APPENDIX C:

SOIL & GROUNDWATER DATA

SOILS:

VOLATILE ORGANIC COMPOUNDS

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Acetone	Benzene	Bromodichloro-methane	Bromoform
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	14	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	24	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	5.9 J	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	26	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	38 J	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	27	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	20	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	15	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	51	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	22	11 U	11 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	59	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	59	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	20	11 U	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	14	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	9.3 J	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	7.1 J	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	15	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	72	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	77	11 U	11 U	11 U
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	17	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	20	0	0	0
Minimum Detected				ug/kg	5.9 J			
Maximum Detected				ug/kg	77			
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	21	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	27	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	13	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	23	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	7.6 J	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	14	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	7	0	0	0
Minimum Detected				ug/kg	7.6 J			
Maximum Detected				ug/kg	27			

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Bromomethane	2-Butanone	Carbon Disulfide	Carbon Tetrachloride
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 UJ	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	6.6 J	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 U	11 UJ	11 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 UJ	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 UJ	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	17	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 U	11	11 U	11 U
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	3	0	0
Minimum Detected				ug/kg		6.6 J		
Maximum Detected				ug/kg		17		
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	4 J	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	1	0	0
Minimum Detected				ug/kg		4 J		
Maximum Detected				ug/kg		4 J		

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Chlorobenzene	Chloroform	Chloroethane	Chloromethane
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 UJ	11 U	11 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 UJ	11 U	11 U	11 U
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Dibromochloro-methane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 U	11 U	11 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloroethene (Total)	1,2-Dichloropropane
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	10 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	10 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 U	11 U	10 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U		11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	10 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	10 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 U		11 U	11 U
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	21	23	23
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 U	11 U	11 UJ	11 UJ
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	4 J	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 U	11 U	11 UJ	11 UJ
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	0	1	0
Minimum Detected				ug/kg			4 J	
Maximum Detected				ug/kg			4 J	
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	4-Methyl-2-pentanone	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	11 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 UJ	11 UJ	11 UJ	5.6 J
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	0	0	1
Minimum Detected				ug/kg				5.6 J
Maximum Detected				ug/kg				5.6 J
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	4.7 J
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	11 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	5.3 J	11 U	11 U	11 U
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	3 J	11 U	11 U	3 J
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	3.9 J	11 U	11 U	11 U
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	11 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	3.8 J	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	17 J	11 U	11 U	13
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	5.1 J	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	6	0	0	3
Minimum Detected				ug/kg	3 J			3 J
Maximum Detected				ug/kg	17 J			13
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	6.3 J	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	.2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	1	0	0	0
Minimum Detected				ug/kg	6.3 J			
Maximum Detected				ug/kg	6.3 J			

