I'	out of control, data rejected due to low recovery
ICAL	initial calibration
ICB	initial calibration blank
ICP	inductively-coupled plasma
ICS	interference check sample
ID	inside diameter
IDL	instrument detection limit
IDLH	immediately dangerous to life or health
IDW	investigation-derived waste
IMPA	isopropylmethyl phosphonic acid
in.	inch
Ing	ingestion
Inh	inhalation
IP	ionization potential
IPS	International Pipe Standard
IRDMIS	Installation Restoration Data Management Information System
ISCP	Installation Spill Contingency Plan
IT	IT Corporation
ITEMS	IT Environmental Management System ™
'J'	estimated concentration
JeB2	Jefferson gravelly fine sandy loam, 2 to 6 percent slopes, eroded
JeC2	Jefferson gravelly fine sandy loam, 6 to 10 percent slopes, eroded
JfB	Jefferson stony fine sandy loam, 0 to 10 percent slopes have strong slopes
K	conductivity
L	lewisite; liter
LC_{50}	lethal concentration for 50 percent of population tested
LD_{50}	lethal dose for 50 percent of population tested
l	liter
LCS	laboratory control sample
LEL	lower explosive limit
LT	less than the certified reporting limit
max	maximum
MDL	method detection limit
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter
mh	inorganic silts, micaceous or diatomaceous fine, sandy or silt soils
MHz	megahertz
µg/g	micrograms per gram
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
µmhos/cm	micromhos per centimeter
min	minimum
MINICAMS	miniature continuous air sampling system
ml	inorganic silts and very fine sands
mL	milliliter
mm	millimeter
MM	mounded material
MOGAS	motor vehicle gasoline
MPA	methyl phosphonic acid
MR	molasses residue
MS	matrix spike
mS/cm	millisiemens per centimeter
MSD	matrix spike duplicate
msl	mean sea level
MtD3	Montevallo shaly, silty clay loam, 10 to 40 percent slopes , severely eroded
mV	millivolts
MW	monitoring well
N/A	not applicable; not available
NAD	North American Datum
NAD83	North American Datum of 1983
NAVD88	North American Vertical Datum of 1988
ND	not detected
NE	no evidence; northeast
NFA	No Further Action
ng/L	nanograms per liter
NGVD	National Geodetic Vertical Datum
NIC	notice of intended change
NIOSH	National Institute for Occupational Safety and Health
No.	number
NOAA	National Oceanic and Atmospheric Administration
NR	not requested
ns	nanosecond
N-S	north to south
nT	nanotesla
NTU	nephelometric turbidity unit
O&G	oil and grease
OD	outside diameter
OE	ordnance and explosives
oh	organic clays of medium to high plasticity
ol	organic silts and organic silty clays of low plasticity
OP	organophosphorus
ORP	oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OWS	oil/water separator
oz	ounce
PAH	polynuclear aromatic hydrocarbon
Parsons	Parsons Engineering Science, Inc.
Pb	lead
PCB	polychlorinated biphenyl
PCE	perchloroethene
PCP	pentachlorophenol
PDS	Personnel Decontamination Station
PEL	permissible exposure limit
Pest.	pesticide
PG	professional geologist
PID	photoionization detector
PkA	Philo and Stendal soils local alluvium, 0 to 2 percent slopes
POL	petroleum, oils, and lubricants
PP	peristaltic pump
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
PPMP	Print Plant Motor Pool
ppt	parts per thousand
PSSC	potential site-specific chemical
pt	peat or other highly organic silts
PVC	polyvinyl chloride
QA	quality assurance
QA/QC	quality assurance/quality control
QAP	installation-wide quality assurance plan
QC	quality control
QST	QST Environmental Inc.
qty	quantity
Qual	qualifier
'R'	rejected; resample
RCRA	Resource Conservation and Recovery Act
RDX	cyclonite
ReB3	Rarden silty clay loams
REG	field sample
REL	recommended exposure limit
RFA	request for analysis
RI	remedial investigation
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
RSD	relative standard deviation
RTK	real-time kinematic
SAD	South Atlantic Division
SAE	Society of Automotive Engineers
SAIC	Science Applications International Corporation
SAP	installation-wide sampling and analysis plan

List of Abbreviations and Acronyms *(Continued)*

sc	clayey sands; sand-clay mixtures
Sch.	schedule
SD	sediment
SDG	sample delivery group
SDZ	safe distance zone; surface danger zone
SEMS	Southern Environmental Management & Specialties, Inc.
SFSP	site-specific field sampling plan
SGF	standard grade fuels
SHP	installation-wide safety and health plan
SI	site investigation
SL	standing liquid
sm	silty sands; sand-silt mixtures
SM	Serratia marcescens
SOP	standard operating procedure
sp	poorly graded sands; gravelly sands
SP	sump pump
Sr-90	strontium-90
Ss	stony rough land, sandstone series
SS	surface soil
SSC	site-specific chemical
SSHO	site safety and health officer
SSHP	site-specific safety and health plan
SSSL	site-specific screening level
STB	supertropical bleach
STEL	short-term exposure limit
STOLS	Surface Towed Ordnance Locator System®
Std. units	standard units
SU	standard unit
SVOC	semivolatile organic compound
SW	surface water
SW-846	U.S. EPA *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*
SZ	support zone
TAL	target analyte list
TAT	turn around time
TB	trip blank
TCA	trichloroethane
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TCDF	tetrachlorodibenzofurans
TCE	trichloroethene
TCL	target compound list
TCLP	toxicity characteristic leaching procedure
TDGCL	thiodiglycol
TDGCLA	thiodiglycol chloroacetic acid
TERC	Total Environmental Restoration Contract
TIC	tentatively identified compound
TLV	threshold limit value
TN	Tennessee
TOC	top of casing; total organic carbon
TPH	total petroleum hydrocarbons
TRADOC	U.S. Army Training and Doctrine Command
TRPH	total recoverable petroleum hydrocarbons
TWA	time weighted average
UCL	upper confidence limit
UCR	upper certified range
'U'	not detected above reporting limit
USACE	U.S. Army Corps of Engineers
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
USAEC	U.S. Army Environmental Center
USAEHA	U.S. Army Environmental Hygiene Agency
USACMLS	U.S. Army Chemical School
USAMPS	U.S. Army Military Police School
USATEU	U.S. Army Technical Escort Unit
USATHAMA	U.S. Army Toxic and Hazardous Material Agency
USCS	Unified Soil Classification System
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
UXO	unexploded ordnance
VOA	volatile organic analyte
VOC	volatile organic compound
VOH	volatile organic hydrocarbon
VQlfr	validation qualifier
VQual	validation qualifier
VX	nerve agent (O-ethyl-S-[diisopropylaminoethyl]-methylphosphonothiolate)
Weston	Roy F. Weston, Inc.
WP	installation-wide work plan
WS	watershed
WSA	Watershed Screening Assessment
WWI	World War I
WWII	World War II
XRF	x-ray fluorescence
yd^3	cubic yards

SAIC – Data Qualifiers, Codes and Footnotes, 1995 Remedial Investigation

N/A – Not analyzed

ND – Not detected

Boolean Codes

- LT – Less than the certified reporting limit

Flagging Codes

- 9 – Non-demonstrated/validated method performed for USAEC
- B – Analyte found in the method blank or QC blank
- C – Analysis was confirmed
- D – Duplicate analysis
- I – Interfaces in sample make quantitation and/or identification to be suspicious
- J – Value is estimated
- K – Reported results are affected by interfaces or high background
- N – Tentatively identified compound (match greater than 70%)
- Q – Sample interference obscured peak of interest
- R – Non-target compound analyzed for but not detected (GC/MS methods)
- S – Non-target compound analyzed for and detected (GC/MS methods)
- T – Non-target compound analyzed for but not detected (non GC/MS methods)
- U – Analysis in unconfirmed
- Z – Non-target compound analyzed for and detected (non-GC/MS methods)

Qualifiers

- J – The low-spike recovery is low
- N – The high-spike recovery is low
- R – Data is rejected

APPENDIX A

HTRW DRILLING LOGS

HTRW DRILLING LOG

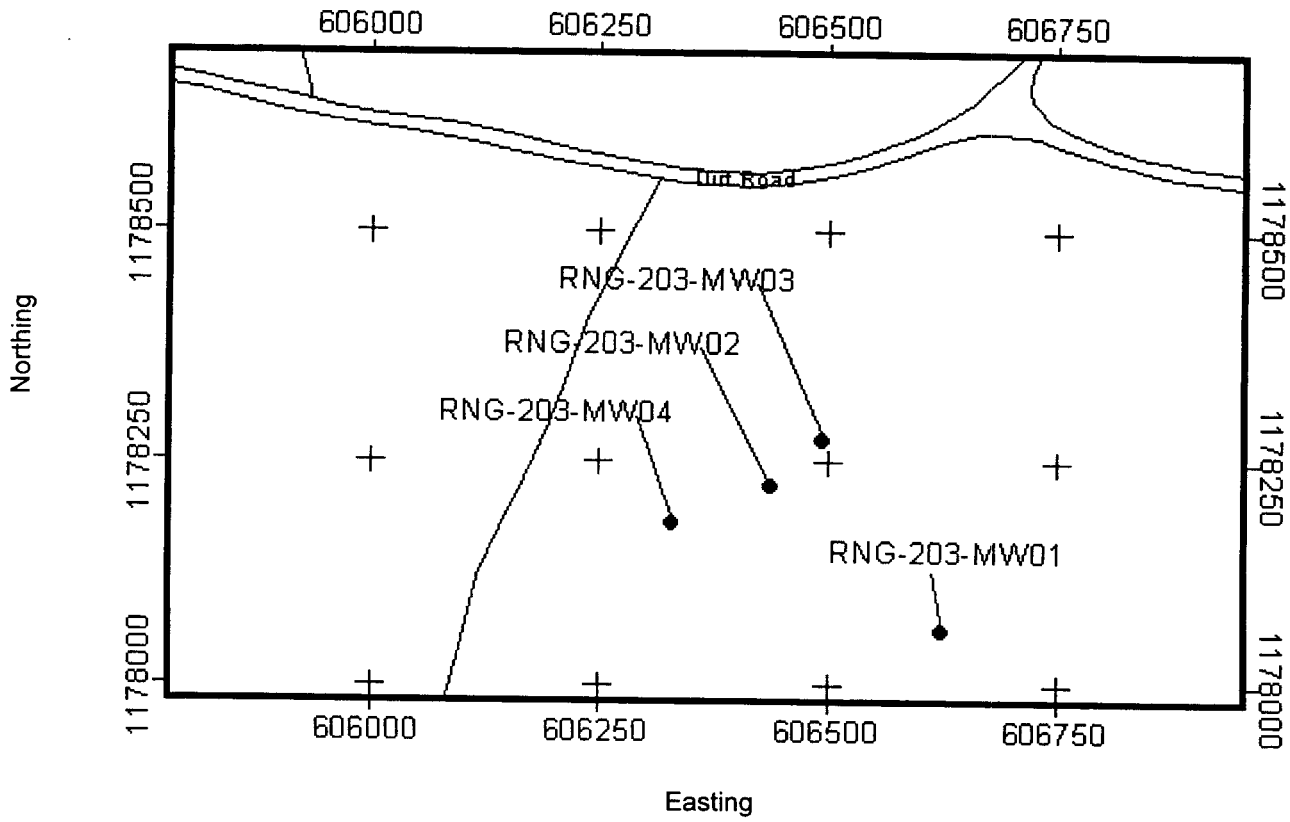
HOLE NUMBER	RNG-203-MW01

1. Company name: IT Corporation	2. Drill Subcontractor: Miller Drilling	Sheet 1 of 3 sheets

3. Project: Fort McClellan	4. Location: RNG-203
5. Name of driller: Ken Gobell	6. Mfr. designation of drill: CME-550 ATV
7. Sizes and types of drilling and sampling equipment: Hollow Stem Auger 4.25" HSA, 2"x24" split spoons	8. Hole location Range K 9. Surface elevation (feet above mean sea level): 583.95 10. Date started: 02/29/00 / 11. Date completed: 02/29/00
12. Overburden thickness (feet bgs): >14	15. Depth groundwater encountered (feet bgs): 1 Ft
13. Depth drilled into rock (feet bgs):	16. Depth to water and elapsed time after drilling completed (feet bgs):
14. Total depth of hole (feet bgs): 14	17. Other water level measurements (specify):

18. Geotechnical samples:	Disturbed:	Undisturbed:		19. Total no. of core boxes:		
20. Samples for chemical analysis:	VOC	Metals	Other (specify)	Other (specify)	Other (specify)	21. Total core recovery:
	X	X	SVOC	Nitro Exp.		N/A
22. Disposition of hole:	Backfilled	Monitoring well	Other (specify)	Geologist:		
		X		John Hofer		

LOCATION SKETCH/COMMENTS:



bgs= below ground surface
NA = Not applicable

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW01

Project: Fort McClellan | Geologist: John Hofer | Sheet 2 of 3 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	0	cl: Yellowish orange to light brown CLAY, medium stiff, wet.			Organic Vapor = 0.0ppm				Rec 16"/24"
	1		cl				RG0001		Wet at 1'.
	2	cl: Brownish red, CLAY with Sand, medium grained, very soft, saturated to moist.			Organic Vapor = 0.0ppm				Rec 10"/24"
	3		cl						
580	4	ml: Brownish gray-brown mottled SILT, medium stiff, very moist.			Organic Vapor = 0.0ppm				Rec 21"/24"
	5		ml						
	6	ml: Dark brown SILT thin, high angle bedding, medium stiff, moist, odor.			Organic Vapor = 0.0ppm				Rec 18"/24"
	7		ml				RG0002		
	8	ml: Dark brown SILT, some weathered Shale, medium stiff, moist.			Organic Vapor = 0.0ppm				Rec 12"/24"
575	9		ml						

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW01

Project: Fort McClellan

Geologist: John Hofer

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	10	sh: Weathered SHALE.			Organic Vapor = 0.0ppm				10
	11								11
	12		sh						12
	13								13
570	14								Bottom of borehole is 14'. 10' below 1st water. 14

HTRW DRILLING LOG

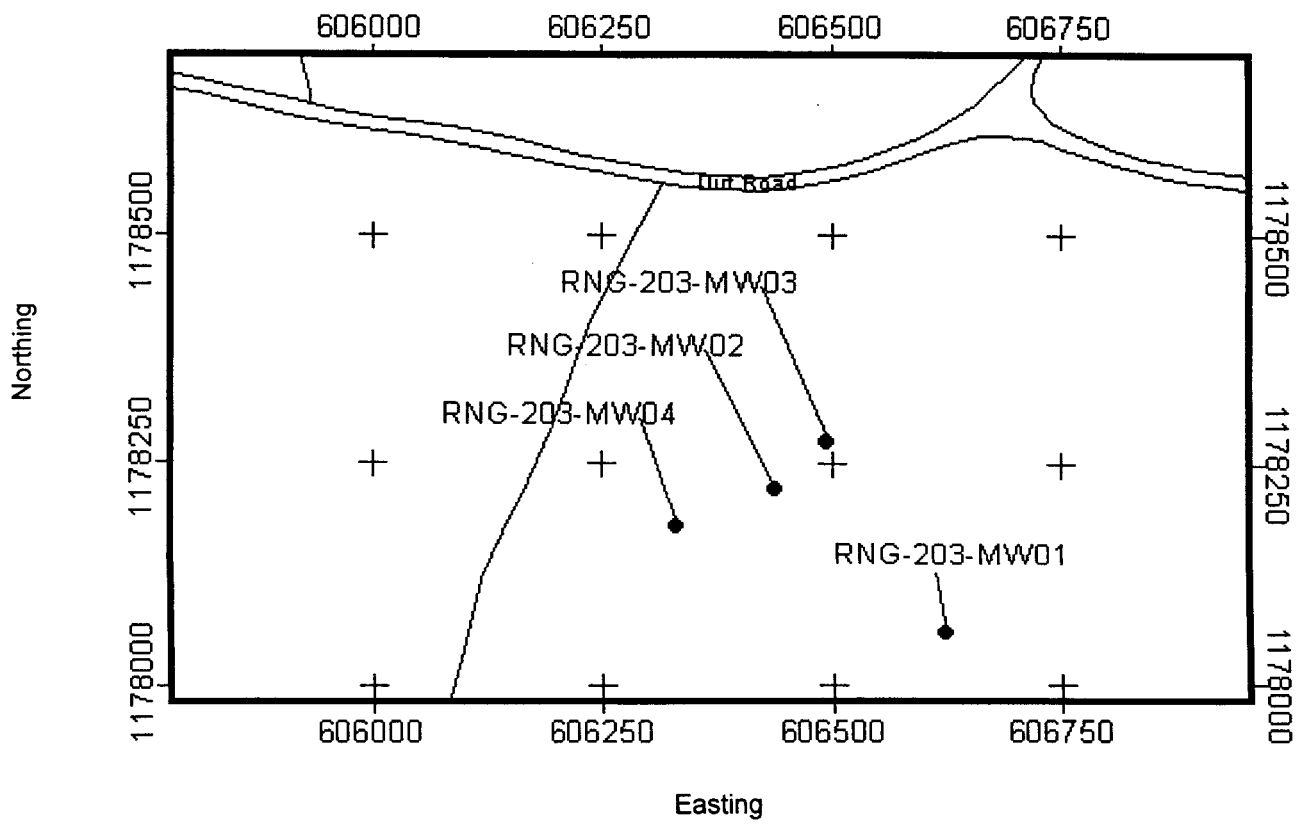
HOLE NUMBER
RNG-203-MW02

1. Company name: IT Corporation	2. Drill Subcontractor: Miller Drilling	Sheet 1 of 4 sheets

3. Project: Fort McClellan	4. Location: RNG-203
5. Name of driller: Ken Gobell	6. Mfr. designation of drill: CME-550 ATV
7. Sizes and types of drilling and sampling equipment: Hollow Stem Auger 4.25" HSA, 2"x24" Split Spoons	8. Hole location Range K 9. Surface elevation (feet above mean sea level): 593.90 10. Date started: 03/01/00 / 11. Date completed: 03/01/00
12. Overburden thickness (feet bgs): >22	15. Depth groundwater encountered (feet bgs): 7.5 Ft
13. Depth drilled into rock (feet bgs):	16. Depth to water and elapsed time after drilling completed (feet bgs):
14. Total depth of hole (feet bgs): 22	17. Other water level measurements (specify):

