APPENDIX C

BORING LOGS

COMPLETED
Demi Mar 8/7/01

HTRW DRILLING LOG

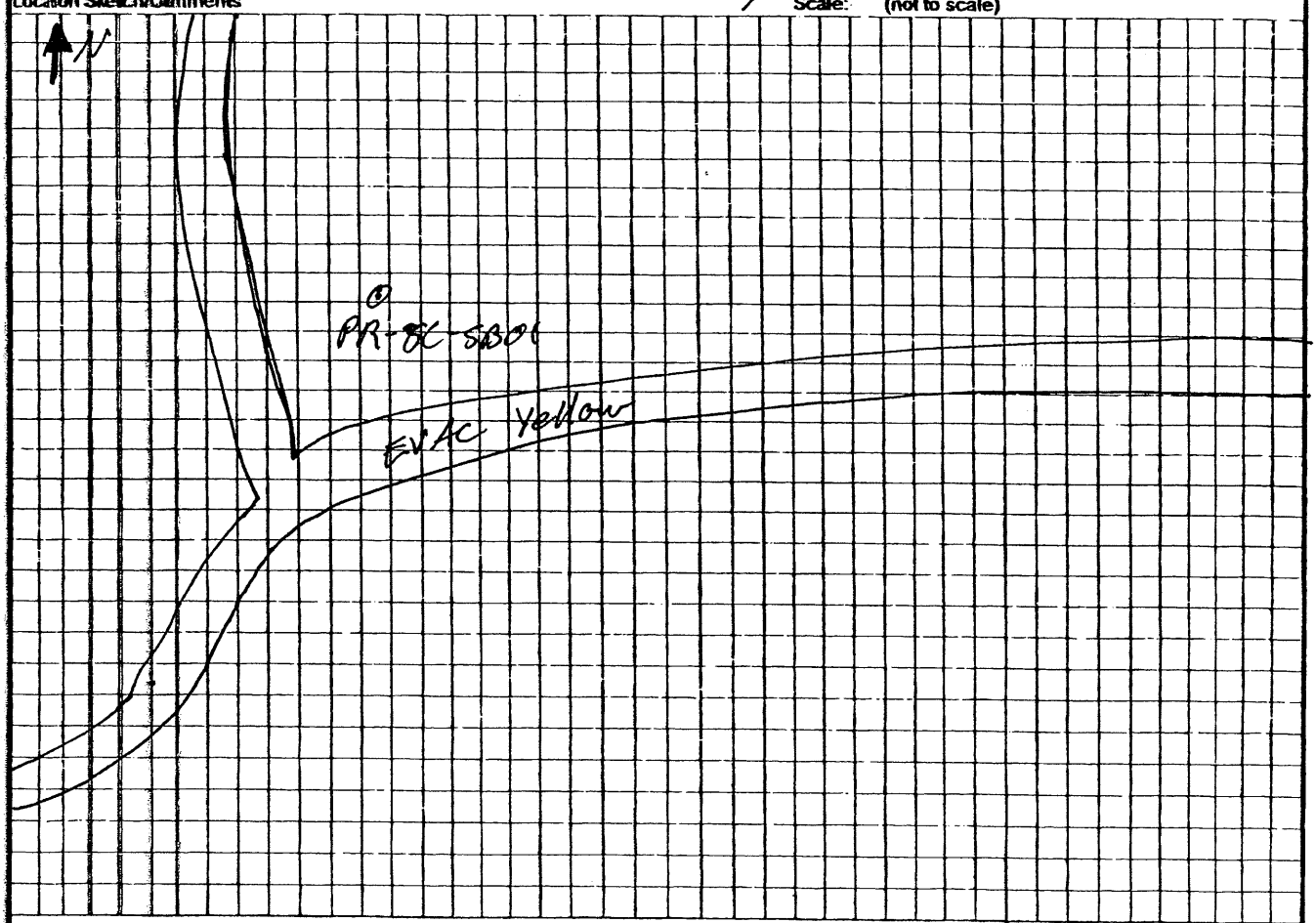
District: Mobile USACE		Hole Number: PR-8C-SB01
Company Name: IT Corporation	Drill Subcontractor: Zack Parham	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations		Location: Calhoun County, Alabama
Name of Driller: Zack Parham		Manufacture's Designation of Drill: Hand Auger
Sizes and Types of Drilling and Sampling Equipment: PID; Stainless Steel bowls/Spoons; Hand Auger; Encore Samplers		Hole Location: PR-8C-SB01
		Surface Elevation: NA TBD
		Date Started: 7.30.01 / Date Completed: 7.30.01
Overburden Thickness: >8'		Depth Groundwater Encountered: NA
Depth Drilled into Rock: TBD		Depth to Water and Elapsed Time After Drilling Completed: NA
Total Depth of Hole: 8'		Other Water Level Measurements (Specify): NA

Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	—

Samples for Chemical/Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
	X	X	Semi volitales	Herbacides Pesticides	PCB's Nitro aromatics	—

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	—	—	—	Zack Parham

Location Sketch/Comments — Scale: (not to scale)



Project	Hole Number
Fort McClellan Site Investigations	PR-8C-SB01

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HTRW DRILLING LOG

(continuation sheet)

Hole Number: PR-8C-SB01

Project: Fort McClellan Site Investigations

Geologist: Zach Parks

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft)	Description of Materials	USCS/Lith	Field Screening Results (ppm)	Geotech. Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	Remarks Time
	0	light brown to light grey slightly moist SILT, trace coarse quartz-rich subangular Gravel.	ML	0.0	X	XQ0001	1.0/1.0	1425
	1	light brown to light grey slightly moist SILT, trace coarse to fine Sand.	ML	0.0	X	XQ0002	3.0/3.0	1455
	2							
	3							
	4	light Grey slightly moist SILT and soft CLAY.	ML/CL	0.0	X	XQ0003	4.0/4.0	1515
	5							
	6							
	7							
	8							~~stopped~~ auger refusal.