U = Undetected at the quantitation limit presented
J = Estimated concentration

SUMMARY OF SOIL ANALYSIS
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Number	Sample Identifier	Depth	Area	Units	Vinyl Chloride	o-Xylene	m + p-Xylene	Xylenes(Total)
SB-111	SB111-5JN01-002	.5-4.5	A	ug/kg	11 U	11 U	11 U	11 U
SB-112	SB112-5JN06-002	.5-4.5	A	ug/kg	12 U	12 U	12 U	12 U
SB-113	SB113-5JN16-002	1-5	B	ug/kg	11 U	11 U	11 U	11 U
SB-114	SB114-5JN16-002	1-5	B	ug/kg	12 U	12 U	12 U	12 U
SB-115	SB115-5JN01-002	0-4	D	ug/kg	11 U	11 U	11 U	11 U
SB-116	SB116-5JN06-002	.5-4	E	ug/kg	11 U	11 U	11 U	11 U
SB-116	DP116-5JN06-002	.5-4	E	ug/kg	11 UJ	11 UJ	11 UJ	11 UJ
SB-117	SB117-5JN14-002	1-5	J	ug/kg	12 U	12 U	12 U	12 U
SB-118	SB118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	10 U
SB-118	DP118-5JN07-002	.5-4.5	K	ug/kg	11 U	11 U	11 U	10 U
SB-119	SB119-5JN19-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-121	SB121-5JN19-002	1-5	L	ug/kg	12 U	12 U	12 U	12 U
SB-120	SB120-5JN07-002	0-2.5	L	ug/kg	11 U	11 UJ	11 UJ	10 UJ
SB-122	SB122-5JN13-002	1-5	K	ug/kg	12 U	12 U	12 U	12 U
SB-123	SB123-5MA22-002	0-4	M	ug/kg	11 U	11 U	11 U	10 U
SB-124	SB124-5JN07-002	1.5-5.5	N	ug/kg	11 U	14	20	34
SB-125	SB125-5JN07-002	1.5-5.5	N	ug/kg	11 U	11 U	11 U	10 U
SB-126	SB126-5JN19-002	1-5	N	ug/kg	13 U	13 U	13 U	13 U
SB-127	SB127-5JN19-002	1-5	N	ug/kg	12 U	12 U	12 U	12 U
SB-128	SB128-5MA30-002	1-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-129	SB129-5JN14-002	0-4	O	ug/kg	11 U	11 U	11 U	11 U
SB-130	SB130-5MA17-002	0-4	O	ug/kg	11 U	11 UJ	11 UJ	10 UJ
SB-131	SB131-5JN20-002	1-5	O/N	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	23	23	23	23
Number of Detections				-	0	1	1	1
Minimum Detected				ug/kg		14	20	34
Maximum Detected				ug/kg		14	20	34
SB-132	SB132-5JN19-002	0-4	BG	ug/kg	12 U	12 U	12 U	12 U
SB-132	SB132-5JN19-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-002	1-5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-133	SB133-5JN20-010	10-12	BG	ug/kg	12 U	12 U	12 U	12 U
SB-134	SB134-5JN21-001	0-2	BG	ug/kg	11 U	11 U	11 U	11 U
SB-134	SB134-5JN21-005	2-6	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-001	0-3.5	BG	ug/kg	12 U	12 U	12 U	12 U
SB-135	SB135-5JN21-004	3.5-5.5	BG	ug/kg	12 U	12 U	12 U	12 U
Number of Samples				-	8	8	8	8
Number of Detections				-	0	0	0	0
Minimum Detected				ug/kg				
Maximum Detected				ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration

SOILS:

SEMI-VOLATILE ORGANIC COMPOUNDS

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Acenaphthylene	Acenaphthene	Anthracene	Benzo[g,h,i]-perylene	Dibenzofuran	Fluorene
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	380 U	380 U	380 U	190 J	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg	165 U	165 U	70 J	360 U		7.7 U
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	370 U	440	320 J	280 J	500	580
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	76 J	420	200 J	370 U	500	700
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg	140 UJ	3,400 J	520 J	550 J		28 UJ
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg	1,700 U	1,800 U	100	400		83 U
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg	860 L	190 UL	57 L	670 L		9 UL
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg	1,300 J	15,000 J	370 J	10,000 J		200 J
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	120 J	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	350 U	100 J	350 U	1,800 J	94 J	120 J
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg	180 UL	670 L	0.8 UL	290 L		8.4 UL
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg	1,500 U	1,600 U	350	350 U		270
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg	1,500 U	1,600 U	25 J	630		73 U
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg	1,600 U	1,700 U	7.6 UJ	370 U		79 U
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg	1,000 J	16,000 U	73 U	4,300 K		710 K
SB-124		SB124-5JN07-002	N	2-4	µg/kg	130 J	2,300	1,700	290 J	2,300	2,800
SB-125		SB125-5JN07-002	N	2-4	µg/kg	370 U	370 U	370 U	130 J	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	410 U	410 U	43 J	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg	1,700 U	7,300	740	390 U		330
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	360 U	120 J	380	240 J	84 J	180 J
SB-130		SB130-5MA17-002	O	2-4	µg/kg	360 UJ	360 UJ	360 UJ	110 J	360 UJ	360 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg	1,600 UL	1,700 UL	630 L	530 L		79 UL
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg	540	3,700	460	380 U		82 U
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg	1,600 U	1,700 U	12	690		170
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg	180 U	190 U	28	41 U		50
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg	2,200 L	1,600 UL	740 L	350 UL		3,100 L
Number of Samples						39	39	39	39	23	39
Number of Detections						7	10	18	17	5	12
Minimum Detected					ug/kg	76 J	100 J	12	110 J	84 J	50
Maximum Detected					ug/kg	2,200 L	15,000 J	1,700	10,000 J	2,300	3,100 L

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	44 J	380 U	110 J	220 J	380 U	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	60 J	120 J	370 U	370 U	49 J
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						1	1	2	1	0	1
Minimum Detected					ug/kg	44 J	60 J	110 J	220 J		49 J
Maximum Detected					ug/kg	44 J	60 J	120 J	220 J		49 J