18. Geotechnical samples:	Disturbed:	Undisturbed:		19. Total no. of core boxes:		
20. Samples for chemical analysis:	VOC	Metals	Other (specify)	Other (specify)	Other (specify)	21. Total core recovery:
	X	X	SVOC	Nitro Exp.		N/A
22. Disposition of hole:	Backfilled	Monitoring well	Other (specify)	Geologist:		
		X		John Hofer		

LOCATION SKETCH/COMMENTS:



Project: Fort McClellan

bgs= below ground surface
NA = Not applicable

Hole no.: RNG-203-MW02

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW02

Project: Fort McClellan | Geologist: John Hofer | Sheet 2 of 4 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	0	cl: Yellowish orange to light brown CLAY, dry, stiff, low plasticity.	cl		Organic Vapor = 0.0ppm		RG0005		Rec 24"/24"
	1								
	2	ml: Yellowish orange to light brown SILT with some Clay with gray mottling, dry stiff, low plasticity.	ml		Organic Vapor = 0.0ppm				Rec 24"/24"
	3								
590	4	cl-ml: Interbedded yellow SILT and gray CLAY vertical bedding, slightly moist, medium stiff.	cl-ml		Organic Vapor = 0.0ppm				Rec 24"/24"
	5								
	6				Organic Vapor = 0.0ppm		RG0006		Rec 24"/24"
	7								
		ml: Light brown SILT, saturated soft.							Wet at 7.5'.
	8				Organic Vapor = 0.0ppm				Rec 18"/24"
585	9								

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW02

Project: Fort McClellan | Geologist: John Hofer | Sheet 3 of 4 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	10				Organic Vapor = 0.0ppm				
	11								
	12								
	13		ml						
580	14								
	15								
	16								
	17								
	18								
575	19	ch: Yellowish orange CLAY with some weathered Shale fragments, saturated, soft.	ch		Organic Vapor = 0.0ppm				

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW02

Project: Fort McClellan

Geologist: John Hofer

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	20								20
	21	ch: Brownish-yellow CLAY, high plasticity with some weathered Shale fragments, some Sand, saturated.	ch		Organic Vapor = 0.0ppm				Rec 20"/24" 21
	22								Bottom of borehole is 22'. 22

HTRW DRILLING LOG

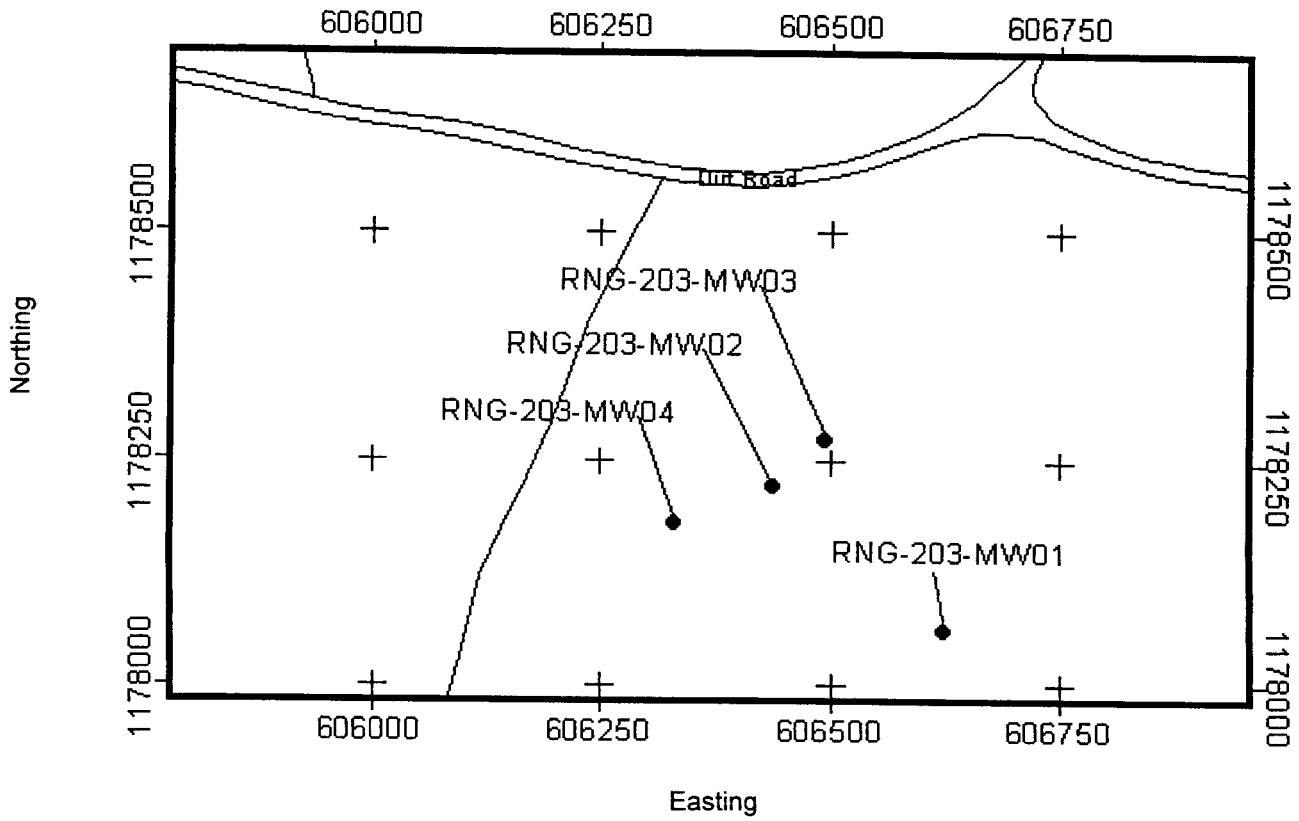
HOLE NUMBER
RNG-203-MW03

1. Company name: IT Corporation	2. Drill Subcontractor: Miller Drilling	Sheet 1 of 5 sheets

3. Project: Fort McClellan	4. Location: RNG-203
5. Name of driller: Ken Gobell	6. Mfr. designation of drill: CME-550 ATV
7. Sizes and types of drilling and sampling equipment: Hollow Stem Auger 4.25" HSA, 2"x24" Split Spoons	8. Hole location Range K 9. Surface elevation (feet above mean sea level): 598.26 10. Date started: 03/01/00 11. Date completed: 03/07/00
12. Overburden thickness (feet bgs): 33.5	15. Depth groundwater encountered (feet bgs): 26 Ft
13. Depth drilled into rock (feet bgs): 2.5	16. Depth to water and elapsed time after drilling completed (feet bgs):
14. Total depth of hole (feet bgs): 33.5	17. Other water level measurements (specify):

18. Geotechnical samples:	Disturbed:	Undisturbed:		19. Total no. of core boxes:		
20. Samples for chemical analysis:	VOC	Metals	Other (specify)	Other (specify)	Other (specify)	21. Total core recovery:
	X	X	SVOC	Nitro Exp.		N/A
22. Disposition of hole:	Backfilled	Monitoring well	Other (specify)	Geologist:		
		X		John Hofer		

LOCATION SKETCH/COMMENTS:



Project: Fort McClellan

bgs= below ground surface
NA = Not applicable

Hole no.: RNG-203-MW03

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW03

Project: Fort McClellan | Geologist: John Hofer | Sheet 2 of 5 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	0	cl: Yellowish orange to light brown CLAY, some Silt, some red weathered Shale, dry to slightly moist,stiff, low plasticity.	cl		Organic Vapor = 13.5ppm				Rec 24"/24"
	1				Organic Vapor = 0.0ppm		RG0007		
	2	ml: Brown to gray SILT and weathered SHALE, weathered SHALE, thin, vertical bedding, gray; brown: and rust colored, dry, friable, low plasticity.	ml		Organic Vapor = 0.0ppm				Rec 12"/24"
595	3								
	4				Organic Vapor = 0.0ppm				Rec 23"/24"
		cl: Yellowish orange to light brown CLAY, some Silt, thin vertical bedding, dry, low plasticity, stiff.	cl						
	5								
		sh: Brown, black, gray, rust weathered SHALE, dry, friable.							
	6				Organic Vapor = 0.0ppm				Rec 23"/24"
	7								
	8				Organic Vapor = 0.0ppm				Rec 16"/24"
590									
	9								

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW03

Project: Fort McClellan | Geologist: John Hofer | Sheet 3 of 5 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	10		sh		Organic Vapor = 0.0ppm				Rec 23"/24"
	11						RG0008		
	12								
	13								
585									
	14	sh: Brownish-black weathered SHALE, dry, friable, high angle bedding.			Organic Vapor = 0.0ppm				Rec 18"/24"
	15								
	16		sh						
	17								
	18								
580									
	19	sh: Very dark gray to brownish black weathered SHALE, some Quartz, dry, friable.	sh						Rec 9"/11"

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW03

Project: Fort McClellan | Geologist: John Hofer | Sheet 4 of 5 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	20				Organic Vapor = 0.0ppm				
	21	sh: Brownish black weathered SHALE, dry.							Description from auger cuttings, hard drilling.
	22		sh						
575	23								
	24								
	25	sh: Black SHALE, weathered.							
	26								Softer 26'-27'. Water encountered at 26'
	27								
570	28		sh						
	29								Saturated cuttings
	30								

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW03

Project: Fort McClellan | Geologist: John Hofer | Sheet 5 of 5 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	31	sh: Black SHALE, hard.							31
	32		sh						32
	33								33
565									Hollow stem auger refusal at 33.5'. Bottom of borehole is 33.5'.

HTRW DRILLING LOG

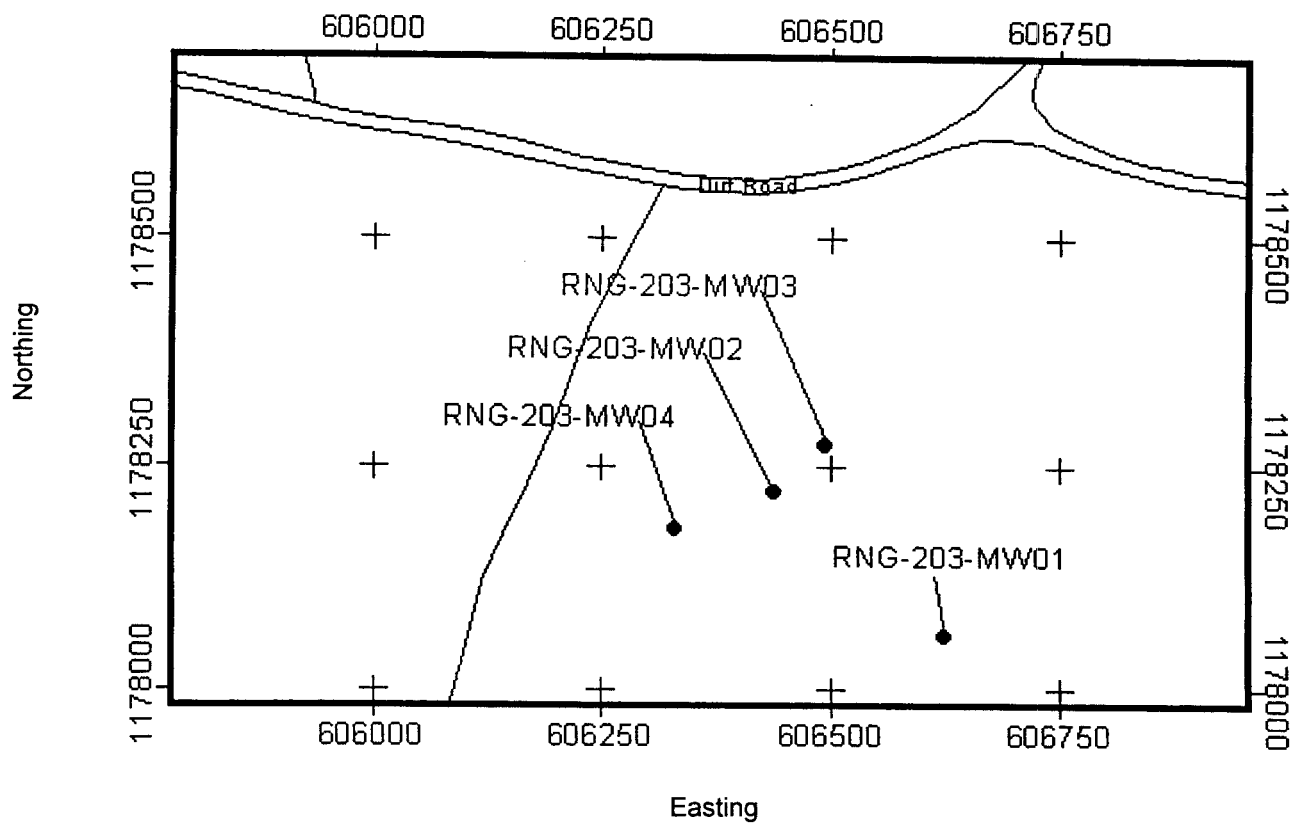
HOLE NUMBER RNG-203-MW04

1. Company name: IT Corporation	2. Drill Subcontractor: Miller Drilling	Sheet 1 of 4 sheets

3. Project: Fort McClellan	4. Location: RNG-203
5. Name of driller: Ken Gobell	6. Mfr. designation of drill: CME-550 ATV
7. Sizes and types of drilling and sampling equipment: Hollow Stem Auger 4.25" HSA, 2"x24" split spoon	8. Hole location Range K 9. Surface elevation (feet above mean sea level): 586.73 10. Date started: 03/02/00 11. Date completed: 03/02/00
12. Overburden thickness (feet bgs): >26	15. Depth groundwater encountered (feet bgs): 18 Ft
13. Depth drilled into rock (feet bgs):	16. Depth to water and elapsed time after drilling completed (feet bgs):
14. Total depth of hole (feet bgs): 26	17. Other water level measurements (specify):

18. Geotechnical samples:	Disturbed:	Undisturbed:		19. Total no. of core boxes:		
20. Samples for chemical analysis:	VOC	Metals	Other (specify)	Other (specify)	Other (specify)	21. Total core recovery:
	X	X	SVOC	Nitro Exp.		N/A
22. Disposition of hole:	Backfilled	Monitoring well	Other (specify)	Geologist:		
		X		John Hofer		

LOCATION SKETCH/COMMENTS:



Project: Fort McClellan

bgs= below ground surface
NA = Not applicable

Hole no.: RNG-203-MW04

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW04

Project: Fort McClellan | Geologist: John Hofer | Sheet 2 of 4 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	0	ml: Olive gray SILT, soft, moist.			Organic Vapor = 0.0ppm				Rec 24"/24"
	1		ml				RG0009		
585									
	2	ml: Yellowish-orange to light brown SILT, some Sand, soft, saturated.			Organic Vapor = 0.0ppm				Rec 24"/24"
	3		ml						
	4	ml: Yellowish-orange to light brown SILT, trace Clay, no sand, slightly moist, stiff.			Organic Vapor = 0.0ppm				Rec 7"/24"
	5		ml						
	6	ml: Yellowish-orange to light brown SILT with Clay, slightly moist to dry, very stiff.			Organic Vapor = 0.0ppm				Rec 18"/24"
580									
	7						RG0010		
	8								
	9								

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW04

Project: Fort McClellan | Geologist: John Hofer | Sheet 3 of 4 sheets

Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	10		ml						
	11								
575									
	12								
	13								
	14	cl: Brownish yellow CLAY, some Silt, gray mottling, slightly moist to dry, very stiff, moderate plasticity.	cl						
	15	cl: Brownish yellow CLAY with Sandstone Gravel gray.							
	16								
570									
	17		cl						
	18								Water encountered at 18'.
	19	ch: Yellowish-orange to light brown CLAY some Silt, high plasticity, moist, medium stiff.	ch						

HTRW DRILLING LOG (Continuation Sheet)