Project: Fort McClellan Site Investigations

Hole Number: PR-8C-SB01

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COMPLETED
Kenni Myh 8/7/01

HTRW DRILLING LOG

District: Mobile USACE		Hole Number: PR-8C-SB02
Company Name: IT Corporation	Drill Subcontractor: Zack Parham	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Zack Parham	Manufacture's Designation of Drill: Hand Auger	
Sizes and Types of Drilling and Sampling Equipment: PID; Stainless Steel bowls/spoons; Hand auger; Encore sampler	Hole Location: PR-8C-SB02	
	Surface Elevation: TBD	
	Date Started: 7.31.01	Date Completed: 7.31.01
Overburden Thickness: >6.8'	Depth Groundwater Encountered: NA	
Depth Drilled into Rock: NA	Depth to Water and Elapsed Time After Drilling Completed: NA	
Total Depth of Hole: 6.8'	Other Water Level Measurements (Specify): NA	

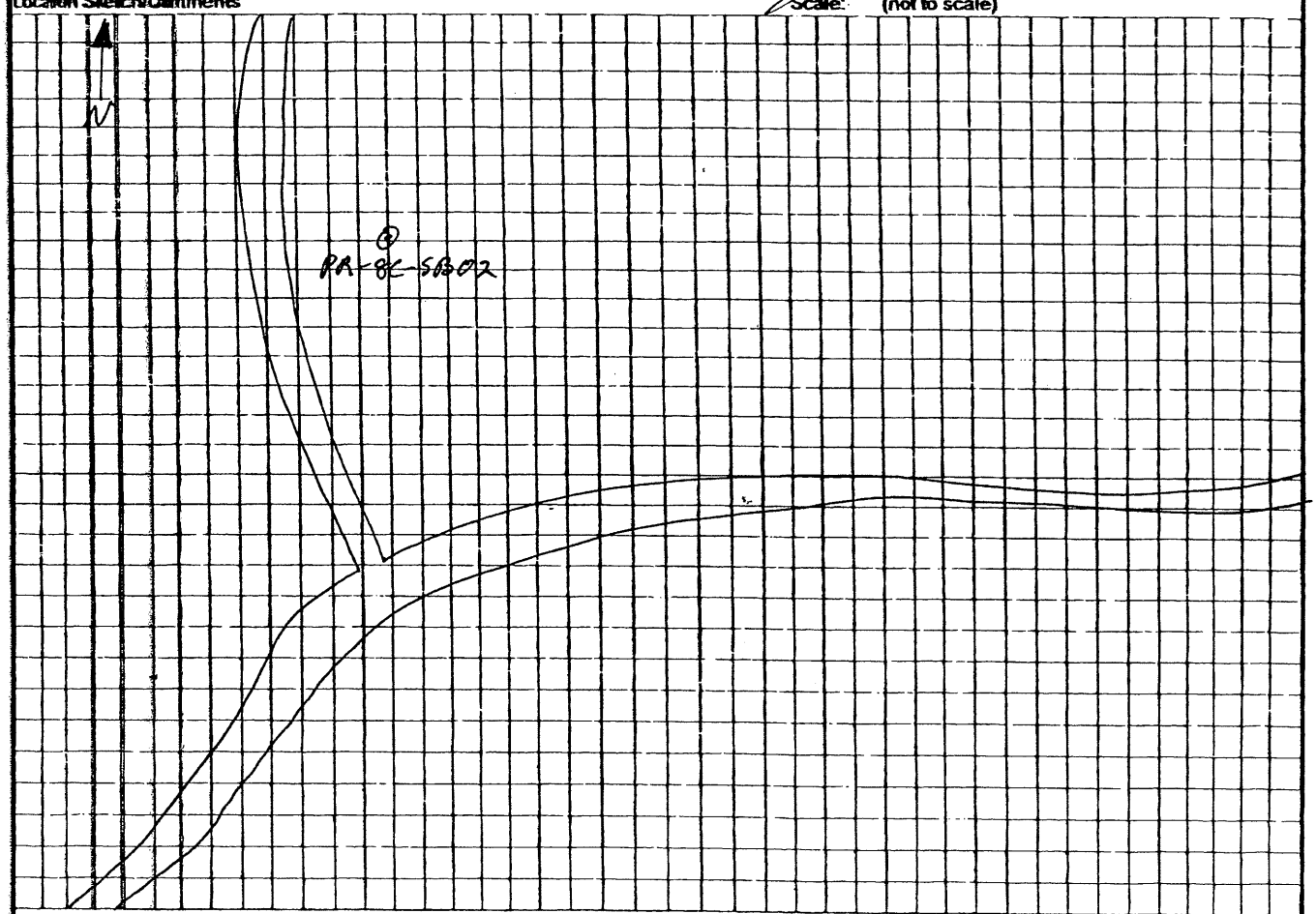
Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	—