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Fluoranthene	Naphthalene	2-Methyl-naphthalene	2-Chloro-naphthalene	Phenanthrene	Pyrene
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	600	380 U	380 U	380 U	360 J	480
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg	530	86 U			280	880
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	1,700	240 J	380	370 U	1,720	1,260
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	1,700	154 J	280 J	370 U	1,700	840
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg	2,000 J	9,000 J			1,800 J	4,400 J
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg	1,100	1,100			640	1,200
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg	260 L	98 UL			540 L	1,200 L
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg	8,400 J	6,400 J			21,000 J	38,000 J
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	180 J	370 U	370 U	370 U	190 J	160 J
SB-118		SB118-5JN07-002	K	2-4	µg/kg	110 J	370 U	370 U	370 U	370 U	100 J
SB-119		SB119-5JN19-002	K	2-4	µg/kg	60 J	390 U	390 U	390 U	390 U	46 J
SB-122		SB122-5JN13-002	K	2-4	µg/kg	57 J	390 U	390 U	390 U	390 U	55 J
SB-120		SB120-5JN07-002	L	2-4	µg/kg	1,100	82 J	93 J	350 U	680	750
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	130 J	360 U	360 U	360 U	87 J	110 J
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg	77 L	320 L			63 L	130 L
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg	980	830 U			710	1,800
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg	310	810 U			280	280 J
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg	160	880 U			57 U	540 J
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg	1,400 U	5,100 K			12,000 K	30,000 K
SB-124		SB124-5JN07-002	N	2-4	µg/kg	5,000	3,800	3,500	360 U	5,600	2,500
SB-125		SB125-5JN07-002	N	2-4	µg/kg	280 J	370 U	370 U	370 U	120 J	220 J
SB-126		SB126-5JN19-002	N	2-4	µg/kg	220 J	410 U	410 U	410 U	130 J	130 J
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg	3,600	920 U			59 U	4,800
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	940	58 J	46 J	360 U	990	1,100
SB-130		SB130-5MA17-002	O	2-4	µg/kg	250 J	45 J	47 J	360 UJ	180 UJ	230 J
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg	4,200 L	UL			3,600 L	5,800 L
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg	1,900	720			1,300	100 U
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg	240	870 U			56 U	560
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg	420	270			250	730
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg	10,000 L	7,300 L			12,000 L	93 UL
Number of Samples						39	38	23	23	39	39
Number of Detections						29	13	6	0	23	28
Minimum Detected					ug/kg	57	45 J	46 J		63 L	46 J
Maximum Detected					ug/kg	10,000	9,000 J	3,500		21,000 J	38,000 J

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	550	380 U	380 U	380 U	150 J	410
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	320 J	370 U	370 U	370 U	250 J	120 J
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						2	0	0	0	2	2
Minimum Detected					ug/kg	320 J				150 J	120 J
Maximum Detected					ug/kg	550				250 J	410

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Benzo[a]-anthracene	Benzo[a]-pyrene	Benzo[b]-fluoranthene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	40 J	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	260 J	460	760	580	360 J	280 J
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg	370	350 J	320	150	540	350 U
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	820	560	1,560	720	820	660
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	660	280 J	1,300	1,200	740	440
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg	1,600 J	1,200 J	990 J	560 J	2,200 J	55 UJ
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg	470	570	470	250	710	
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg	11 UL	100 L	74 L	3 UL	320 L	1,100 L
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg	21,000 J	19,000 J	15,000 J	7,400 J	25,000 J	
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	77 J	120 J	140 J	160 J	110 J	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	330 J	2,300 J	3,300 J	2,400 J	590	1,100 J
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	77 J	64 J	85 J	65 J	93 J	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg	49 L	25 UL	16 L	3.2 UL	280 L	110 L
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg	520	500	360	200	740	
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg	160	220 U	150	79 J	230	
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg	260	240	150	30 UJ	490	360 U
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg	10,000 K	10,000 K	8,500 K	4,600 K	13,000 K	
SB-124		SB124-5JN07-002	N	2-4	µg/kg	1,800	730	1,200	740	1,500	130 J
SB-125		SB125-5JN07-002	N	2-4	µg/kg	150 J	170 J	230 J	210 J	170 J	89 J
SB-126		SB126-5JN19-002	N	2-4	µg/kg	110 J	79 J	100 J	48 J	140 J	51 J
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg	1,300	910	880	460	1,700	380 U
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	590	380	290 J	370	490	240 J
SB-130		SB130-5MA17-002	O	2-4	µg/kg	140 J	130 J	250 J	130 J	180 J	64 J
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg	98 UL	1,100 L	280 L	600 L	98 UL	1,400 L
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg	360	200	150	63	550	940
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg	97 U	230 U	140	57	290	350 U
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg	190	26 U	45	3 U	270	260
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg	820 L	610 L	380 L	140 L	93 UL	3,500 L
Number of Samples						39	39	39	39	39	34
Number of Detections						24	24	27	23	25	14
Minimum Detected					ug/kg	49 L	40 J	16 L	48 J	93 J	51 J
Maximum Detected					ug/kg	21,000 J	19,000 J	15,000 L	7,400 J	25,000 J	3,500 L