HOLE NUMBER: RNG-203-MW04

Project: Fort McClellan | Geologist: John Hofer | Sheet 4 of 4 sheets

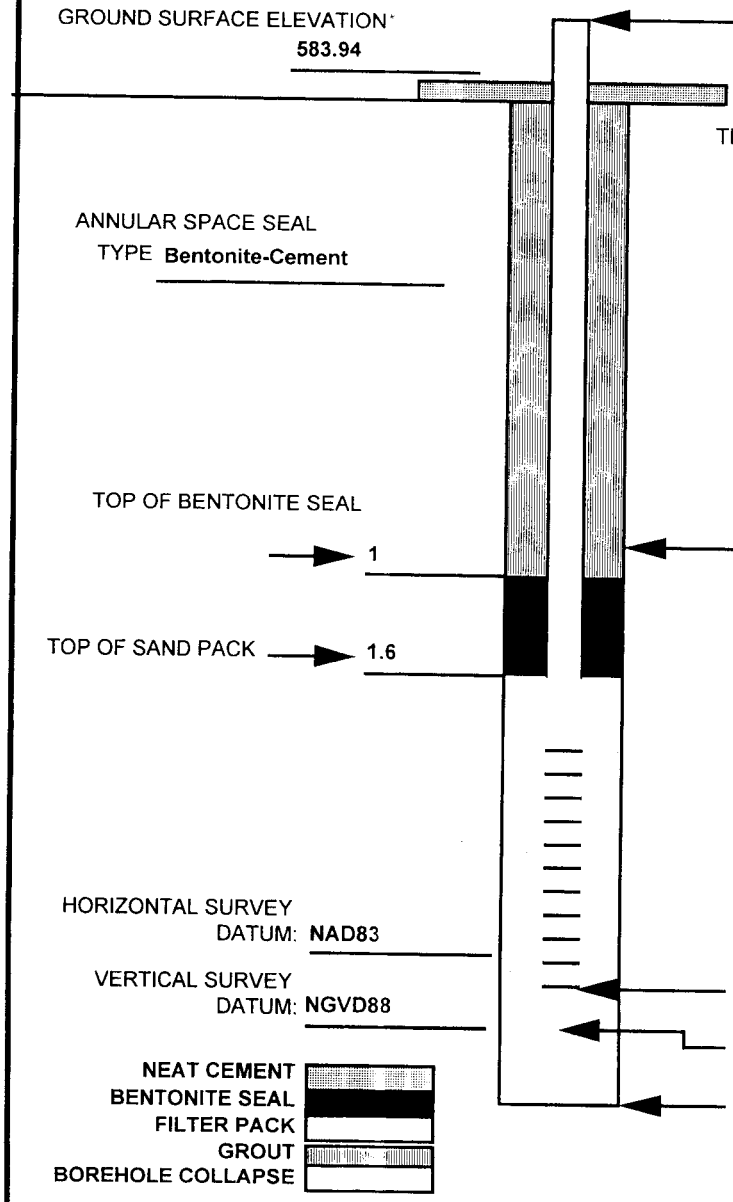
Elev. (a)	Depth (b)	Description of Materials (c)	USCS / Lithology	Graphic	Field screening results (d)	Geotech sample or core box no. (e)	Analytical sample no. (f)	Blow count (g)	Remarks (h)
	20	ch: Yellowish-orange to brown CLAY, some Silt in fractures, moist, fractures saturated, soft, high plasticity.			Organic Vapor = 0.0ppm				
	21		ch						Rec 23"/24"
565	22	ch: Olive brown CLAY, silty, trace coarse Sand.							Description from hollow stem auger cuttings.
	23		ch						
	24	NA: No recovery.							Rec 0"/24" No recovery.
	25		NA						Bottom of borehole is 26'.
	26								

APPENDIX B

MONITORING WELL COMPLETION LOGS

MONITORING WELL INSTALLATION DETAIL

PROJECT: Fort McClellan, SAD TERC	WELL NO: RNG-203-MW01
LOCATION Anniston, AL	DRILLING METHOD: Hollow Stem Auger
CLIENT: USACE Mobile District	INSTALLATION DATE 03/01/00
CONTRACTOR Miller Drilling	NORTHING: 1178057.75
DRILLER: Ken Gobell	EASTING: 606622.75
IT FIELD REPRESENTATIVE: John Hofer	JOB NO: 774645A



GROUND SURFACE ELEVATION* 583.94

TOP of WELL CASING or RISER PIPE EL* 586.37 STICKUP 2.43

TYPE of SURFACE SEAL Concrete

THICKNESS of SURFACE SEAL (inches) 4

ANNULAR SPACE SEAL TYPE Bentonite-Cement

TYPE of RISER MATERIAL (Flush Threaded) PVC SCH 40

INSIDE DIAMETER of RISER (inches) 2

TOP OF BENTONITE SEAL 1

APPROXIMATE DIAMETER of BOREHOLE (inches) 8

TOP OF SAND PACK 1.6

TOP OF SCREENED INTERVAL EL* 581.74 DEPTH 2.2

TYPE of SCREEN MATERIAL PVC SCH 40

SLOT SIZE (inches) 0.010

INSIDE DIAMETER (inches) 2

TYPE of SAND PACK AROUND SCREEN Sand No 1

HORIZONTAL SURVEY DATUM: NAD83

VERTICAL SURVEY DATUM: NGVD88

BOTTOM of SCREENED INTERVAL EL* 571.74 DEPTH 12.2

BOTTOM of SUMP and WELL EL* 571.44 DEPTH 12.5

BOTTOM of BOREHOLE EL* 569.94 DEPTH 14

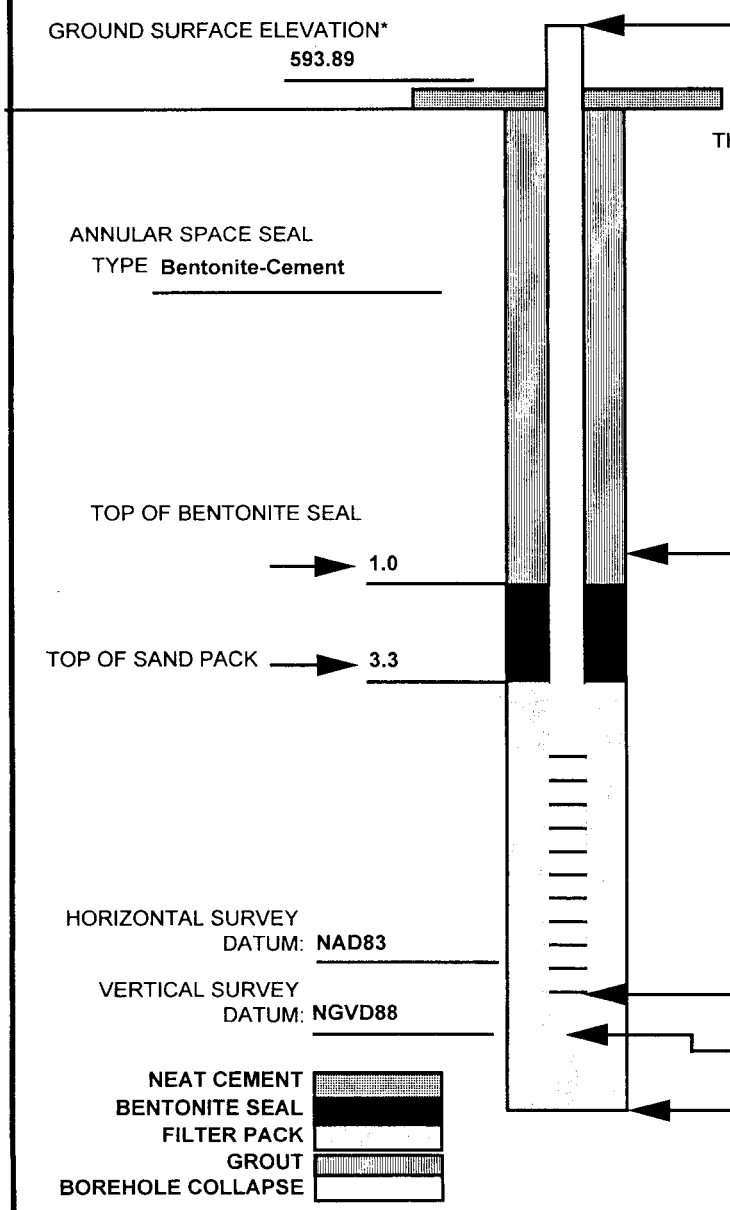
NEAT CEMENT
BENTONITE SEAL
FILTER PACK
GROUT
BOREHOLE COLLAPSE

*All elevations (EL) are referenced to MSL.

All depths and heights are given in feet and are referenced to the ground surface.

MONITORING WELL INSTALLATION DETAIL

PROJECT: Fort McClellan, SAD TERC	WELL NO: RNG-203-MW02
LOCATION Anniston, AL	DRILLING METHOD: Hollow Stem Auger
CLIENT: USACE Mobile District	INSTALLATION DATE 03/01/00
CONTRACTOR Miller Drilling	NORTHING: 1178219.9
DRILLER: Ken Gobell	EASTING: 606436.12
IT FIELD REPRESENTATIVE: John Hofer	JOB NO: 774645A



GROUND SURFACE ELEVATION* 593.89

TOP of WELL CASING or RISER PIPE
EL* 596.59 STICKUP 2.70

TYPE of SURFACE SEAL Concrete

THICKNESS of SURFACE SEAL (inches) 4

ANNULAR SPACE SEAL
TYPE Bentonite-Cement

TYPE of RISER MATERIAL (Flush Threaded) PVC SCH 40

INSIDE DIAMETER of RISER (inches) 2

TOP OF BENTONITE SEAL 1.0

APPROXIMATE DIAMETER of BOREHOLE (inches) 8

TOP OF SAND PACK 3.3

TOP OF SCREENED INTERVAL
EL* 588.89 DEPTH 5

TYPE of SCREEN MATERIAL PVC SCH 40

SLOT SIZE (inches) 0.010

INSIDE DIAMETER (inches) 2

TYPE of SAND PACK AROUND SCREEN Sand No 1

HORIZONTAL SURVEY DATUM: NAD83

VERTICAL SURVEY DATUM: NGVD88

BOTTOM of SCREENED INTERVAL
EL* 573.89 DEPTH 20

BOTTOM of SUMP and WELL
EL* 571.89 DEPTH 22

BOTTOM of BOREHOLE
EL* 571.89 DEPTH 22

NEAT CEMENT
BENTONITE SEAL
FILTER PACK
GROUT
BOREHOLE COLLAPSE

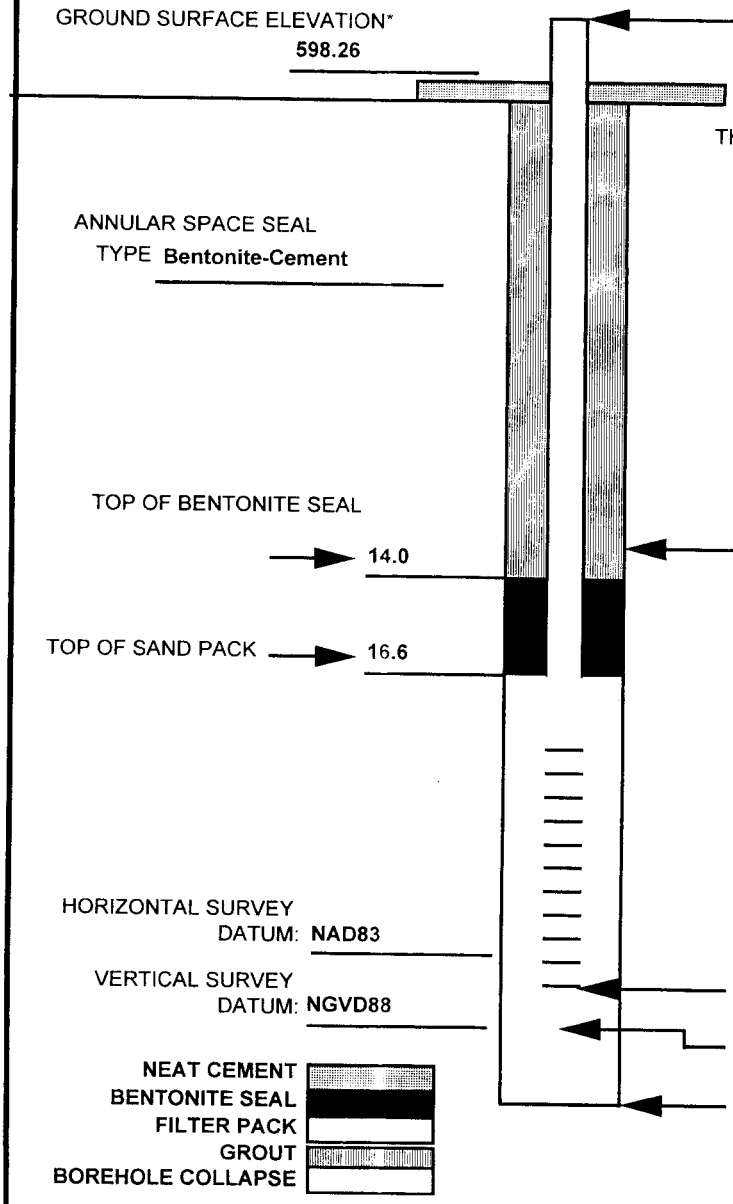
*All elevations (EL) are referenced to MSL.

All depths and heights are given in feet and are referenced to the ground surface.

MONITORING WELL INSTALLATION DETAIL

PROJECT: Fort McClellan, SAD TERC
LOCATION Anniston, AL
CLIENT: USACE Mobile District
CONTRACTOR Miller Drilling
DRILLER: Ken Gobell
IT FIELD REPRESENTATIVE: John Hofer

WELL NO: RNG-203-MW03
DRILLING METHOD: Hollow Stem Auger
INSTALLATION DATE 03/07/00
NORTHING: 1178269.19
EASTING: 606493.25
JOB NO: 774645A



GROUND SURFACE ELEVATION* 598.26

TOP of WELL CASING or RISER PIPE EL* 600.98 STICKUP 2.7

TYPE of SURFACE SEAL Concrete

THICKNESS of SURFACE SEAL (inches) 4

ANNULAR SPACE SEAL TYPE Bentonite-Cement

TYPE of RISER MATERIAL (Flush Threaded) PVC SCH 40

INSIDE DIAMETER of RISER (inches) 2

TOP OF BENTONITE SEAL 14.0

APPROXIMATE DIAMETER of BOREHOLE (inches) 8

TOP OF SAND PACK 16.6

TOP OF SCREENED INTERVAL EL* 575.06 DEPTH 23.2

TYPE of SCREEN MATERIAL PVC SCH 40

SLOT SIZE (inches) 0.010

INSIDE DIAMETER (inches) 2

TYPE of SAND PACK AROUND SCREEN Sand No 1

HORIZONTAL SURVEY DATUM: NAD83

VERTICAL SURVEY DATUM: NGVD88

BOTTOM of SCREENED INTERVAL EL* 565.06 DEPTH 33.2

BOTTOM of SUMP and WELL EL* 564.76 DEPTH 33.5

BOTTOM of BOREHOLE EL* 564.76 DEPTH 33.5

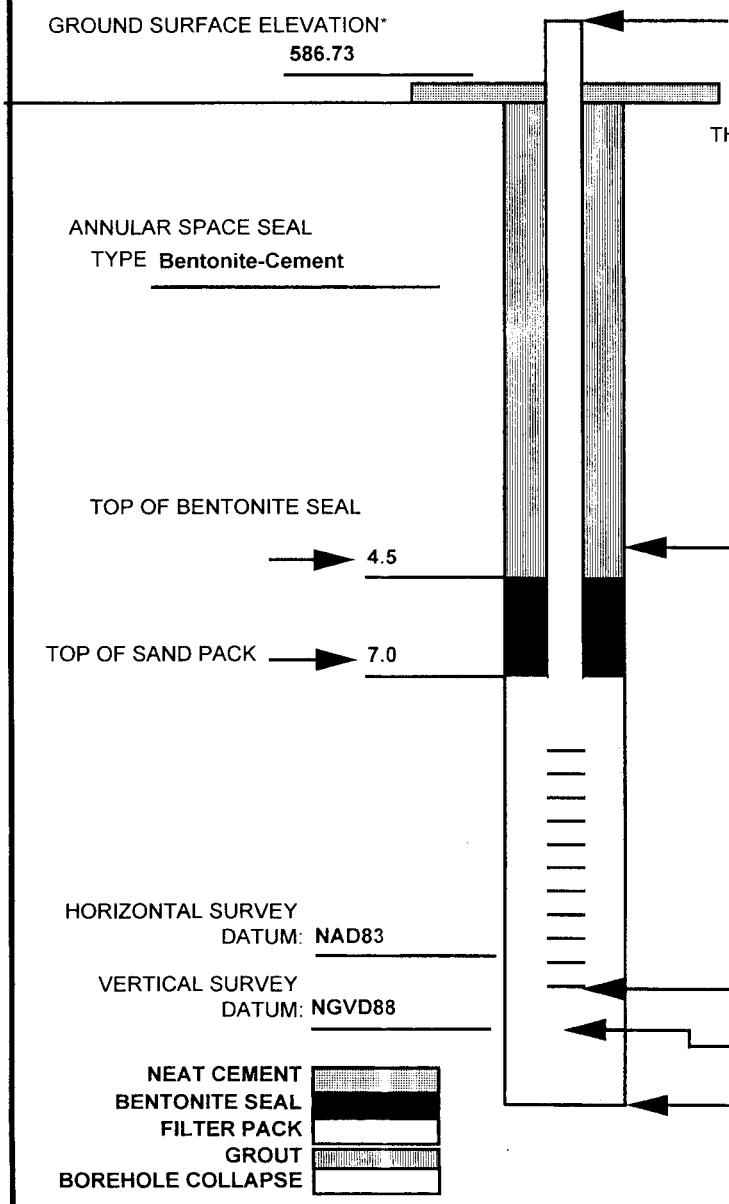
NEAT CEMENT
BENTONITE SEAL
FILTER PACK
GROUT
BOREHOLE COLLAPSE

*All elevations (EL) are referenced to MSL.