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
—	X	X	Herbicides/Pesticides	PCB's	Nitroaromatics	—

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	—	—	—	Zack Parham

Location Sketch/Comments

Scale: (not to scale)



Project: Fort McClellan Site Investigations	Hole Number: PR-8C-SB02

HTRW DRILLING LOG

(continuation sheet)

Hole Number: PR-8C-SB02

Project: Fort McClellan Site Investigations

Geologist: Zach Porter

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft)	Description of Materials	USCS/LKh	Field Screening Results (ppm)	Geotech. Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	Remarks time
		brown to dark brown slightly moist SILT.	ML	0.0	X	XQ0004	1.0/1.0	1015
	1							
		brown to grey slightly moist soft CLAY, trace coarse to fine Sand.	CL	0.0	X	XQ0005	3.0/3.0	1030
	2							
	3							
	4	grey with light grey mottles slightly moist soft CLAY.	CL	0.0	X	XQ0006	2.8/2.8	1050
	5							
	6							
								auger refusal

Project Fort McClellan Site Investigations

Hole Number: PR-8C-SB02

COMPLETED
Dennis Myers 8/7/01

HTRW DRILLING LOG

District: Mobile USACE		Hole Number: PR-8C-SB03
Company Name: IT Corporation	Drill Subcontractor: Zach Parham	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Zach Parham	Manufacture's Designation of Drill: Hand Auger	
Sizes and Types of Drilling and Sampling Equipment: PID; Stainless steel bowls/spoons; Hand auger; Encore sampler	Hole Location: PR-8C-SB03	
	Surface Elevation: TBD	
	Date Started: 7.31.01	Date Completed: 7.31.01
Overburden Thickness: > 6"	Depth Groundwater Encountered: NA	
Depth Drilled into Rock: NA	Depth to Water and Elapsed Time After Drilling Completed: NA	
Total Depth of Hole: 6"	Other Water Level Measurements (Specify): NA	

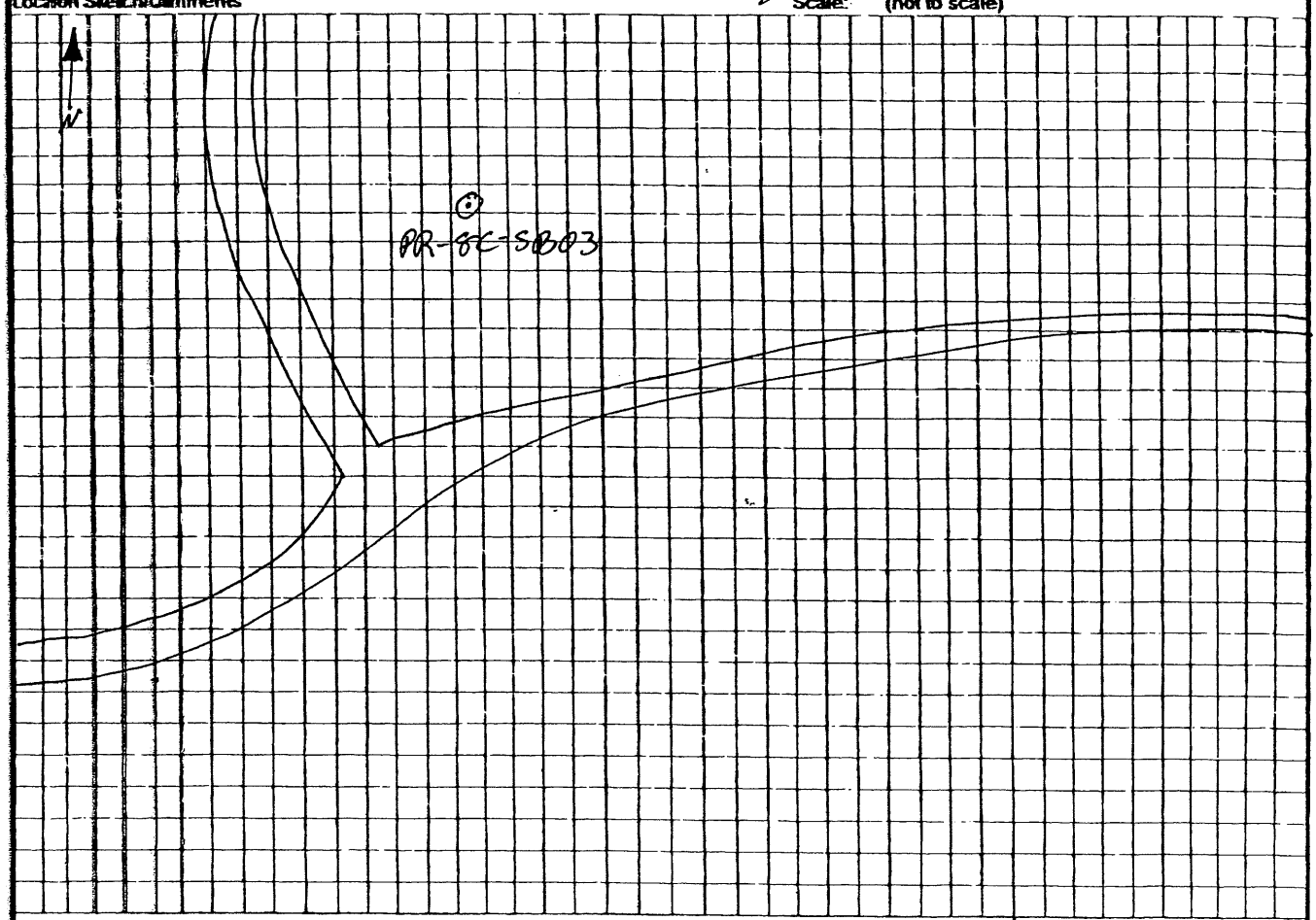
Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	—