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	220 J	420	**980**	1,000	560	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	140 J	370 U	120 J	180 J	170 J	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						2	1	2	2	2	0
Minimum Detected					ug/kg	140 J	420	120 J	180 J	170 J	
Maximum Detected					ug/kg	220 J	420	980	1,000	560	

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Indeno[1,2,3-cd]-pyrene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	1,2,4-Trichloro benzene	Hexachloro-benzene
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	480	380 U	380 U	380 U	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg	150					
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	860	76 J	122 J	114 J	98 J	370 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	540	370 U	370 U	370 U	370 U	370 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg	440 J					
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg	170 L					
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg	8,600 J					
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	140 J	370 U	370 U	370 U	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	2,400 J	350 U	350 U	350 U	350 U	350 U
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	39 J	360 U	360 U	360 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg	58 L					
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg	120					
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg	120 U					
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg	5,800 K					
SB-124		SB124-5JN07-002	N	2-4	µg/kg	400 J	360 U	360 U	360 U	360 U	360 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	160 J	370 U	370 U	370 U	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	59 J	410 U	410 U	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg	400					
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	330 J	360 U	360 U	360 U	360 U	360 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	110 J	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg	550 L					
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg	350					
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg	120 U					
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg	70					
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg	1,800 L					
Number of Samples						37	23	23	23	23	23
Number of Detections						23	1	1	1	1	0
Minimum Detected					ug/kg	39 J	76 J	122 J	114 J	98 J	
Maximum Detected					ug/kg	8,600 J	76 J	122 J	114 J	98 J	

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	430	380 U	380 U	380 U	380 U	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						1	0	0	0	0	0
Minimum Detected					ug/kg	430					
Maximum Detected					ug/kg	430					

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Phenol	2-Methylphenol	4-Methylphenol	2,4-Dimethyl-phenol	2-Chloro-phenol	2,4-Dichloro-phenol
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 UL	380 UL	380 UL	380 UL	380 UL	380 UL
SB-112		SB112-5JN06-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	R	350 U	R	R	R	R
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	410 U	410 U	410 U	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	R	R	R	R	R	R
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						21	22	21	21	21	21
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	2,4,5-Trichloro phenol	2,4,6-Trichloro phenol	4-Chloro-3-methylphenol	Pentachloro-phenol	Nitrobenzene	2-Nitrophenol
SB-111		SB111-5JN01-002	A	2-4	µg/kg	940 UL	380 UL	380 UL	940 UL	380 U	380 UL
SB-112		SB112-5JN06-002	A	2-4	µg/kg	960 U	380 U	380 U	960 U	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	910 U	370 U	370 U	910 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	980 U	390 U	390 U	980 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	900 U	360 U	360 U	900 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	920 U	370 U	370 U	920 U	182 J	370 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	920 U	370 U	370 U	920 U	370 U	370 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	970 U	390 U	390 U	970 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	920 U	370 U	370 U	920 U	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	930 U	370 U	370 U	930 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	970 U	390 U	390 U	970 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	980 U	390 U	390 U	980 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	R	R	R	R	350 U	R
SB-121		SB121-5JN19-002	L	2-4	µg/kg	970 U	390 U	390 U	970 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	910 U	360 U	360 U	910 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	900 U	360 U	360 U	900 U	360 U	360 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	930 U	370 U	370 U	930 U	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	1,000 U	410 U	410 U	1,000 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	980 U	390 U	390 U	980 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	970 U	390 U	390 U	970 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	920 U	370 U	370 U	920 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	900 U	360 U	360 U	900 U	360 U	360 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	R	R	R	R	360 UJ	R
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						21	21	21	21	23	21
Number of Detections						0	0	0	0	1	0
Minimum Detected					ug/kg					182 J	
Maximum Detected					ug/kg					182 J	