All depths and heights are given in feet and are referenced to the ground surface.

MONITORING WELL INSTALLATION DETAIL

PROJECT: Fort McClellan, SAD TERC	WELL NO: RNG-203-MW04
LOCATION Anniston, AL	DRILLING METHOD: Hollow Stem Auger
CLIENT: USACE Mobile District	INSTALLATION DATE 03/02/00
CONTRACTOR Miller Drilling	NORTHING: 1178176.62
DRILLER: Ken Gobell	EASTING: 606330.84
IT FIELD REPRESENTATIVE: John Hofer	JOB NO: 774645A



GROUND SURFACE ELEVATION* 586.73

TOP of WELL CASING or RISER PIPE EL* 589.6 STICKUP 2.87

TYPE of SURFACE SEAL Concrete

THICKNESS of SURFACE SEAL (inches) 4

ANNULAR SPACE SEAL TYPE Bentonite-Cement

TYPE of RISER MATERIAL (Flush Threaded) PVC SCH 40

INSIDE DIAMETER of RISER (inches) 2

TOP OF BENTONITE SEAL 4.5

APPROXIMATE DIAMETER of BOREHOLE (inches) 8

TOP OF SAND PACK 7.0

TOP OF SCREENED INTERVAL EL* 577.73 DEPTH 9.0

TYPE of SCREEN MATERIAL PVC SCH 40

SLOT SIZE (inches) 0.010

INSIDE DIAMETER (inches) 2

TYPE of SAND PACK AROUND SCREEN Sand No 1

HORIZONTAL SURVEY DATUM: NAD83

VERTICAL SURVEY DATUM: NGVD88

BOTTOM of SCREENED INTERVAL EL* 562.73 DEPTH 24

BOTTOM of SUMP and WELL EL* 560.73 DEPTH 26

BOTTOM of BOREHOLE EL* 560.73 DEPTH 26

NEAT CEMENT
BENTONITE SEAL
FILTER PACK
GROUT
BOREHOLE COLLAPSE

*All elevations (EL) are referenced to MSL.

All depths and heights are given in feet and are referenced to the ground surface.

APPENDIX C

MONITORING WELL SURVEY DATA

Appendix C

Survey Data
Range K, Former Agent Training Site, Parcel 203(7)
Fort McClellan, Calhoun County, Alabama

Sample Location	Northing	Easting	Ground Elevation (ft msl)	Top of Casing Elevation (ft msl)
RNG-203-MW01	1178057.76	606622.75	583.95	586.37
RNG-203-MW02	1178219.91	606436.13	593.90	596.59
RNG-203-MW03	1178269.19	606493.26	598.26	600.99
RNG-203-MW04	1178176.62	606330.85	586.73	589.61

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).

ft msl - Feet mean sea level
NA - Not available, temporary well not installed.

APPENDIX D

SUMMARY STATISTICS FOR THE ESTABLISHMENT OF BACKGROUND METALS AT FTMC

Summary Statistics for Surface Soil (0 -1 BLS)
Fort McClellan, Alabama

Run Time: 8:18:07 AM
Run Date: 7/10/98
Exposure Unit: SS

Parameter	Units	Total Number of Samples	Total Number of Detects	Frequency of Detection	NonDetects Min CRL	NonDetects Max CRL	Detects Minimum	Detects Maximum	Arithmetic Mean[a]	Standard Deviation[a]	Distribution[b]	95% UCL of Arith. Mean[a]	Exposure Point Concentration[c]		2x Arithmetic Mean[a]
Aluminum	ug/g	70	70	100%	- -	- -	2,400	39,900	8,153.00	6,095	Lognormal	11,187	11,187		16,306
Antimony	ug/g	69	47	68%	0.082	7.1	0.11	2.6	0.99	1.3	Lognormal	3.4	2.6	#	1.99
Arsenic	ug/g	66	66	100%	- -	- -	0.82	49	6.86	8.0	Lognormal	13	13		13.73
Barium	ug/g	70	70	100%	- -	- -	11	288	61.97	54	Lognormal	99	99		123.94
Beryllium	ug/g	54	54	100%	- -	- -	0.062	0.87	0.40	0.22	Lognormal	0.61	0.61		0.80
Cadmium	ug/g	70	45	64%	0.016	1.2	0.024	0.21	0.14	0.16	Lognormal	0.36	0.21	#	0.29
Calcium	ug/g	70	66	94%	75	100	63	17,900	861.37	2,265	Lognormal	1,942	1,942		1,723
Chromium	ug/g	70	70	100%	- -	- -	2.0	134	18.52	20	Lognormal	31	31		37.04
Cobalt	ug/g	70	68	97%	1.4	1.4	0.39	71	7.57	12	Lognormal	18	18		15.15
Copper	ug/g	70	69	99%	0.50	0.50	1.3	24	6.36	4.4	Lognormal	11	11		12.71
Iron	ug/g	70	70	100%	- -	- -	2,510	56,300	17,076.86	11,577	Lognormal	27,000	27,000		34,154
Lead	ug/g	70	70	100%	- -	- -	2.9	83	20.02	15	Lognormal	33	33		40.05
Magnesium	ug/g	70	70	100%	- -	- -	60	9,600	516.49	1,266	Lognormal	768	768		1,033
Manganese	ug/g	70	70	100%	- -	- -	8.0	6,850	789.46	1,192	Lognormal	3,183	3,183		1,579
Mercury	ug/g	70	23	33%	0.023	0.050	0.031	0.32	0.04	0.046	Lognormal	0.058	0.058		0.08
Nickel	ug/g	70	56	80%	1.6	2.3	1.8	22	5.17	4.2	Lognormal	9.7	9.7		10.33
Potassium	ug/g	70	60	86%	82	116	104	6,010	399.88	948	Lognormal	607	607		799.76
Selenium	ug/g	70	1	1%	0.25	0.58	1.3	1.3	0.24	0.14	Lognormal	0.29	0.29		0.48
Silver	ug/g	70	42	60%	0.016	0.80	0.019	1.9	0.18	0.34	Lognormal	0.70	0.70		0.36
Sodium	ug/g	70	66	94%	39	39	76	563	317.14	98	Lognormal	562	562		634.28
Thallium	ug/g	68	55	81%	6.6	6.6	0.015	34	1.71	5.9	Lognormal	12	12		3.43
Vanadium	ug/g	70	70	100%	- -	- -	4.7	158	29.42	26	Lognormal	48	48		58.84
Zinc	ug/g	70	64	91%	4.9	11	4.6	209	20.32	26	Lognormal	35	35		40.64

[a]Results of duplicate analyses were averaged and nondetects were treated as one-half the detection limit in the calculation of the arithmetic mean, standard deviation, and 95% UCL.

[b]For the calculation of exposure point concentrations (EPCs):

If fewer than four samples are available, or the standard deviation of the data set is zero, the distribution is undetermined.

If the probability plot correlation coefficient of the untransformed data is > or = to the critical value, the distribution is normal.

In all other cases, the distribution assumed for the EPC calculation was lognormal.

[c]The exposure point concentration (EPC) is the 95% upper confidence (UCL) of the arithmetic mean, unless the 95% UCL exceeds the maximum detected value. If the latter is true, the maximum detected value is substituted as the EPC(denoted by a "#" next to the EPC).

- - Parameter detected in all samples.

Summary Statistics for Background Groundwater
Fort McClellan, Alabama

Run Time: 4:50:27 PM
Run Date: 7/9/98
Exposure Unit: WD

Parameter	Units	Total Number of Samples	Total Number of Detects	Frequency of Detection	NonDetects Min CRL	NonDetects Max CRL	Detects Minimum	Detects Maximum	Arithmetic Mean[a]	Standard Deviation[a]	Distribution[b]	95% UCL of Arith. Mean[a]	Exposure Point Concentration[c]		2x Arithmetic Mean[a]
Alkalinity-phenolphthalein	µg/L	33	2	6%	5,000	5,000	104,000	132,000	9,500.00	28,204	Lognormal	9,763	9,763		19,000
Aluminum	µg/L	57	34	60%	50	141	59	9,600	1,167.66	2,030	Lognormal	19,988	9,600	#	2,335
Antimony	µg/L	57	2	4%	0.60	10.0	0.70	0.80	1.60	1.7	Lognormal	4.4	0.80	#	3.191
Arsenic	µg/L	57	10	18%	1.1	2.5	1.5	224	8.88	41	Lognormal	6.1	6.1		17.764
Barium	µg/L	57	53	93%	6.5	18	5.5	401	63.73	88	Lognormal	144	144		127.458
Beryllium	µg/L	57	15	26%	0.20	5.0	0.20	2.4	0.62	0.74	Lognormal	1.8	1.8		1.247
Bicarbonate	µg/L	33	22	67%	5,000	172,000	9,000	392,000	100,818.18	93,836	Lognormal	831,264	392,000	#	201,636
Bromide	µg/L	33	4	12%	200	200	278	715	138.03	121	Lognormal	171	171		276.06
Cadmium	µg/L	57	22	39%	0.100	5.0	0.100	5.3	1.26	1.2	Lognormal	10	5.3	#	2.51
Calcium	µg/L	57	48	84%	231	33,900	217	452,000	28,246.44	60,264	Lognormal	580,060	452,000	#	56,493
Chloride	µg/L	33	24	73%	923	2,640	1,080	11,000	2,446.06	2,363	Lognormal	4,347	4,347		4,892
Cobalt	µg/L	57	3	5%	20	25	20	25	11.68	2.8	Lognormal	13	13		23.36
Copper	µg/L	57	10	18%	5.0	19	5.3	235	12.74	32	Lognormal	21	21		25.48
Fluoride	µg/L	33	6	18%	200	200	202	646	146.24	124	Lognormal	185	185		292.48
Iron	µg/L	57	44	77%	45	78	2.5	25,800	3,520.25	5,364	Lognormal	590,286	25,800	#	7,040
Lead	µg/L	57	25	44%	0.60	4.5	0.60	27	4.00	6.1	Lognormal	13	13		7,998
Magnesium	µg/L	57	47	82%	100	18,400	176	149,000	10,640.88	19,972	Lognormal	146,372	146,372		21,282
Manganese	µg/L	57	42	74%	5.0	9.7	9.8	5,820	290.25	809	Lognormal	7,221	5,820	#	580.5
Nitrate,Nitrite	µg/L	33	4	12%	10.0	1,110	430	771	141.26	219	Lognormal	1,192	771	#	282.5
Potassium	µg/L	57	43	75%	270	1,240	1.0	68,500	3,597.54	9,508	Lognormal	18,602	18,602		7,195
Silver	µg/L	57	1	2%	0.100	10.0	0.40	0.40	2.00	2.4	Lognormal	141	0.40	#	4.00
Sodium	µg/L	57	52	91%	892	1,180	555	64,700	7,423.18	11,765	Lognormal	23,173	23,173		14,846
Sulfate	µg/L	33	25	76%	1000	3,680	1,650	1.4E+06	51,628.33	242,827	Lognormal	88,195	88,195		103,257
Thallium	µg/L	54	7	13%	0.100	10.0	0.100	5.3	0.73	1.2	Lognormal	5.3	5.3		1.455
Total Alkalinity	µg/L	33	22	67%	5,000	172,000	9,000	392,000	103,424.24	93,707	Lognormal	880,230	392,000	#	206,848
Total Phosphorous	µg/L	33	21	64%	10.0	10.0	10.0	282	44.30	70	Lognormal	140	140		88.594
Vanadium	µg/L	57	2	4%	10.0	28	11	11	8.49	4.3	Lognormal	11	11		16.975
Zinc	µg/L	57	25	44%	18	30	22	1,160	109.98	249	Lognormal	273	273		219.97

[a]Results of duplicate analyses were averaged and nondetects were treated as one-half the detection limit in the calculation of the arithmetic mean, standard deviation, and 95% UCL.

[b]For the calculation of exposure point concentrations (EPCs):

If fewer than four samples are available, or the standard deviation of the data set is zero, the distribution is undetermined.

If the probability plot correlation coefficient of the untransformed data is > or = to the critical value, the distribution is normal.

In all other cases, the distribution assumed for the EPC calculation was lognormal.

[c]The exposure point concentration (EPC) is the 95% upper confidence (UCL) of the arithmetic mean, unless the 95% UCL exceeds the maximum detected value.

If the latter is true, the maximum detected value is substituted as the EPC(denoted by a "#" next to the EPC).

- - Parameter detected in all samples.

APPENDIX E

COMPLETE ANALYTICAL RESULTS

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

		Location Code:	RK-S01			RK-S01			RK-S01			RK-S02		
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
		Sample No:	MCBS*51			UB03619			UB04468			MCBS*54		
		Sample Date:	07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94		
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
AROMATICS														
LT03														
	Fluoroacetic Acid	mg/kg	.182									.182		
CL HERBICIDE														
LT03														
	Chloroacetic Acid	mg/kg	.5									.5		
CWM														
LT03														
	Isopropylmethylphosphonic Acid	mg/kg	.5									.5		
	Methylphosphonic Acid	mg/kg	.5									.5		
LW18														
	Thiodiglycol	mg/kg	3.94									3.94		
EXPLOSIVES														
LW23														
	1,3,5-Trinitrobenzene	mg/kg				.922			.922					
	1,3-Dinitrobenzene	mg/kg				.504			.504					
	2,4,6-Trinitrotoluene	mg/kg				2			2	7				
	HMX	mg/kg				2			2					
	RDX	mg/kg				1.28			1.28					
	Tetryl	mg/kg				2.11			2.11					
LW27														
	Nitroglycerine	mg/kg							.962	U	U			
	PETN	mg/kg							1					
METALS														
SW6010_S														
	Aluminum	mg/kg												
	Antimony	mg/kg												
	Arsenic	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

		Location Code:	RK-S02			RK-S02			RK-S03			RK-S03		
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
		Sample No:	UB03620			UB04469			MCBS*52			UB03621		
		Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94		
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
AROMATICS														
LT03														
	Fluoroacetic Acid	mg/kg							.182					
CL HERBICIDE														
LT03														
	Chloroacetic Acid	mg/kg							.5					
CWM														
LT03														
	Isopropylmethylphosphonic Acid	mg/kg							.5					
	Methylphosphonic Acid	mg/kg							.5					
LW18														
	Thiodiglycol	mg/kg							3.94					
EXPLOSIVES														
LW23														
	1,3,5-Trinitrobenzene	mg/kg	.922			.922						.922		
	1,3-Dinitrobenzene	mg/kg	.504			.504						.504		
	2,4,6-Trinitrotoluene	mg/kg	2			2	7					2		
	HMX	mg/kg	2			2						2		
	RDX	mg/kg	1.28			1.28						1.28		
	Tetryl	mg/kg	2.11			2.11						2.11		
LW27														
	Nitroglycerine	mg/kg				.51								
	PETN	mg/kg				1								
METALS														
SW6010_S														
	Aluminum	mg/kg												
	Antimony	mg/kg												
	Arsenic	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB04470			MCBS*53			UB03622			UB04471		
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method / Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
AROMATICS													
LT03													
Fluoroacetic Acid	mg/kg				.182								
CL HERBICIDE													
LT03													
Chloroacetic Acid	mg/kg				.5								
CWM													
LT03													
Isopropylmethylphosphonic Acid	mg/kg				.5								
Methylphosphonic Acid	mg/kg				.5								
LW18													
Thiodiglycol	mg/kg				3.94								
EXPLOSIVES													
LW23													
1,3,5-Trinitrobenzene	mg/kg	.922						.922			.922		
1,3-Dinitrobenzene	mg/kg	.504						.504			.504		
2,4,6-Trinitrotoluene	mg/kg	2	7					2			2	7	
HMX	mg/kg	2						2			2		
RDX	mg/kg	1.28						1.28			1.28		
Tetryl	mg/kg	2.11						2.11			2.11		
LW27													
Nitroglycerine	mg/kg	.51									.51		
PETN	mg/kg	1									1		
METALS													
SW6010_S													
Aluminum	mg/kg												
Antimony	mg/kg												
Arsenic	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

		Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
		Sample No:	RG0002			RG0006			RG0003			RG0008		
		Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group		*Sample Depth:*	6 - 8			6 - 7			10 - 12			1 - 12		
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
AROMATICS														
LT03														
	Fluoroacetic Acid	mg/kg												
CL HERBICIDE														
LT03														
	Chloroacetic Acid	mg/kg												
CWM														
LT03														
	Isopropylmethylphosphonic Acid	mg/kg												
	Methylphosphonic Acid	mg/kg												
LW18														
	Thiodiglycol	mg/kg												
EXPLOSIVES														
LW23														
	1,3,5-Trinitrobenzene	mg/kg												
	1,3-Dinitrobenzene	mg/kg												
	2,4,6-Trinitrotoluene	mg/kg												
	HMX	mg/kg												
	RDX	mg/kg												
	Tetryl	mg/kg												
LW27														
	Nitroglycerine	mg/kg												
	PETN	mg/kg												
METALS														
SW6010_S														
	Aluminum	mg/kg	10100			15300			13000			14500		
	Antimony	mg/kg	0.69	B	J	0.84	B	J	0.73	B	J	0.98	B	J
	Arsenic	mg/kg	42.4			17.1			16.3			19.8		