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
—	X	X	Herbicides Pesticides	PCB's	Nitroaromatics	—

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	—	—	—	Zach Parham

Location Sketch/Comments

Scale: (not to scale)



Project: Fort McClellan Site Investigations	Hole Number: PR-8C-SB03

HTRW DRILLING LOG

(continuation sheet)

Hole Number: PR-8C-SB03

Project: Fort McClellan Site Investigations

Geologist: Zach Parham

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft)	Description of Materials	USCS/Lith	Field Screening Results (ppm)	Geotech. Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	Remarks Time
	.1 .2 .3 .4 .5 .6	brown dry cobbly Gravel.	GC	0.0	X	XR0007	0.6'/0.6'	1130
								auger refusal

Project: Fort McClellan Site Investigations

Hole Number: PR-8C-SB03

COMPLETED
Dennis Myers 8/2/01

HTRW DRILLING LOG

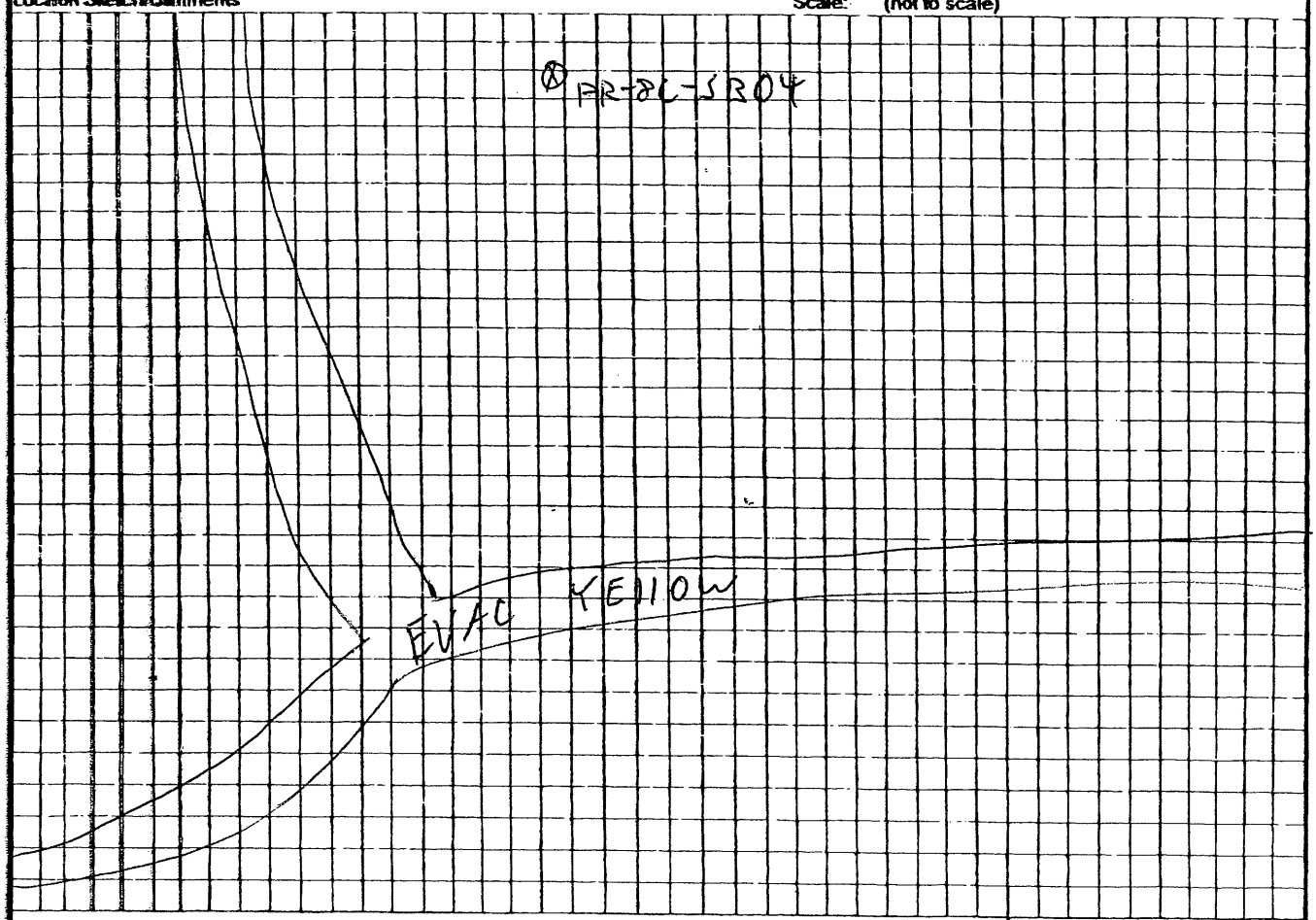
District: Mobile USACE		Hole Number: PR-8C-SB04
Company Name: IT Corporation	Drill Subcontractor: Zack Purham	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Zack Purham	Manufacture's Designation of Drill: Hand Auger	
Sizes and Types of Drilling and Sampling Equipment: PID; Stainless Steel Bowls/Spoons; Hand Auger; Encore Samplers	Hole Location: PR-8C-SB01	
	Surface Elevation: TBD	
	Date Started: 07/31/2001	Date Completed: 07/31/2001
Overburden Thickness: 3'	Depth Groundwater Encountered: N/A	
Depth Drilled into Rock: N/A	Depth to Water and Elapsed Time After Drilling Completed: N/A	
Total Depth of Hole: 3' Auger Refusal	Other Water Level Measurements (Specify): N/A	

Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	—

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
✓	✓	✓	SVOCs	Herbicides Pesticides	PCBs Nitro aromatics	—

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	—	—	—	

Location Sketch/Comments — Scale: (not to scale)



Project	Hole Number
Fort McClellan Site Investigations	PR-8C-SB04

HTRW DRILLING LOG

(continuation sheet)

Hole Number: PR-8C-SB04

Project: Fort McClellan Site Investigations

Geologist: J. Fisher

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft)	Description of Materials	USCS/Lith	Field Screening Results (ppm)	Geotech. Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	Remarks
		SILT- lt. grey, dry some coarse quartz rich subangular gravel	ML	0.0	X	XQ0010	1.0/1.0	1200
	1	CLAY- red orange, slightly moist, med. stiff some coarse quartz rich subangular gravel	CL	0.0	X	XQ0011	1.5/1.5	1220
	2							
		CLAY- red orange, dry, med. stiff, some quartz, rich sub. gravel	CL	0.0			0.5/0.5	1240
	3							Auger Refusal
	4							

Project: Fort McClellan Site Investigations

Hole Number: PR-8C-SB04

COMPLETED
Denni Mgr 8/8/01

HTRW DRILLING LOG

District: Mobile USACE		Hole Number: PR-22C-SB01
Company Name: IT Corporation	Drill Subcontractor: Z. Parhan	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Zach Parhan	Manufacture's Designation of Drill: Hand auger	
Sizes and Types of Drilling and Sampling Equipment: PID; Stainless steel bowls/spoons; Hand auger; Encor sampler	Hole Location: PR-22C-SB01	
	Surface Elevation: TBD	
	Date Started: 8.1.1	Date Completed: 8.1.1
Overburden Thickness: >8'	Depth Groundwater Encountered: NA	
Depth Drilled into Rock: NA	Depth to Water and Elapsed Time After Drilling Completed: NA	
Total Depth of Hole: 8'	Other Water Level Measurements (Specify): NA	

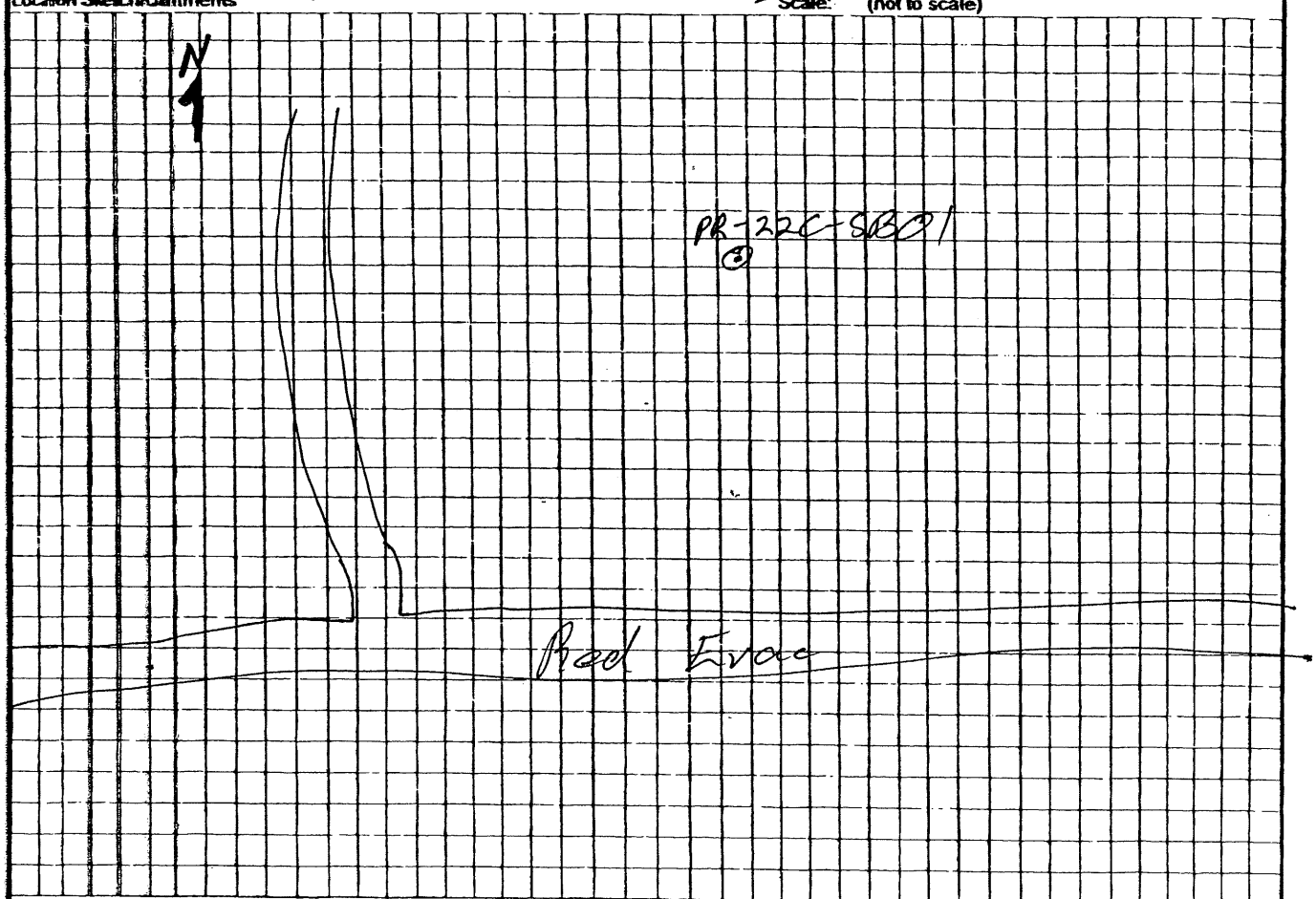
Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	—