		Location Code:	RNG-203-MW04		
		Associated Site:	RNG-203		
		Sample No:	RG0010		
		Sample Date:	02-MAR-00		
User Test Group / Lab Method		Sample Depth:	6 - 8		
	Parameter	Units	Result	Qual	VQual
AROMATICS					
LT03					
	Fluoroacetic Acid	mg/kg			
CL HERBICIDE					
LT03					
	Chloroacetic Acid	mg/kg			
CWM					
LT03					
	Isopropylmethylphosphonic Acid	mg/kg			
	Methylphosphonic Acid	mg/kg			
LW18					
	Thiodiglycol	mg/kg			
EXPLOSIVES					
LW23					
	1,3,5-Trinitrobenzene	mg/kg			
	1,3-Dinitrobenzene	mg/kg			
	2,4,6-Trinitrotoluene	mg/kg			
	HMX	mg/kg			
	RDX	mg/kg			
	Tetryl	mg/kg			
LW27					
	Nitroglycerine	mg/kg			
	PETN	mg/kg			
METALS					
SW6010_S					
	Aluminum	mg/kg	12400		
	Antimony	mg/kg	0.60	B	J
	Arsenic	mg/kg	15.7		

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RK-S01			RK-S01			RK-S01			RK-S02	
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203	
	Sample No:		MCBS*51			UB03619			UB04468			MCBS*54	
	Sample Date:		07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94	
User Test Group	*Sample Depth:*		2 - 4			2 - 4			2 - 4			2 - 4	
Lab Method													
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
METALS													
SW6010_S													
Barium	mg/kg												
Beryllium	mg/kg												
Cadmium	mg/kg												
Calcium	mg/kg												
Chromium	mg/kg												
Cobalt	mg/kg												
Copper	mg/kg												
Iron	mg/kg												
Lead	mg/kg												
Magnesium	mg/kg												
Manganese	mg/kg												
Nickel	mg/kg												
Potassium	mg/kg												
Selenium	mg/kg												
Silver	mg/kg												
Sodium	mg/kg												
Thallium	mg/kg												
Vanadium	mg/kg												
Zinc	mg/kg												
SW7471_S													
Mercury	mg/kg												
NITROAROMATI													
SW8330_S													
1,3,5-Trinitrobenzene	mg/kg												
1,3-Dinitrobenzene	mg/kg												
2,4,6-Trinitrotoluene	mg/kg												
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
2-Amino-4,6-dinitrotoluene	mg/kg												
[illegible]rotoluene	mg/kg												

	Location Code:	RK-S02			RK-S02			RK-S03			RK-S03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB03620			UB04469			MCBS*52			UB03621		
	Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94		
User Test Group / Lab Method	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
METALS													
SW6010_S													
Barium	mg/kg												
Beryllium	mg/kg												
Cadmium	mg/kg												
Calcium	mg/kg												
Chromium	mg/kg												
Cobalt	mg/kg												
Copper	mg/kg												
Iron	mg/kg												
Lead	mg/kg												
Magnesium	mg/kg												
Manganese	mg/kg												
Nickel	mg/kg												
Potassium	mg/kg												
Selenium	mg/kg												
Silver	mg/kg												
Sodium	mg/kg												
Thallium	mg/kg												
Vanadium	mg/kg												
Zinc	mg/kg												
SW7471_S													
Mercury	mg/kg												
NITROAROMATI													
SW8330_S													
1,3,5-Trinitrobenzene	mg/kg												
1,3-Dinitrobenzene	mg/kg												
2,4,6-Trinitrotoluene	mg/kg												
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
2-Amino-4,6-dinitrotoluene	mg/kg												
2-Nitrotoluene	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04	
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203	
	Sample No:	UB04470			MCBS*53			UB03622			UB04471	
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94	
User Test Group	*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4	
Lab Method												
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
METALS													
SW6010_S													
Barium	mg/kg												
Beryllium	mg/kg												
Cadmium	mg/kg												
Calcium	mg/kg												
Chromium	mg/kg												
Cobalt	mg/kg												
Copper	mg/kg												
Iron	mg/kg												
Lead	mg/kg												
Magnesium	mg/kg												
Manganese	mg/kg												
Nickel	mg/kg												
Potassium	mg/kg												
Selenium	mg/kg												
Silver	mg/kg												
Sodium	mg/kg												
Thallium	mg/kg												
Vanadium	mg/kg												
Zinc	mg/kg												
SW7471_S													
Mercury	mg/kg												
NITROAROMATI													
SW8330_S													
1,3,5-Trinitrobenzene	mg/kg												
1,3-Dinitrobenzene	mg/kg												
2,4,6-Trinitrotoluene	mg/kg												
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
2-Amino-4,6-dinitrotoluene	mg/kg												
[illegible]-otoluene	mg/kg												

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group / Lab Method	Sample Depth:	6 - 8			6 - 7			10 - 12			1 - 12		
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
METALS													
SW6010_S													
Barium	mg/kg	35.9			38.4			92.3			84.9		
Beryllium	mg/kg	0.82			0.89			3.0			3.0		
Cadmium	mg/kg	0.68	U	U	0.72	U	U	0.57	U	U	0.59	U	U
Calcium	mg/kg	343	B	J	723	U	U	575		J	847		J
Chromium	mg/kg	26.2		J	27.3		J	22.1		J	17.8		J
Cobalt	mg/kg	3.9	B	J	5.0	B	J	43.7			17.9		
Copper	mg/kg	39.0		J	25.7		J	52.5		J	57.3		J
Iron	mg/kg	28100			34600			61700			69300		
Lead	mg/kg	19.9			9.5			14.8			12.5		
Magnesium	mg/kg	238	B	J	216	B	J	1520			919		J
Manganese	mg/kg	62.3			51.2			383		J	230		
Nickel	mg/kg	42.3			32.5			72.4			62.9		
Potassium	mg/kg	528	B	J	547	B	J	823			724		
Selenium	mg/kg	1.3			0.72	U	U	3.2			1.4		
Silver	mg/kg	1.4	U	U	1.4	U	U	0.23	B	J	1.2	U	U
Sodium	mg/kg	676	U	U	723	U	U	74.8	B	J	76.9	B	J
Thallium	mg/kg	1.1	B	B	0.96	B	B	1.2		B	1.7		B
Vanadium	mg/kg	46.6		J	28.0		J	35.0		J	53.0		J
Zinc	mg/kg	148		J	107		J	229		J	234		J
SW7471_S													
Mercury	mg/kg	0.068			0.075			0.041			0.046		
NITROAROMATI													
SW8330_S													
1,3,5-Trinitrobenzene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
1,3-Dinitrobenzene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
2,4,6-Trinitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
2,4-Dinitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
2,6-Dinitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
2-Amino-4,6-dinitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
2-Nitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
METALS				
SW6010_S				
Barium	mg/kg	70.0		
Beryllium	mg/kg	1.0		
Cadmium	mg/kg	0.65	U	U
Calcium	mg/kg	3670		J
Chromium	mg/kg	31.7		J
Cobalt	mg/kg	5.0	B	J
Copper	mg/kg	17.8		J
Iron	mg/kg	31600		
Lead	mg/kg	9.1		
Magnesium	mg/kg	263	B	J
Manganese	mg/kg	39.8		
Nickel	mg/kg	22.2		
Potassium	mg/kg	462	B	J
Selenium	mg/kg	0.65	U	U
Silver	mg/kg	1.3	U	U
Sodium	mg/kg	649	U	U
Thallium	mg/kg	1.1	B	B
Vanadium	mg/kg	43.6		J
Zinc	mg/kg	61.8		J
SW7471_S				
Mercury	mg/kg	0.067		
NITROAROMATI				
SW8330_S				
1,3,5-Trinitrobenzene	mg/kg	0.25	U	U
1,3-Dinitrobenzene	mg/kg	0.25	U	U
2,4,6-Trinitrotoluene	mg/kg	0.25	U	U
2,4-Dinitrotoluene	mg/kg	0.25	U	U
2,6-Dinitrotoluene	mg/kg	0.25	U	U
2-Amino-4,6-dinitrotoluene	mg/kg	0.25	U	U
[illegible]rotoluene	mg/kg	0.25	U	[illegible]

	Location Code:	RK-S01			RK-S01			RK-S01			RK-S02		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	MCBS*51			UB03619			UB04468			MCBS*54		
	Sample Date:	07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method / Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
NITROAROMATI													
SW8330_S													
3-Nitrotoluene	mg/kg												
4-Amino-2,6-dinitrotoluene	mg/kg												
HMX	mg/kg												
Nitrobenzene	mg/kg												
RDX	mg/kg												
Tetryl	mg/kg												
p-Nitrotoluene	mg/kg												
ORGANOSULF													
LL03													
1,4-Oxathiane	mg/kg	.856									.856		
Benxothiazole	mg/kg	1.08									1.08		
Disulfide, Dimethyl	mg/kg	.692									.692		
Dithiane	mg/kg	1.47									1.47		
p-Chlorophenylmethylsulfide	mg/kg	1.08									1.08		
p-Chlorophenylmethylsulfone	mg/kg	2.37									2.37		
p-Chlorophenylmethylsulfoxide	mg/kg	2.25									2.25		
SEMIVOLATILES													
LW23													
2,4-Dinitrotoluene	mg/kg				2.5			2.5					
2,6-Dinitrotoluene	mg/kg				2			2					
Nitrobenzene	mg/kg				1.14			1.14					
SW8270_S													
1,2,4-Trichlorobenzene	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg												
2,4-Dichlorophenol	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RK-S02			RK-S02			RK-S03			RK-S03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB03620			UB04469			MCBS*52			UB03621		
	Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94		
User Test Group	*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
NITROAROMATI													
SW8330_S													
3-Nitrotoluene	mg/kg												
4-Amino-2,6-dinitrotoluene	mg/kg												
HMX	mg/kg												
Nitrobenzene	mg/kg												
RDX	mg/kg												
Tetryl	mg/kg												
p-Nitrotoluene	mg/kg												
ORGANOSULF													
LL03													
1,4-Oxathiane	mg/kg							.856					
Benxothiazole	mg/kg							1.08					
Disulfide, Dimethyl	mg/kg							.692					
Dithiane	mg/kg							1.47					
p-Chlorophenylmethylsulfide	mg/kg							1.08					
p-Chlorophenylmethylsulfone	mg/kg							2.37					
p-Chlorophenylmethylsulfoxide	mg/kg							2.25					
SEMIVOLATILES													
LW23													
2,4-Dinitrotoluene	mg/kg	2.5			2.5						2.5		
2,6-Dinitrotoluene	mg/kg	2			2						2		
Nitrobenzene	mg/kg	1.14			1.14						1.14		
SW8270_S													
1,2,4-Trichlorobenzene	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg												
[illegible] Dichlorophenol	mg/kg												

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB04470			MCBS*53			UB03622			UB04471		
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94		
User Test Group / Lab Method	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
NITROAROMATI													
SW8330_S													
3-Nitrotoluene	mg/kg												
4-Amino-2,6-dinitrotoluene	mg/kg												
HMX	mg/kg												
Nitrobenzene	mg/kg												
RDX	mg/kg												
Tetryl	mg/kg												
p-Nitrotoluene	mg/kg												
ORGANOSULF													
LL03													
1,4-Oxathiane	mg/kg				.856								
Benxothiazole	mg/kg				1.08								
Disulfide, Dimethyl	mg/kg				.692								
Dithiane	mg/kg				1.47								
p-Chlorophenylmethylsulfide	mg/kg				1.08								
p-Chlorophenylmethylsulfone	mg/kg				2.37								
p-Chlorophenylmethylsulfoxide	mg/kg				2.25								
SEMIVOLATILES													
LW23													
2,4-Dinitrotoluene	mg/kg	2.5						2.5			2.5		
2,6-Dinitrotoluene	mg/kg	2						2			2		
Nitrobenzene	mg/kg	1.14						1.14			1.14		
SW8270_S													
1,2,4-Trichlorobenzene	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg												
2,4-Dichlorophenol	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group / Lab Method	Sample Depth:	6 - 8			6 - 7			10 - 12			1 - 12		
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
NITROAROMATI													
SW8330_S													
3-Nitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
4-Amino-2.6-dinitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
HMX	mg/kg	0.50	U	U	0.50	U	U	0.50	U	U	0.50	U	U
Nitrobenzene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
RDX	mg/kg	0.50	U	U	0.50	U	U	0.50	U	U	0.50	U	U
Tetryl	mg/kg	0.65	U	U	0.65	U	UJ	0.65	U	UJ	0.65	U	UJ
p-Nitrotoluene	mg/kg	0.25	U	U	0.25	U	U	0.25	U	U	0.25	U	U
ORGANOSULF													
LL03													
1,4-Oxathiane	mg/kg												
Benxothiazole	mg/kg												
Disulfide, Dimethyl	mg/kg												
Dithiane	mg/kg												
p-Chlorophenylmethylsulfide	mg/kg												
p-Chlorophenylmethylsulfone	mg/kg												
p-Chlorophenylmethylsulfoxide	mg/kg												
SEMIVOLATILES													
LW23													
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
Nitrobenzene	mg/kg												
SW8270_S													
1,2,4-Trichlorobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
1,2-Dichlorobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
1,3-Dichlorobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
1,4-Dichlorobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2,4,5-Trichlorophenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2,4,6-Trichlorophenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2,4-Dichlorophenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
NITROAROMATI				
SW8330_S				
3-Nitrotoluene	mg/kg	0.25	U	U
4-Amino-2,6-dinitrotoluene	mg/kg	0.25	U	U
HMX	mg/kg	0.50	U	U
Nitrobenzene	mg/kg	0.25	U	U
RDX	mg/kg	0.50	U	U
Tetryl	mg/kg	0.65	U	UJ
p-Nitrotoluene	mg/kg	0.25	U	U
ORGANOSULF				
LL03				
1,4-Oxathiane	mg/kg			
Benxothiazole	mg/kg			
Disulfide, Dimethyl	mg/kg			
Dithiane	mg/kg			
p-Chlorophenylmethylsulfide	mg/kg			
p-Chlorophenylmethylsulfone	mg/kg			
p-Chlorophenylmethylsulfoxide	mg/kg			
SEMIVOLATILES				
LW23				
2,4-Dinitrotoluene	mg/kg			
2,6-Dinitrotoluene	mg/kg			
Nitrobenzene	mg/kg			
SW8270_S				
1,2,4-Trichlorobenzene	mg/kg	.43	U	U
1,2-Dichlorobenzene	mg/kg	.43	U	U
1,3-Dichlorobenzene	mg/kg	.43	U	U
1,4-Dichlorobenzene	mg/kg	.43	U	U
2,4,5-Trichlorophenol	mg/kg	.43	U	U
2,4,6-Trichlorophenol	mg/kg	.43	U	U
2,4-Dichlorophenol	mg/kg	.43	U	U

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

		Location Code:	RK-S01			RK-S01			RK-S01			RK-S02			
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203			
		Sample No:	MCBS*51			UB03619			UB04468			MCBS*54			
		Sample Date:	07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94			
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4			
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	
SEMIVOLATILES															
SW8270_S															
	2,4-Dimethylphenol	mg/kg													
	2,4-Dinitrophenol	mg/kg													
	2,4-Dinitrotoluene	mg/kg													
	2,6-Dinitrotoluene	mg/kg													
	2-Chloronaphthalene	mg/kg													
	2-Chlorophenol	mg/kg													
	2-Methylnaphthalene	mg/kg													
	2-Methylphenol	mg/kg													
	2-Nitroaniline	mg/kg													
	2-Nitrophenol	mg/kg													
	3,3'-Dichlorobenzidine	mg/kg													
	3-Nitroaniline	mg/kg													
	4,6-Dinitro-2-methylphenol	mg/kg													
	4-Bromophenyl phenyl ether	mg/kg													
	4-Chloro-3-methylphenol	mg/kg													
	4-Chloroaniline	mg/kg													
	4-Chlorophenyl phenyl ether	mg/kg													
	4-Methylphenol	mg/kg													
	4-Nitroaniline	mg/kg													
	4-Nitrophenol	mg/kg													
	Acenaphthene	mg/kg													
	Acenaphthylene	mg/kg													
	Anthracene	mg/kg													
	Benzo(a)anthracene	mg/kg													
	Benzo(a)pyrene	mg/kg													
	Benzo(b)fluoranthene	mg/kg													
	Benzo(ghi)perylene	mg/kg													
	Benzo(k)fluoranthene	mg/kg													
	Butyl benzyl phthalate	mg/kg													
	Carbazole	mg/kg													
	Chrysene	mg/kg													

	Location Code:	RK-S02			RK-S02			RK-S03			RK-S03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB03620			UB04469			MCBS*52			UB03621		
	Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
SEMIVOLATILES													
SW8270_S													
2,4-Dimethylphenol	mg/kg												
2,4-Dinitrophenol	mg/kg												
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
2-Chloronaphthalene	mg/kg												
2-Chlorophenol	mg/kg												
2-Methylnaphthalene	mg/kg												
2-Methylphenol	mg/kg												
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg												
3,3'-Dichlorobenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-methylphenol	mg/kg												
4-Bromophenyl phenyl ether	mg/kg												
4-Chloro-3-methylphenol	mg/kg												
4-Chloroaniline	mg/kg												
4-Chlorophenyl phenyl ether	mg/kg												
4-Methylphenol	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg												
Acenaphthene	mg/kg												
Acenaphthylene	mg/kg												
Anthracene	mg/kg												
Benzo(a)anthracene	mg/kg												
Benzo(a)pyrene	mg/kg												
Benzo(b)fluoranthene	mg/kg												
Benzo(ghi)perylene	mg/kg												
Benzo(k)fluoranthene	mg/kg												
Butyl benzyl phthalate	mg/kg												
Carbazole	mg/kg												
Chrysene	mg/kg												

		Location Code:	RK-S03			RK-S04			RK-S04			RK-S04			
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203			
		Sample No:	UB04470			MCBS*53			UB03622			UB04471			
		Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94			
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4			
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	
SEMIVOLATILES															
SW8270_S															
	2,4-Dimethylphenol	mg/kg													
	2,4-Dinitrophenol	mg/kg													
	2,4-Dinitrotoluene	mg/kg													
	2,6-Dinitrotoluene	mg/kg													
	2-Chloronaphthalene	mg/kg													
	2-Chlorophenol	mg/kg													
	2-Methylnaphthalene	mg/kg													
	2-Methylphenol	mg/kg													
	2-Nitroaniline	mg/kg													
	2-Nitrophenol	mg/kg													
	3,3'-Dichlorobenzidine	mg/kg													
	3-Nitroaniline	mg/kg													
	4,6-Dinitro-2-methylphenol	mg/kg													
	4-Bromophenyl phenyl ether	mg/kg													
	4-Chloro-3-methylphenol	mg/kg													
	4-Chloroaniline	mg/kg													
	4-Chlorophenyl phenyl ether	mg/kg													
	4-Methylphenol	mg/kg													
	4-Nitroaniline	mg/kg													
	4-Nitrophenol	mg/kg													
	Acenaphthene	mg/kg													
	Acenaphthylene	mg/kg													
	Anthracene	mg/kg													
	Benzo(a)anthracene	mg/kg													
	Benzo(a)pyrene	mg/kg													
	Benzo(b)fluoranthene	mg/kg													
	Benzo(ghi)perylene	mg/kg													
	Benzo(k)fluoranthene	mg/kg													
	Butyl benzyl phthalate	mg/kg													
	Carbazole	mg/kg													
	Chrysene	mg/kg													

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group	Sample Depth:	6 - 8			6 - 7			10 - 12			1 - 12		
Lab Method													
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
SEMIVOLATILES													
SW8270_S													
2,4-Dimethylphenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2,4-Dinitrophenol	mg/kg	2.2	U	UJ	2.3	U	UJ	1.8	U	UJ	1.9	U	UJ
2,4-Dinitrotoluene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2,6-Dinitrotoluene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2-Chloronaphthalene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2-Chlorophenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2-Methylnaphthalene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2-Methylphenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
2-Nitroaniline	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
2-Nitrophenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
3,3'-Dichlorobenzidine	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
3-Nitroaniline	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
4,6-Dinitro-2-methylphenol	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
4-Bromophenyl phenyl ether	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
4-Chloro-3-methylphenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
4-Chloroaniline	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
4-Chlorophenyl phenyl ether	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
4-Methylphenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
4-Nitroaniline	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
4-Nitrophenol	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
Acenaphthene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Acenaphthylene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Anthracene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Benzo(a)anthracene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Benzo(a)pyrene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Benzo(b)fluoranthene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Benzo(ghi)perylene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Benzo(k)fluoranthene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Butyl benzyl phthalate	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Carbazole	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Chrysene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
SEMIVOLATILES				
SW8270_S				
2,4-Dimethylphenol	mg/kg	.43	U	U
2,4-Dinitrophenol	mg/kg	2.1	U	UJ
2,4-Dinitrotoluene	mg/kg	.43	U	U
2,6-Dinitrotoluene	mg/kg	.43	U	U
2-Chloronaphthalene	mg/kg	.43	U	U
2-Chlorophenol	mg/kg	.43	U	U
2-Methylnaphthalene	mg/kg	.43	U	U
2-Methylphenol	mg/kg	.43	U	U
2-Nitroaniline	mg/kg	2.1	U	U
2-Nitrophenol	mg/kg	.43	U	U
3,3'-Dichlorobenzidine	mg/kg	2.1	U	U
3-Nitroaniline	mg/kg	2.1	U	U
4,6-Dinitro-2-methylphenol	mg/kg	2.1	U	U
4-Bromophenyl phenyl ether	mg/kg	.43	U	U
4-Chloro-3-methylphenol	mg/kg	.43	U	U
4-Chloroaniline	mg/kg	.43	U	U
4-Chlorophenyl phenyl ether	mg/kg	.43	U	U
4-Methylphenol	mg/kg	.43	U	U
4-Nitroaniline	mg/kg	2.1	U	U
4-Nitrophenol	mg/kg	2.1	U	U
Acenaphthene	mg/kg	.43	U	U
Acenaphthylene	mg/kg	.43	U	U
Anthracene	mg/kg	.43	U	U
Benzo(a)anthracene	mg/kg	.43	U	U
Benzo(a)pyrene	mg/kg	.43	U	U
Benzo(b)fluoranthene	mg/kg	.43	U	U
Benzo(ghi)perylene	mg/kg	.43	U	U
Benzo(k)fluoranthene	mg/kg	.43	U	UJ
Butyl benzyl phthalate	mg/kg	.43	U	U
Carbazole	mg/kg	.43	U	U
Chrysene	mg/kg	.43	U	U

	Location Code:	RK-S01			RK-S01			RK-S01			RK-S02				
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203				
	Sample No:	MCBS*51			UB03619			UB04468			MCBS*54				
	Sample Date:	07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94				
User Test Group	*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4				
Lab Method															
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*		
SEMIVOLATILES															
SW8270_S															
Di-n-butyl phthalate	mg/kg														
Di-n-octyl phthalate	mg/kg														
Dibenz(a,h)anthracene	mg/kg														
Dibenzofuran	mg/kg														
Diethyl phthalate	mg/kg														
Dimethyl phthalate	mg/kg														
Fluoranthene	mg/kg														
Fluorene	mg/kg														
Hexachlorobenzene	mg/kg														
Hexachlorobutadiene	mg/kg														
Hexachlorocyclopentadiene	mg/kg														
Hexachloroethane	mg/kg														
Indeno(1,2,3-cd)pyrene	mg/kg														
Isophorone	mg/kg														
Naphthalene	mg/kg														
Nitrobenzene	mg/kg														
Pentachlorophenol	mg/kg														
Phenanthrene	mg/kg														
Phenol	mg/kg														
Pyrene	mg/kg														
bis(2-Chloroethoxy)methane	mg/kg														
bis(2-Chloroethyl)ether	mg/kg														
bis(2-Chloroisopropyl)ether	mg/kg														
bis(2-Ethylhexyl)phthalate	mg/kg														
n-Nitroso-di-n-propylamine	mg/kg														
n-Nitrosodiphenylamine	mg/kg														
VOLATILES															
SW8260_S															
1,1,1,2-Tetrachloroethane	mg/kg														
1,1,1-Trichloroethane	mg/kg														

		Location Code:	RK-S02			RK-S02			RK-S03			RK-S03			
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203			
		Sample No:	UB03620			UB04469			MCBS*52			UB03621			
		Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94			
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4			
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	
SEMIVOLATILES															
SW8270_S															
	Di-n-butyl phthalate	mg/kg													
	Di-n-octyl phthalate	mg/kg													
	Dibenz(a,h)anthracene	mg/kg													
	Dibenzofuran	mg/kg													
	Diethyl phthalate	mg/kg													
	Dimethyl phthalate	mg/kg													
	Fluoranthene	mg/kg													
	Fluorene	mg/kg													
	Hexachlorobenzene	mg/kg													
	Hexachlorobutadiene	mg/kg													
	Hexachlorocyclopentadiene	mg/kg													
	Hexachloroethane	mg/kg													
	Indeno(1,2,3-cd)pyrene	mg/kg													
	Isophorone	mg/kg													
	Naphthalene	mg/kg													
	Nitrobenzene	mg/kg													
	Pentachlorophenol	mg/kg													
	Phenanthrene	mg/kg													
	Phenol	mg/kg													
	Pyrene	mg/kg													
	bis(2-Chloroethoxy)methane	mg/kg													
	bis(2-Chloroethyl)ether	mg/kg													
	bis(2-Chloroisopropyl)ether	mg/kg													
	bis(2-Ethylhexyl)phthalate	mg/kg													
	n-Nitroso-di-n-propylamine	mg/kg													
	n-Nitrosodiphenylamine	mg/kg													
VOLATILES															
SW8260_S															
	1,1,1,2-Tetrachloroethane	mg/kg													
	1,1,1-Trichloroethane	mg/kg													

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB04470			MCBS*53			UB03622			UB04471		
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method / Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
SEMIVOLATILES													
SW8270_S													
Di-n-butyl phthalate	mg/kg												
Di-n-octyl phthalate	mg/kg												
Dibenz(a,h)anthracene	mg/kg												
Dibenzofuran	mg/kg												
Diethyl phthalate	mg/kg												
Dimethyl phthalate	mg/kg												
Fluoranthene	mg/kg												
Fluorene	mg/kg												
Hexachlorobenzene	mg/kg												
Hexachlorobutadiene	mg/kg												
Hexachlorocyclopentadiene	mg/kg												
Hexachloroethane	mg/kg												
Indeno(1,2,3-cd)pyrene	mg/kg												
Isophorone	mg/kg												
Naphthalene	mg/kg												
Nitrobenzene	mg/kg												
Pentachlorophenol	mg/kg												
Phenanthrene	mg/kg												
Phenol	mg/kg												
Pyrene	mg/kg												
bis(2-Chloroethoxy)methane	mg/kg												
bis(2-Chloroethyl)ether	mg/kg												
bis(2-Chloroisopropyl)ether	mg/kg												
bis(2-Ethylhexyl)phthalate	mg/kg												
n-Nitroso-di-n-propylamine	mg/kg												
n-Nitrosodiphenylamine	mg/kg												
VOLATILES													
SW8260_S													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group	*Sample Depth:*	6 - 8			6 - 7			10 - 12			1 - 12		
Lab Method													
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
SEMIVOLATILES													
SW8270_S													
Di-n-butyl phthalate	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Di-n-octyl phthalate	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Dibenz(a,h)anthracene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Dibenzofuran	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Diethyl phthalate	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Dimethyl phthalate	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Fluoranthene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Fluorene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Hexachlorobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Hexachlorobutadiene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Hexachlorocyclopentadiene	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
Hexachloroethane	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Indeno(1,2,3-cd)pyrene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Isophorone	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Naphthalene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Nitrobenzene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Pentachlorophenol	mg/kg	2.2	U	U	2.3	U	U	1.8	U	U	1.9	U	U
Phenanthrene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Phenol	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
Pyrene	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
bis(2-Chloroethoxy)methane	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
bis(2-Chloroethyl)ether	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
bis(2-Chloroisopropyl)ether	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
bis(2-Ethylhexyl)phthalate	mg/kg	.078	J B	B	.12	J B	B	.064	J B	B	.08	J B	B
n-Nitroso-di-n-propylamine	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
n-Nitrosodiphenylamine	mg/kg	.45	U	U	.48	U	U	.38	U	U	.39	U	U
VOLATILES													
SW8260_S													
1,1,1,2-Tetrachloroethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,1,1-Trichloroethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
SEMIVOLATILES				
SW8270_S				
Di-n-butyl phthalate	mg/kg	.43	U	U
Di-n-octyl phthalate	mg/kg	.43	U	U
Dibenz(a,h)anthracene	mg/kg	.43	U	U
Dibenzofuran	mg/kg	.43	U	U
Diethyl phthalate	mg/kg	.43	U	U
Dimethyl phthalate	mg/kg	.43	U	U
Fluoranthene	mg/kg	.43	U	U
Fluorene	mg/kg	.43	U	U
Hexachlorobenzene	mg/kg	.43	U	U
Hexachlorobutadiene	mg/kg	.43	U	U
Hexachlorocyclopentadiene	mg/kg	2.1	U	U
Hexachloroethane	mg/kg	.43	U	U
Indeno(1,2,3-cd)pyrene	mg/kg	.43	U	U
Isophorone	mg/kg	.43	U	U
Naphthalene	mg/kg	.43	U	U
Nitrobenzene	mg/kg	.43	U	U
Pentachlorophenol	mg/kg	2.1	U	U
Phenanthrene	mg/kg	.43	U	U
Phenol	mg/kg	.43	U	U
Pyrene	mg/kg	.43	U	U
bis(2-Chloroethoxy)methane	mg/kg	.43	U	U
bis(2-Chloroethyl)ether	mg/kg	.43	U	U
bis(2-Chloroisopropyl)ether	mg/kg	.43	U	U
bis(2-Ethylhexyl)phthalate	mg/kg	.14	J B	B
n-Nitroso-di-n-propylamine	mg/kg	.43	U	U
n-Nitrosodiphenylamine	mg/kg	.43	U	U
VOLATILES				
SW8260_S				
1,1,1,2-Tetrachloroethane	mg/kg	.0065	U	U
1,1,1-Trichloroethane	mg/kg	.0065	U	U

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RK-S01			RK-S01			RK-S01			RK-S02		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	MCBS*51			UB03619			UB04468			MCBS*54		
	Sample Date:	07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94		
User Test Group	*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
VOLATILES													
SW8260_S													
1,1,2,2-Tetrachloroethane	mg/kg												
1,1,2-Trichloroethane	mg/kg												
1,1-Dichloroethane	mg/kg												
1,1-Dichloroethene	mg/kg												
1,1-Dichloropropene	mg/kg												
1,2,3-Trichlorobenzene	mg/kg												
1,2,3-Trichloropropane	mg/kg												
1,2,4-Trichlorobenzene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromo-3-Chloropropane	mg/kg												
1,2-Dibromoethane	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,2-Dichloroethane	mg/kg												
1,2-Dichloropropane	mg/kg												
1,2-Dimethylbenzene	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,3-Dichloropropane	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2-Butanone	mg/kg												
2-Hexanone	mg/kg												
4-Methyl-2-pentanone	mg/kg												
Acetone	mg/kg												
Benzene	mg/kg												
Bromobenzene	mg/kg												
Bromochloromethane	mg/kg												
Bromodichloromethane	mg/kg												
Bromoform	mg/kg												
Bromomethane	mg/kg												
Carbon disulfide	mg/kg												
Carbon tetrachloride	mg/kg												

	Location Code:	RK-S02			RK-S02			RK-S03			RK-S03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB03620			UB04469			MCBS*52			UB03621		
	Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94		
User Test Group	*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
VOLATILES													
SW8260_S													
1,1,2,2-Tetrachloroethane	mg/kg												
1,1,2-Trichloroethane	mg/kg												
1,1-Dichloroethane	mg/kg												
1,1-Dichloroethene	mg/kg												
1,1-Dichloropropene	mg/kg												
1,2,3-Trichlorobenzene	mg/kg												
1,2,3-Trichloropropane	mg/kg												
1,2,4-Trichlorobenzene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromo-3-Chloropropane	mg/kg												
1,2-Dibromoethane	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,2-Dichloroethane	mg/kg												
1,2-Dichloropropane	mg/kg												
1,2-Dimethylbenzene	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,3-Dichloropropane	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2-Butanone	mg/kg												
2-Hexanone	mg/kg												
4-Methyl-2-pentanone	mg/kg												
Acetone	mg/kg												
Benzene	mg/kg												
Bromobenzene	mg/kg												
Bromochloromethane	mg/kg												
Bromodichloromethane	mg/kg												
Bromoform	mg/kg												
Bromomethane	mg/kg												
Carbon disulfide	mg/kg												
Carbon tetrachloride	mg/kg												

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB04470			MCBS*53			UB03622			UB04471		
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260_S													
1,1,2,2-Tetrachloroethane	mg/kg												
1,1,2-Trichloroethane	mg/kg												
1,1-Dichloroethane	mg/kg												
1,1-Dichloroethene	mg/kg												
1,1-Dichloropropene	mg/kg												
1,2,3-Trichlorobenzene	mg/kg												
1,2,3-Trichloropropane	mg/kg												
1,2,4-Trichlorobenzene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromo-3-Chloropropane	mg/kg												
1,2-Dibromoethane	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,2-Dichloroethane	mg/kg												
1,2-Dichloropropane	mg/kg												
1,2-Dimethylbenzene	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,3-Dichloropropane	mg/kg												
1,4-Dichlorobenzene	mg/kg												
2-Butanone	mg/kg												
2-Hexanone	mg/kg												
4-Methyl-2-pentanone	mg/kg												
Acetone	mg/kg												
Benzene	mg/kg												
Bromobenzene	mg/kg												
Bromochloromethane	mg/kg												
Bromodichloromethane	mg/kg												
Bromoform	mg/kg												
Bromomethane	mg/kg												
Carbon disulfide	mg/kg												
Carbon tetrachloride	mg/kg												