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
—	X	X	PCB's	pesticides herbicides	nitroaromatics	—

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	soil	—	—	Zach Parh

Location Sketch/Comments

Scale: (not to scale)



Project: Fort McClellan Site Investigations	Hole Number: PR-22C-SB01

HTRW DRILLING LOG

(continuation sheet)

Parcel Number: PR-22C-SB01

Project: Fort McClellan, SAD TERC

Geologist: Z. Parham

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft) bgs	Description of Materials	USCS/ Litho	Field Screening Results (ppm)	Geotech Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	COMMENTS time
		brown with red mottles moist soft CLAY.	CL	0.0		XQ0013	1.0/1.0	0910
	1							
		grey with red mottles moist soft CLAY.	CL	0.0			3.0/3.0	0945
	2					XQ0014		
	3							
	4							
		gleyed wet soft CLAY.	CL	0.0			4.0/4.0	1020
	5							
	6							
	7					XQ0015		
	8							end of borehole.

Project Fort McClellan, SAD TERC

Parcel Number PR-22C-SB01

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HTRW DRILLING LOG

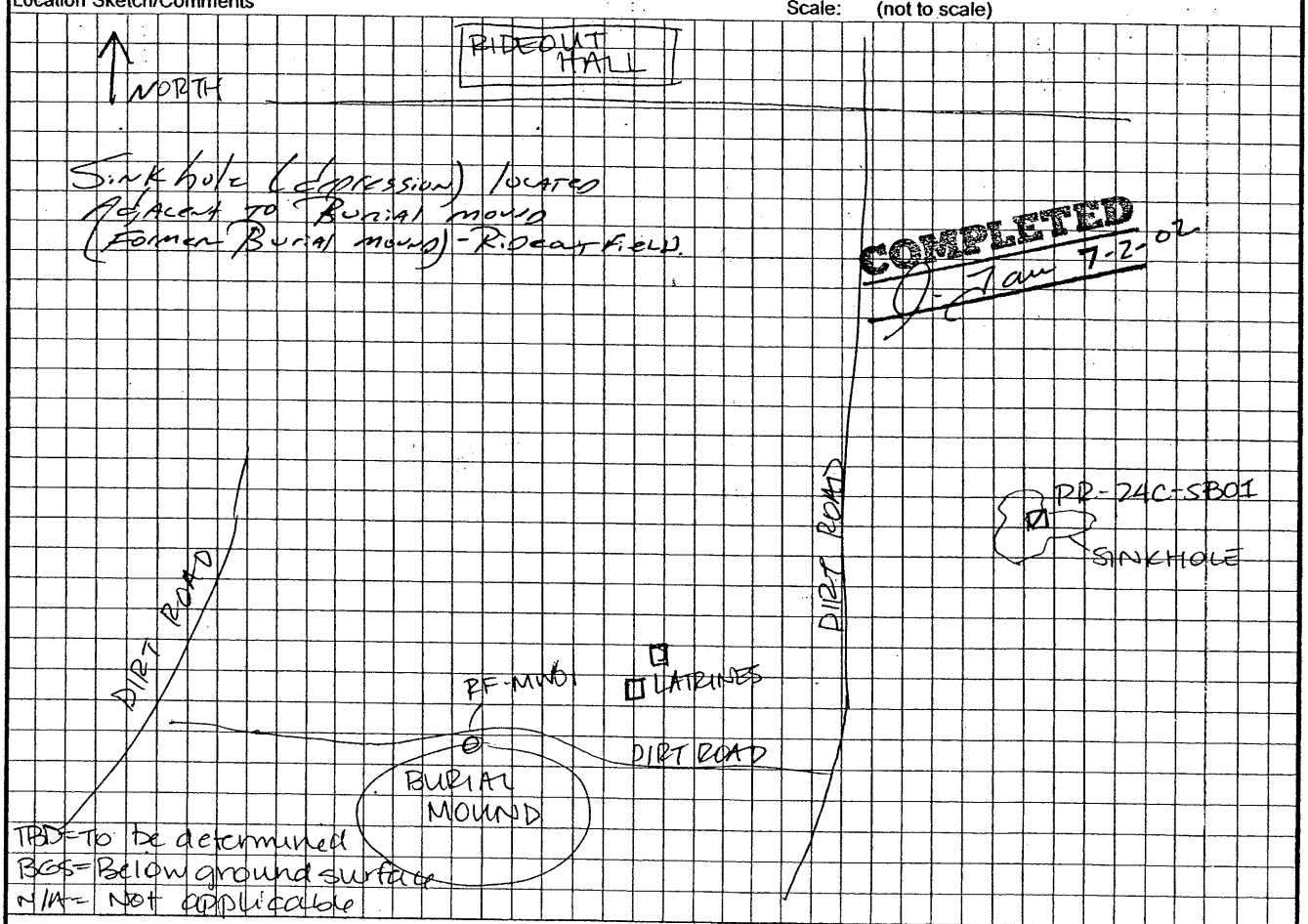
District: Mobile USACE	Hole Number: PR-24C-SB01	
Company Name: IT Corporation	Drill Subcontractor: N/A	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Mark Shoemaker / Cindy Levaas	Manufacture's Designation of Drill: Hand Auger	
Sizes and Types of Drilling and Sampling Equipment: 8 oz glass jars; 5 g Encores; stainless steel bowls/spoons/augers; PID # 84599	Hole Location:	
	Surface Elevation: TBD	
	Date Started: 6/19/02	Date Completed: 6/19/02
Overburden Thickness: >4'	Depth Groundwater Encountered: N/A	
Depth Drilled into Rock: N/A	Depth to Water and Elapsed Time After Drilling Completed: N/A	
Total Depth of Hole: 4'	Other Water Level Measurements (Specify): N/A	

Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	N/A

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
—	✓	✓	PCBs	SVOCs		N/A

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
—	✓	—	—	Cindy Levaas

Location Sketch/Comments — Scale: (not to scale)



Project	Hole Number
Fort McClellan Site Investigations	PR-24C-SB01

HTRW DRILLING LOG

(continuation sheet)

Parcel Number: PR-24C-SB01

Project: Fort McClellan, SAD TERC

Geologist: Cindy Levaas

Sheet 2 of 2 Sheets

Elev (ft)	Depth (ft) bgs	Description of Materials	USCS/ Litho	Field Screening Results (ppm)	Geotech Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	COMMENTS Time
	0	reddish brown moist medium stiff CLAY, some silt, little fine to medium sand, trace roots.	CL	0.0		XQ0021 0-1' 0911		0911
	1	reddish orange moist medium stiff to stiff CLAY, some silt.	CL					
	2							
	3			0.0		XQ0022 3-4' 0926		0926
	4							Bottom of borehole @ 4' bgs
	5							
	6							
	7							
	8							
	9							
	10							