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group / Lab Method	Sample Depth:	6 - 8			6 - 7			10 - 12			1 - 12		
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260_S													
1,1,2,2-Tetrachloroethane	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,1,2-Trichloroethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,1-Dichloroethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,1-Dichloroethene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,1-Dichloropropene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,2,3-Trichlorobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,2,3-Trichloropropane	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,2,4-Trichlorobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,2,4-Trimethylbenzene	mg/kg	.0022	J	J	.0072	U	U	.0057	U	U	.0059	U	U
1,2-Dibromo-3-Chloropropane	mg/kg	.014	U	UJ	.014	U	U	.011	U	U	.012	U	U
1,2-Dibromoethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,2-Dichlorobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,2-Dichloroethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,2-Dichloropropane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
1,2-Dimethylbenzene	mg/kg	.0059	J	J	.0072	U	U	.0057	U	U	.0059	U	U
1,3,5-Trimethylbenzene	mg/kg	.0018	J	J	.0072	U	U	.0057	U	U	.0059	U	U
1,3-Dichlorobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,3-Dichloropropane	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
1,4-Dichlorobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
2-Butanone	mg/kg	.027	U	U	.029	U	U	.023	U	U	.024	U	U
2-Hexanone	mg/kg	.027	U	U	.029	U	U	.023	U	U	.024	U	U
4-Methyl-2-pentanone	mg/kg	.027	U	U	.029	U	U	.023	U	U	.024	U	U
Acetone	mg/kg	.011	J	B	.012	J	B	.023	U	UJ	.024	U	UJ
Benzene	mg/kg	.0012	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Bromobenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
Bromochloromethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Bromodichloromethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Bromoform	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Bromomethane	mg/kg	.014	U	R	.014	U	R	.011	U	R	.012	U	R
Carbon disulfide	mg/kg	.0068	U	UJ	.0072	U	UJ	.0057	U	UJ	.0059	U	UJ
Carbon tetrachloride	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
VOLATILES				
SW8260_S				
1,1,2,2-Tetrachloroethane	mg/kg	.0065	U	U
1,1,2-Trichloroethane	mg/kg	.0065	U	U
1,1-Dichloroethane	mg/kg	.0065	U	U
1,1-Dichloroethene	mg/kg	.0065	U	U
1,1-Dichloropropene	mg/kg	.0065	U	U
1,2,3-Trichlorobenzene	mg/kg	.0065	U	U
1,2,3-Trichloropropane	mg/kg	.0065	U	U
1,2,4-Trichlorobenzene	mg/kg	.0065	U	U
1,2,4-Trimethylbenzene	mg/kg	.0065	U	U
1,2-Dibromo-3-Chloropropane	mg/kg	.013	U	U
1,2-Dibromoethane	mg/kg	.0065	U	U
1,2-Dichlorobenzene	mg/kg	.0065	U	U
1,2-Dichloroethane	mg/kg	.0065	U	U
1,2-Dichloropropane	mg/kg	.0065	U	U
1,2-Dimethylbenzene	mg/kg	.0065	U	U
1,3,5-Trimethylbenzene	mg/kg	.0065	U	U
1,3-Dichlorobenzene	mg/kg	.0065	U	U
1,3-Dichloropropane	mg/kg	.0065	U	U
1,4-Dichlorobenzene	mg/kg	.0065	U	U
2-Butanone	mg/kg	.026	U	U
2-Hexanone	mg/kg	.026	U	U
4-Methyl-2-pentanone	mg/kg	.026	U	U
Acetone	mg/kg	.026	U	UJ
Benzene	mg/kg	.0065	U	U
Bromobenzene	mg/kg	.0065	U	U
Bromochloromethane	mg/kg	.0065	U	U
Bromodichloromethane	mg/kg	.0065	U	U
Bromoform	mg/kg	.0065	U	U
Bromomethane	mg/kg	.013	U	R
Carbon disulfide	mg/kg	.0065	U	UJ
Carbon tetrachloride	mg/kg	.0065	U	U

	Location Code:		RK-S01			RK-S01			RK-S01			RK-S02	
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203	
	Sample No:		MCBS*51			UB03619			UB04468			MCBS*54	
	Sample Date:		07-JUN-94			07-JUN-94			30-JUN-94			07-JUN-94	
User Test Group	*Sample Depth:*		2 - 4			2 - 4			2 - 4			2 - 4	
Lab Method *Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
VOLATILES													
SW8260_S													
Chlorobenzene	mg/kg												
Chloroethane	mg/kg												
Chloroform	mg/kg												
Chloromethane	mg/kg												
Cumene	mg/kg												
Dibromochloromethane	mg/kg												
Dibromomethane	mg/kg												
Dichlorodifluoromethane	mg/kg												
Ethylbenzene	mg/kg												
Hexachlorobutadiene	mg/kg												
Methylene chloride	mg/kg												
Naphthalene	mg/kg												
Styrene	mg/kg												
Tetrachloroethene	mg/kg												
Toluene	mg/kg												
Trichloroethene	mg/kg												
Trichlorofluoromethane	mg/kg												
Vinyl chloride	mg/kg												
cis-1,2-Dichloroethene	mg/kg												
cis-1,3-Dichloropropene	mg/kg												
m,p-Xylenes	mg/kg												
n-Butylbenzene	mg/kg												
n-Propylbenzene	mg/kg												
o-Chlorotoluene	mg/kg												
p-Chlorotoluene	mg/kg												
p-Cymene	mg/kg												
sec-Butylbenzene	mg/kg												
sec-Dichloropropane	mg/kg												
tert-Butylbenzene	mg/kg												
trans-1,2-Dichloroethene	mg/kg												
trans-1,3-Dichloropropene	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

		Location Code:	RK-S02			RK-S02			RK-S03			RK-S03			
		Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203			
		Sample No:	UB03620			UB04469			MCBS*52			UB03621			
		Sample Date:	07-JUN-94			30-JUN-94			07-JUN-94			07-JUN-94			
User Test Group		*Sample Depth:*	2 - 4			2 - 4			2 - 4			2 - 4			
Lab Method	*Parameter*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	
VOLATILES															
SW8260_S															
	Chlorobenzene	mg/kg													
	Chloroethane	mg/kg													
	Chloroform	mg/kg													
	Chloromethane	mg/kg													
	Cumene	mg/kg													
	Dibromochloromethane	mg/kg													
	Dibromomethane	mg/kg													
	Dichlorodifluoromethane	mg/kg													
	Ethylbenzene	mg/kg													
	Hexachlorobutadiene	mg/kg													
	Methylene chloride	mg/kg													
	Naphthalene	mg/kg													
	Styrene	mg/kg													
	Tetrachloroethene	mg/kg													
	Toluene	mg/kg													
	Trichloroethene	mg/kg													
	Trichlorofluoromethane	mg/kg													
	Vinyl chloride	mg/kg													
	cis-1,2-Dichloroethene	mg/kg													
	cis-1,3-Dichloropropene	mg/kg													
	m,p-Xylenes	mg/kg													
	n-Butylbenzene	mg/kg													
	n-Propylbenzene	mg/kg													
	o-Chlorotoluene	mg/kg													
	p-Chlorotoluene	mg/kg													
	p-Cymene	mg/kg													
	sec-Butylbenzene	mg/kg													
	sec-Dichloropropane	mg/kg													
	tert-Butylbenzene	mg/kg													
	trans-1,2-Dichloroethene	mg/kg													
	trans-1,3-Dichloropropene	mg/kg													

	Location Code:	RK-S03			RK-S04			RK-S04			RK-S04		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	UB04470			MCBS*53			UB03622			UB04471		
	Sample Date:	30-JUN-94			07-JUN-94			07-JUN-94			30-JUN-94		
User Test Group	Sample Depth:	2 - 4			2 - 4			2 - 4			2 - 4		
Lab Method													
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260_S													
Chlorobenzene	mg/kg												
Chloroethane	mg/kg												
Chloroform	mg/kg												
Chloromethane	mg/kg												
Cumene	mg/kg												
Dibromochloromethane	mg/kg												
Dibromomethane	mg/kg												
Dichlorodifluoromethane	mg/kg												
Ethylbenzene	mg/kg												
Hexachlorobutadiene	mg/kg												
Methylene chloride	mg/kg												
Naphthalene	mg/kg												
Styrene	mg/kg												
Tetrachloroethene	mg/kg												
Toluene	mg/kg												
Trichloroethene	mg/kg												
Trichlorofluoromethane	mg/kg												
Vinyl chloride	mg/kg												
cis-1,2-Dichloroethene	mg/kg												
cis-1,3-Dichloropropene	mg/kg												
m,p-Xylenes	mg/kg												
n-Butylbenzene	mg/kg												
n-Propylbenzene	mg/kg												
o-Chlorotoluene	mg/kg												
p-Chlorotoluene	mg/kg												
p-Cymene	mg/kg												
sec-Butylbenzene	mg/kg												
sec-Dichloropropane	mg/kg												
tert-Butylbenzene	mg/kg												
trans-1,2-Dichloroethene	mg/kg												
trans-1,3-Dichloropropene	mg/kg												

Summary of Subsurface Soil Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:	RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:	RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:	RG0002			RG0006			RG0003			RG0008		
	Sample Date:	29-FEB-00			01-MAR-00			01-MAR-00			01-MAR-00		
User Test Group	Sample Depth:	6 - 8			6 - 7			10 - 12			1 - 12		
Lab Method													
Parameter	Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260_S													
Chlorobenzene	mg/kg	.0041	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Chloroethane	mg/kg	.014	U	UJ	.014	U	UJ	.011	U	UJ	.012	U	UJ
Chloroform	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Chloromethane	mg/kg	.014	U	U	.014	U	U	.011	U	U	.012	U	U
Cumene	mg/kg	.00088	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Dibromochloromethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Dibromomethane	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Dichlorodifluoromethane	mg/kg	.014	U	U	.014	U	U	.011	U	U	.012	U	U
Ethylbenzene	mg/kg	.0028	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Hexachlorobutadiene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
Methylene chloride	mg/kg	.007	B	B	.0061	J B	B	.005	J B	B	.006	B	B
Naphthalene	mg/kg	.0014	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Styrene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Tetrachloroethene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
Toluene	mg/kg	.011			.0072	U	U	.0057	U	U	.0059	U	U
Trichloroethene	mg/kg	.0017	J	J	.0072	U	U	.0057	U	U	.0059	U	U
Trichlorofluoromethane	mg/kg	.014	U	U	.014	U	U	.011	U	U	.012	U	U
Vinyl chloride	mg/kg	.003	J	J	.014	U	U	.011	U	U	.012	U	U
cis-1,2-Dichloroethene	mg/kg	.56	D	J	.0072	U	U	.0057	U	U	.0059	U	U
cis-1,3-Dichloropropene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U
m,p-Xylenes	mg/kg	.0099			.0072	U	U	.0057	U	U	.0059	U	U
n-Butylbenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
n-Propylbenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
o-Chlorotoluene	mg/kg	.046		J	.0072	U	U	.0057	U	U	.0059	U	U
p-Chlorotoluene	mg/kg	.015		J	.0072	U	U	.0057	U	U	.0059	U	U
p-Cymene	mg/kg	.0065	J	J	.0072	U	U	.0057	U	U	.0059	U	U
sec-Butylbenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
sec-Dichloropropane	mg/kg	.0068	U	UJ	.0072	U	UJ	.0057	U	UJ	.0059	U	UJ
tert-Butylbenzene	mg/kg	.0068	U	UJ	.0072	U	U	.0057	U	U	.0059	U	U
trans-1,2-Dichloroethene	mg/kg	.12			.0072	U	U	.0057	U	U	.0059	U	U
trans-1,3-Dichloropropene	mg/kg	.0068	U	U	.0072	U	U	.0057	U	U	.0059	U	U

Location Code:	RNG-203-MW04			
Associated Site:	RNG-203			
Sample No:	RG0010			
Sample Date:	02-MAR-00			
Sample Depth:	6 - 8			
User Test Group / Lab Method / Parameter	*Units*	*Result*	*Qual*	*VQual*
VOLATILES				
SW8260_S				
Chlorobenzene	mg/kg	.0065	U	U
Chloroethane	mg/kg	.013	U	UJ
Chloroform	mg/kg	.0065	U	U
Chloromethane	mg/kg	.013	U	U
Cumene	mg/kg	.0065	U	U
Dibromochloromethane	mg/kg	.0065	U	U
Dibromomethane	mg/kg	.0065	U	U
Dichlorodifluoromethane	mg/kg	.013	U	U
Ethylbenzene	mg/kg	.0065	U	U
Hexachlorobutadiene	mg/kg	.0065	U	U
Methylene chloride	mg/kg	.0064	J B	B
Naphthalene	mg/kg	.0065	U	U
Styrene	mg/kg	.0065	U	U
Tetrachloroethene	mg/kg	.0014	J	J
Toluene	mg/kg	.0065	U	U
Trichloroethene	mg/kg	.0065	U	U
Trichlorofluoromethane	mg/kg	.013	U	U
Vinyl chloride	mg/kg	.013	U	U
cis-1,2-Dichloroethene	mg/kg	.0065	U	U
cis-1,3-Dichloropropene	mg/kg	.0065	U	U
m,p-Xylenes	mg/kg	.0065	U	U
n-Butylbenzene	mg/kg	.0065	U	U
n-Propylbenzene	mg/kg	.0065	U	U
o-Chlorotoluene	mg/kg	.0065	U	U
p-Chlorotoluene	mg/kg	.0065	U	U
p-Cymene	mg/kg	.0065	U	U
sec-Butylbenzene	mg/kg	.0065	U	U
sec-Dichloropropane	mg/kg	.0065	U	UJ
tert-Butylbenzene	mg/kg	.0065	U	U
trans-1,2-Dichloroethene	mg/kg	.0065	U	U
trans-1,3-Dichloropropene	mg/kg	.0065	U	U

Summary of Groundwater Data
Former Agent Training Area. Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group														
Lab Method														
Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
METALS														
SW6010_W														
Aluminum		mg/L	2.66			.418		B	.313		B	.188	B	B
Antimony		mg/L	.06	U	U	.06	U	U	.06	U	U	.06	U	U
Arsenic		mg/L	.0796			.01	U	U	.01	U	U	.01	U	U
Barium		mg/L	.0453	B	J	.0137	B	J	.0959	B	J	.0875	B	J
Beryllium		mg/L	.0017	B	B	.00063	B	B	.005	U	U	.005	U	U
Cadmium		mg/L	.0019	B	J	.005	U	U	.005	U	U	.005	U	U
Calcium		mg/L	5.27			9.36			113			113		
Chromium		mg/L	.0028	B	J	.01	U	U	.0017	B	J	.01	U	U
Cobalt		mg/L	.056			.0089	B	J	.05	U	U	.05	U	U
Copper		mg/L	.025	U	U	.025	U	U	.025	U	U	.025	U	U
Iron		mg/L	27.7			.281			1.99			1.66		
Lead		mg/L	.0019	B	J	.003	U	U	.003	U	U	.003	U	U
Magnesium		mg/L	.695	B	J	1.03	B	J	14.6			14.6		
Manganese		mg/L	1.17			.0879			.195			.188		
Nickel		mg/L	.0382	B	J	.0053	B	J	.0046	B	J	.0031	B	J
Potassium		mg/L	.489	B	J	.299	B	J	2.74	B	J	2.64	B	J
Selenium		mg/L	.005	U	U	.005	U	U	.005	U	U	.005	U	U
Silver		mg/L	.0022	B	J	.01	U	U	.01	U	U	.01	U	U
Sodium		mg/L	12.4			3.47	B	J	26.4		J	26.6		J
Thallium		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Vanadium		mg/L	.0046	B	J	.05	U	U	.05	U	U	.05	U	U
Zinc		mg/L	.15			.0058	B	J	.0104	B	J	.0059	B	J
SW7470_W														
Mercury		mg/L	.000072	B	J	.0002	U	U	.0002	U	U	.0002	U	U
NITROAROMATI														
SW8330_W														
1,3,5-Trinitrobenzene		mg/L	.0002	U	U	.0004	U	U	.0002	U	U	.0002	U	U
1,3-Dinitrobenzene		mg/L	.0002	U	U	.0004	U	U	.0002	U	U	.0002	U	U
2,4,6-Trinitrotoluene		mg/L	.00028			.0004	U	U	.0002	U	U	.0002	U	U
[illegible] Dinitrotoluene		mg/L	.00036	GU	[illegible]	.0004	U	U	.0002	U	U	.0002	U	U

Location Code: RNG-203-MW04
Associated Site: RNG-203
Sample No: RG3006
Sample Date: 01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
METALS					
SW6010_W					
Aluminum		mg/L	13.4		
Antimony		mg/L	.06	U	U
Arsenic		mg/L	.0079	B	J
Barium		mg/L	.133	B	J
Beryllium		mg/L	.0027	B	B
Cadmium		mg/L	.0114		
Calcium		mg/L	91.7		
Chromium		mg/L	.0409		
Cobalt		mg/L	.0106	B	J
Copper		mg/L	.0244	B	B
Iron		mg/L	14.7		
Lead		mg/L	.014		
Magnesium		mg/L	3.24	B	J
Manganese		mg/L	.126		
Nickel		mg/L	.0258	B	J
Potassium		mg/L	1.37	B	J
Selenium		mg/L	.005	U	U
Silver		mg/L	.01	U	U
Sodium		mg/L	4.44	B	J
Thallium		mg/L	.01	U	U
Vanadium		mg/L	.0455	B	J
Zinc		mg/L	.152		
SW7470_W					
Mercury		mg/L	.00017	B	J
NITROAROMATI					
SW8330_W					
1,3,5-Trinitrobenzene		mg/L	.0002	U	U
1,3-Dinitrobenzene		mg/L	.0002	U	U
2,4,6-Trinitrotoluene		mg/L	.0002	U	U
2,4-Dinitrotoluene		mg/L	.0002	U	U