Project Fort McClellan, SAD TERC

Parcel Number: PR-24C-SB01

COMPLETED

HTRW DRILLING LOG

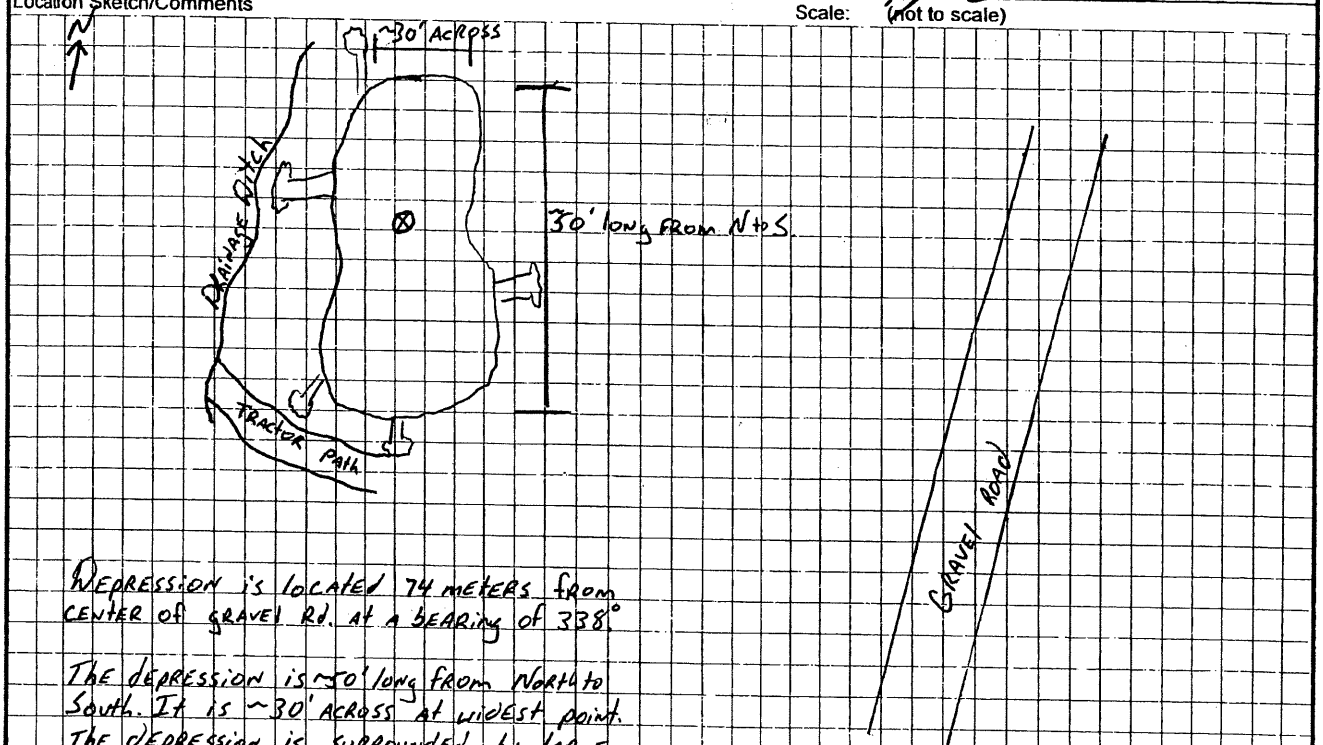
District: Mobile USACE	Hole Number: PR-2D-SB01	
Company Name: IT Corporation	Drill Subcontractor: NA	Sheet 1 of 2 Sheets
Project: Fort McClellan Site Investigations	Location: Calhoun County, Alabama	
Name of Driller: Kyle Wilson (IT), Bud Strum (IT), John Honer (IT)	Manufacture's Designation of Drill: Hand Auger	
Sizes and Types of Drilling and Sampling Equipment: 1 x 4' long T-handled hand auger; 2 x 4' long steel extensions for auger; Stainless steel augers, stainless steel bowls and spoons, 9 x 5oz Encore samples, 12 x 8oz glass jars, PID #82394	Hole Location: PR-2C-SB01 (Pelham Range)	
	Surface Elevation: TBD	
	Date Started: 11/8/01	Date Completed: 11/8/01
Overburden Thickness: 8' bgs	Depth Groundwater Encountered: NA	
Depth Drilled into Rock: NA	Depth to Water and Elapsed Time After Drilling Completed: NA	
Total Depth of Hole: 8' bgs	Other Water Level Measurements (Specify): NA	

Geotechnical Samples	Disturbed	Undisturbed	Total Number of Core Boxes
—	—	—	NA

Samples for Chemical Analysis	VOC	Metals	Other	Other	Other	Total Core Recovery
	✓	✓	Semivolatiles	Cl herbicides	Cl pesticides	NA

Disposition of Hole	Backfilled	Monitoring Well	Other	Signature of Geologist
				[signature]

Location Sketch/Comments — Scale: (not to scale)



Depression is located 74 meters from center of gravel Rd. at a bearing of 338°.

The depression is ~50' long from North to South. It is ~30' across at widest point. The depression is surrounded by large mature pine trees and hardwood trees. Inside the depression is covered with underbrush and sapling trees.

Project	Hole Number
Fort McClellan Site Investigations	2D PR-~~2C~~-SB01

NA - not applicable
bgs - below ground surface
TBD - to be determined

HTRW DRILLING LOG

(continuation sheet)

Hole Number: PR-~~2C~~ 2D-SB01

Project: Fort McClellan Site Investigations

Geologist: Kyle Wilson

Sheet 2 of 2

Elev (ft)	Depth (ft)	Description of Materials	USCS/Lith	Field Screening Results (ppm)	Geotech. Sample or Core Box No.	Analytical Sample No. or RQD	Recovery (ft)	Remarks Time
		Brown to light gray dry to slightly moist soft CLAY, some Silt, some organic matter (roots, leaves, bark, etc.).	OL	0.4	X	XQ0017	1'	1025
	1	Lithology same as interval 0-1'.	OL	0.0	X	No sample taken	1'	1030
	2	Light brown to light gray dry soft to medium stiff CLAY, some Silt.	CL	0.0	X	No sample taken	1'	1100
	3	Light brown to yellowish orange dry medium stiff to soft CLAY, little fine to medium Sand.	CL	0.0	X	No sample taken	1'	1110
	4	Light brown to yellowish orange dry medium stiff CLAY, little coarse to fine Sand.	CL	0.0	X	XQ0018	1'	1140
	5	Yellowish orange to light brown dry soft to medium stiff CLAY.	CL	0.0	X	No sample taken	2'	1330
	6							
	7	Yellowish orange to light brown dry soft to medium stiff CLAY.	CL	0.0	X	XQ0019	1'	1340
	8	White to gray highly weathered Quartz Rich Sandstone Gravel (will crumble easily).						Hand Auger Refusal at 8' bgs.

Project: Fort McClellan Site Investigations

Hole Number: PR-~~2C~~ 2D-SB01