Summary of Groundwater Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
NITROAROMATI														
SW8330_W														
2,6-Dinitrotoluene		mg/L	.0015	GU	U	.0004	U	U	.0002	U	U	.0002	U	U
2-Amino-4,6-dinitrotoluene		mg/L	.0002	U	U	.00067	GU	U	.0002	U	U	.0002	U	U
2-Nitrotoluene		mg/L	.0002	U	U	.0016			.0002	U	U	.0002	U	U
3-Nitrotoluene		mg/L	.00068	GU	U	.0004	U	U	.0002	U	U	.0002	U	U
4-Amino-2,6-dinitrotoluene		mg/L	.0002	U	U	.00048	GU	U	.0002	U	U	.0002	U	U
HMX		mg/L	.0005	U	U	.001	U	U	.0005	U	U	.0005	U	U
Nitrobenzene		mg/L	.0002	U	U	.0013			.0002	U	U	.0002	U	U
RDX		mg/L	.0005	U	U	.001	U	U	.0005	U	U	.0005	U	U
Tetryl		mg/L	.0002	U	U	.0004	U	U	.0002	U	U	.0002	U	U
p-Nitrotoluene		mg/L	.0002	U	U	.00041	GU	U	.0002	U	U	.0002	U	U
SEMIVOLATILES														
SW8270_W														
1,2,4-Trichlorobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
1,2-Dichlorobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
1,3-Dichlorobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
1,4-Dichlorobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,4,5-Trichlorophenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,4,6-Trichlorophenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,4-Dichlorophenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,4-Dimethylphenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,4-Dinitrophenol		mg/L	.05	U	UJ	.05	U	UJ	.05	U	UJ	.05	U	UJ
2,4-Dinitrotoluene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2,6-Dinitrotoluene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2-Chloronaphthalene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2-Chlorophenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2-Methylnaphthalene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2-Methylphenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
2-Nitroaniline		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U
2-Nitrophenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
3,3'-Dichlorobenzidine		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U

Location Code: RNG-203-MW04
Associated Site: RNG-203
Sample No: RG3006
Sample Date: 01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
NITROAROMATI					
SW8330_W					
2,6-Dinitrotoluene		mg/L	.0002	U	U
2-Amino-4,6-dinitrotoluene		mg/L	.00053	GU	U
2-Nitrotoluene		mg/L	.00065		
3-Nitrotoluene		mg/L	.0002	U	U
4-Amino-2,6-dinitrotoluene		mg/L	.00023	GU	U
HMX		mg/L	.0005	U	U
Nitrobenzene		mg/L	.0002	U	U
RDX		mg/L	.0005	U	U
Tetryl		mg/L	.0002	U	U
p-Nitrotoluene		mg/L	.00078		
SEMIVOLATILES					
SW8270_W					
1,2,4-Trichlorobenzene		mg/L	.01	U	U
1,2-Dichlorobenzene		mg/L	.01	U	U
1,3-Dichlorobenzene		mg/L	.01	U	U
1,4-Dichlorobenzene		mg/L	.01	U	U
2,4,5-Trichlorophenol		mg/L	.01	U	U
2,4,6-Trichlorophenol		mg/L	.01	U	U
2,4-Dichlorophenol		mg/L	.01	U	U
2,4-Dimethylphenol		mg/L	.01	U	U
2,4-Dinitrophenol		mg/L	.05	U	UJ
2,4-Dinitrotoluene		mg/L	.01	U	U
2,6-Dinitrotoluene		mg/L	.01	U	U
2-Chloronaphthalene		mg/L	.01	U	U
2-Chlorophenol		mg/L	.01	U	U
2-Methylnaphthalene		mg/L	.01	U	U
2-Methylphenol		mg/L	.01	U	U
2-Nitroaniline		mg/L	.05	U	U
2-Nitrophenol		mg/L	.01	U	U
3,3'-Dichlorobenzidine		mg/L	.05	U	U

Summary of Groundwater Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
SEMIVOLATILES														
SW8270_W														
3-Nitroaniline		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U
4,6-Dinitro-2-methylphenol		mg/L	.05	U	U	.05	U	UJ	.05	U	U	.05	U	U
4-Bromophenyl phenyl ether		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
4-Chloro-3-methylphenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
4-Chloroaniline		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
4-Chlorophenyl phenyl ether		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
4-Methylphenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
4-Nitroaniline		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U
4-Nitrophenol		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U
Acenaphthene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Acenaphthylene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Anthracene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Benzo(a)anthracene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Benzo(a)pyrene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Benzo(b)fluoranthene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Benzo(ghi)perylene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Benzo(k)fluoranthene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Butyl benzyl phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Carbazole		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Chrysene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Di-n-butyl phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Di-n-octyl phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Dibenz(a,h)anthracene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Dibenzofuran		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Diethyl phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Dimethyl phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Fluoranthene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Fluorene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Hexachlorobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Hexachlorobutadiene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Hexachlorocyclopentadiene		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U

Location Code: RNG-203-MW04
Associated Site: RNG-203
Sample No: RG3006
Sample Date: 01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
SEMIVOLATILES					
SW8270_W					
3-Nitroaniline		mg/L	.05	U	U
4,6-Dinitro-2-methylphenol		mg/L	.05	U	U
4-Bromophenyl phenyl ether		mg/L	.01	U	U
4-Chloro-3-methylphenol		mg/L	.01	U	U
4-Chloroaniline		mg/L	.01	U	U
4-Chlorophenyl phenyl ether		mg/L	.01	U	U
4-Methylphenol		mg/L	.01	U	U
4-Nitroaniline		mg/L	.05	U	U
4-Nitrophenol		mg/L	.05	U	U
Acenaphthene		mg/L	.01	U	U
Acenaphthylene		mg/L	.01	U	U
Anthracene		mg/L	.01	U	U
Benzo(a)anthracene		mg/L	.01	U	U
Benzo(a)pyrene		mg/L	.01	U	U
Benzo(b)fluoranthene		mg/L	.01	U	U
Benzo(ghi)perylene		mg/L	.01	U	U
Benzo(k)fluoranthene		mg/L	.01	U	U
Butyl benzyl phthalate		mg/L	.01	U	U
Carbazole		mg/L	.01	U	U
Chrysene		mg/L	.01	U	U
Di-n-butyl phthalate		mg/L	.01	U	U
Di-n-octyl phthalate		mg/L	.01	U	U
Dibenz(a,h)anthracene		mg/L	.01	U	U
Dibenzofuran		mg/L	.01	U	U
Diethyl phthalate		mg/L	.01	U	U
Dimethyl phthalate		mg/L	.01	U	U
Fluoranthene		mg/L	.01	U	U
Fluorene		mg/L	.01	U	U
Hexachlorobenzene		mg/L	.01	U	U
Hexachlorobutadiene		mg/L	.01	U	U
Hexachlorocyclopentadiene		mg/L	.05	U	U

Summary of Groundwater Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
SEMIVOLATILES														
SW8270_W														
Hexachloroethane		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Indeno(1,2,3-cd)pyrene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Isophorone		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Naphthalene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Nitrobenzene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Pentachlorophenol		mg/L	.05	U	U	.05	U	U	.05	U	U	.05	U	U
Phenanthrene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Phenol		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Pyrene		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
bis(2-Chloroethoxy)methane		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
bis(2-Chloroethyl)ether		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
bis(2-Chloroisopropyl)ether		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
bis(2-Ethylhexyl)phthalate		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
n-Nitroso-di-n-propylamine		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
n-Nitrosodiphenylamine		mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
VOLATILES														
SW8260_W														
1,1,1,2-Tetrachloroethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,1,1-Trichloroethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,1,2,2-Tetrachloroethane		mg/L	.1	J	J	.001	U	U	.001	U	U	.001	U	U
1,1,2-Trichloroethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,1-Dichloroethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,1-Dichloroethene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,1-Dichloropropene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2,3-Trichlorobenzene		mg/L	.12	U	UJ	.001	U	U	.001	U	UJ	.001	U	UJ
1,2,3-Trichloropropane		mg/L	.12	U	R	.001	U	U	.001	U	R	.001	U	R
1,2,4-Trichlorobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2,4-Trimethylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2-Dibromo-3-Chloropropane		mg/L	.25	U	R	.002	U	R	.002	U	R	.002	U	R
1,2-Dibromoethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U

Location Code: RNG-203-MW04
Associated Site: RNG-203
Sample No: RG3006
Sample Date: 01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
SEMIVOLATILES					
SW8270_W					
Hexachloroethane		mg/L	.01	U	U
Indeno(1,2,3-cd)pyrene		mg/L	.01	U	U
Isophorone		mg/L	.01	U	U
Naphthalene		mg/L	.01	U	U
Nitrobenzene		mg/L	.01	U	U
Pentachlorophenol		mg/L	.05	U	U
Phenanthrene		mg/L	.0016	J	J
Phenol		mg/L	.01	U	U
Pyrene		mg/L	.01	U	U
bis(2-Chloroethoxy)methane		mg/L	.01	U	U
bis(2-Chloroethyl)ether		mg/L	.01	U	U
bis(2-Chloroisopropyl)ether		mg/L	.01	U	U
bis(2-Ethylhexyl)phthalate		mg/L	.01	U	U
n-Nitroso-di-n-propylamine		mg/L	.01	U	U
n-Nitrosodiphenylamine		mg/L	.01	U	U
VOLATILES					
SW8260_W					
1,1,1,2-Tetrachloroethane		mg/L	.001	U	U
1,1,1-Trichloroethane		mg/L	.001	U	U
1,1,2,2-Tetrachloroethane		mg/L	.001	U	U
1,1,2-Trichloroethane		mg/L	.001	U	U
1,1-Dichloroethane		mg/L	.001	U	U
1,1-Dichloroethene		mg/L	.001	U	U
1,1-Dichloropropene		mg/L	.001	U	U
1,2,3-Trichlorobenzene		mg/L	.001	U	UJ
1,2,3-Trichloropropane		mg/L	.001	U	R
1,2,4-Trichlorobenzene		mg/L	.001	U	U
1,2,4-Trimethylbenzene		mg/L	.001	U	U
1,2-Dibromo-3-Chloropropane		mg/L	.002	U	R
1,2-Dibromoethane		mg/L	.001	U	U

Summary of Groundwater Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group														
Lab Method														
Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
VOLATILES														
SW8260_W														
1,2-Dichlorobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2-Dichloroethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2-Dichloropropane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,2-Dimethylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,3,5-Trimethylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,3-Dichlorobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,3-Dichloropropane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
1,4-Dichlorobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
2-Butanone		mg/L	.62	U	R	.005	U	R	.005	U	R	.005	U	R
2-Hexanone		mg/L	.62	U	U	.005	U	U	.005	U	U	.005	U	U
4-Methyl-2-pentanone		mg/L	.62	U	U	.005	U	U	.005	U	U	.005	U	U
Acetone		mg/L	1.2	U	R	.01	U	R	.0029	J	B	.01	U	R
Benzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Bromobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Bromochloromethane		mg/L	.12	U	R	.001	U	U	.001	U	R	.001	U	R
Bromodichloromethane		mg/L	.12	U	U	.001	U	R	.001	U	U	.001	U	U
Bromoform		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Bromomethane		mg/L	.25	U	U	.002	U	U	.002	U	U	.002	U	U
Carbon disulfide		mg/L	.12	U	U	.00014	J	B	.001	U	U	.001	U	U
Carbon tetrachloride		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Chlorobenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Chloroethane		mg/L	.25	U	U	.002	U	U	.002	U	U	.002	U	U
Chloroform		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Chloromethane		mg/L	.25	U	U	.00018	J	J	.002	U	U	.00014	J	B
Cumene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Dibromochloromethane		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Dibromomethane		mg/L	.12	U	R	.001	U	R	.001	U	R	.001	U	R
Dichlorodifluoromethane		mg/L	.25	U	UJ	.002	U	UJ	.002	U	UJ	.002	U	UJ
Ethylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Hexachlorobutadiene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Methylene chloride		mg/L	.065	J B	B	.001	U	UJ	.001	U	U	.001	U	U

Location Code: RNG-203-MW04
Associated Site: RNG-203
Sample No: RG3006
Sample Date: 01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
VOLATILES					
SW8260_W					
1,2-Dichlorobenzene		mg/L	.001	U	U
1,2-Dichloroethane		mg/L	.00098	J	J
1,2-Dichloropropane		mg/L	.001	U	U
1,2-Dimethylbenzene		mg/L	.001	U	U
1,3,5-Trimethylbenzene		mg/L	.001	U	U
1,3-Dichlorobenzene		mg/L	.001	U	U
1,3-Dichloropropane		mg/L	.001	U	U
1,4-Dichlorobenzene		mg/L	.001	U	U
2-Butanone		mg/L	.005	U	R
2-Hexanone		mg/L	.005	U	U
4-Methyl-2-pentanone		mg/L	.005	U	U
Acetone		mg/L	.0043	J	B
Benzene		mg/L	.001	U	U
Bromobenzene		mg/L	.001	U	U
Bromochloromethane		mg/L	.001	U	R
Bromodichloromethane		mg/L	.001	U	U
Bromoform		mg/L	.001	U	U
Bromomethane		mg/L	.002	U	U
Carbon disulfide		mg/L	.001	U	U
Carbon tetrachloride		mg/L	.001	U	U
Chlorobenzene		mg/L	.001	U	U
Chloroethane		mg/L	.002	U	U
Chloroform		mg/L	.001	U	U
Chloromethane		mg/L	.00018	J	B
Cumene		mg/L	.001	U	U
Dibromochloromethane		mg/L	.001	U	U
Dibromomethane		mg/L	.001	U	R
Dichlorodifluoromethane		mg/L	.002	U	UJ
Ethylbenzene		mg/L	.001	U	U
Hexachlorobutadiene		mg/L	.001	U	U
Methylene chloride		mg/L	.001	U	U

Summary of Groundwater Data
Former Agent Training Area, Range K(Parcel 203)
Fort McClellan, Alabama

Report Date: 10/13/00

	Location Code:		RNG-203-MW01			RNG-203-MW02			RNG-203-MW03			RNG-203-MW03		
	Associated Site:		RNG-203			RNG-203			RNG-203			RNG-203		
	Sample No:		RG3001			RG3004			RG3002			RG3005		
	Sample Date:		01-JUN-00			06-JUN-00			01-JUN-00			01-JUN-00		
User Test Group														
Lab Method														
Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*	*Result*	*Qual*	*VQual*
VOLATILES														
SW8260_W														
Naphthalene		mg/L	.12	U	UJ	.001	U	U	.001	U	UJ	.001	U	UJ
Styrene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Tetrachloroethene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Toluene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Trichloroethene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
Trichlorofluoromethane		mg/L	.25	U	U	.002	U	U	.002	U	U	.002	U	U
Vinyl chloride		mg/L	.043	J	J	.002	U	U	.002	U	U	.002	U	U
cis-1,2-Dichloroethene		mg/L	3.8			.001	U	U	.001	U	U	.001	U	U
cis-1,3-Dichloropropene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
m,p-Xylenes		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
n-Butylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
n-Propylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
o-Chlorotoluene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
p-Chlorotoluene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
p-Cymene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
sec-Butylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
sec-Dichloropropane		mg/L	.12	U	UJ	.001	U	U	.001	U	UJ	.001	U	UJ
tert-Butylbenzene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U
trans-1,2-Dichloroethene		mg/L	1.2			.001	U	U	.001	U	U	.001	U	U
trans-1,3-Dichloropropene		mg/L	.12	U	U	.001	U	U	.001	U	U	.001	U	U

Location Code:	RNG-203-MW04
Associated Site:	RNG-203
Sample No:	RG3006
Sample Date:	01-JUN-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
VOLATILES					
SW8260_W					
Naphthalene		mg/L	.001	U	UJ
Styrene		mg/L	.001	U	U
Tetrachloroethene		mg/L	.00031	J	J
Toluene		mg/L	.001	U	U
Trichloroethene		mg/L	.00029	J	J
Trichlorofluoromethane		mg/L	.002	U	U
Vinyl chloride		mg/L	.007		
cis-1,2-Dichloroethene		mg/L	.001	U	U
cis-1,3-Dichloropropene		mg/L	.001	U	U
m,p-Xylenes		mg/L	.001	U	U
n-Butylbenzene		mg/L	.001	U	U
n-Propylbenzene		mg/L	.001	U	U
o-Chlorotoluene		mg/L	.001	U	U
p-Chlorotoluene		mg/L	.001	U	U
p-Cymene		mg/L	.001	U	U
sec-Butylbenzene		mg/L	.001	U	U
sec-Dichloropropane		mg/L	.001	U	UJ
tert-Butylbenzene		mg/L	.001	U	U
trans-1,2-Dichloroethene		mg/L	.001	U	U
trans-1,3-Dichloropropene		mg/L	.001	U	U