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	970 U	390 U	390 U	970 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	990 U	400 U	400 U	990 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	940 U	380 U	380 U	940 U	380 U	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	990 U	400 U	400 U	990 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	920 U	370 U	370 U	920 U	370 U	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	940 U	380 U	380 U	940 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	1,000 U	400 U	400 U	1,000 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	960 U	380 U	380 U	960 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	4-Nitrophenol	2,4-Dinitro-phenol	4,6-Dinitro-2-methylphenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Nitroaniline
SB-111		SB111-5JN01-002	A	2-4	µg/kg	940 UL	940 UL	940 UL	380 U	380 U	940 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	960 U	960 U	960 U	380 U	380 U	960 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	910 U	910 U	910 U	370 U	370 U	910 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	980 U	980 U	980 U	390 U	390 U	980 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	900 U	900 U	900 U	360 U	360 U	900 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	920 U	920 U	920 U	370 U	370 U	920 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	920 U	920 U	920 U	370 U	370 U	920 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	970 U	970 U	970 U	390 U	390 U	970 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	920 U	920 UJ	920 U	370 U	370 U	920 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	930 U	930 UJ	930 U	370 U	370 U	930 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	970 U	970 UJ	970 U	390 U	390 U	970 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	980 U	980 UJ	980 U	390 U	390 U	980 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	R	R	R	350 U	350 U	880 U
SB-121		SB121-5JN19-002	L	2-4	µg/kg	970 U	970 U	970 U	390 U	390 U	970 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	910 U	910 U	910 U	360 U	360 U	910 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	900 U	900 UJ	900 U	360 U	360 U	900 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	930 U	930 UJ	930 U	370 U	370 U	930 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	1,000 U	1,000 U	1,000 U	410 U	410 U	1,000 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	980 U	980 U	980 U	390 U	390 U	980 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	970 U	970 U	970 U	390 U	390 U	970 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	920 U	920 U	920 U	370 U	370 U	920 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	900 U	900 U	900 U	360 U	360 U	900 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	R	R	R	360 UJ	360 UJ	900 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						21	21	21	23	23	23
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	970 U	970 U	970 U	390 U	390 U	970 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	990 U	990 U	990 U	400 U	400 U	990 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	940 U	940 U	940 U	380 U	380 U	940 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	990 U	990 U	990 U	400 U	400 U	990 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	920 U	920 U	920 U	370 U	370 U	920 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	940 U	940 U	940 U	380 U	380 U	940 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	1,000 U	1,000 U	1,000 U	400 U	400 U	1,000 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	960 U	960 U	960 U	380 U	380 U	960 U
Number of Samples						8	8	8	8	8	8
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	3-Nitroaniline	4-Nitroaniline	4-Chloro-aniline	Hexachloro-butadiene	Hexachloro-ethane	n-Nitroso-diphenylamine
SB-111		SB111-5JN01-002	A	2-4	µg/kg	940 U	940 U	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	960 UJ	960 U	380 U	380 U	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	910 U	910 U	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	980 U	980 U	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	900 U	900 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	920 UJ	920 U	370 U	370 U	370 U	370 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	920 UJ	920 U	370 U	370 U	370 U	370 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	970 U	970 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	920 UJ	920 U	370 U	370 U	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	930 U	930 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	970 U	970 U	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	980 U	980 U	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	870 U	870 U	350 U	350 U	350 U	350 U
SB-121		SB121-5JN19-002	L	2-4	µg/kg	970 U	970 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	910 U	910 U	360 U	360 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	900 UJ	900 U	360 U	360 U	360 U	360 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	930 UJ	930 U	370 U	370 U	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	1,000 U	1,000 U	410 U	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	980 U	980 U	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	970 U	970 U	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	920 U	920 U	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	900 U	900 U	360 U	360 U	360 U	360 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	900 UJ	900 UJ	360 UJ	360 UJ	360 UJ	360 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						23	23	23	23	23	23
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	970 U	970 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	990 U	990 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	940 U	940 U	380 U	380 U	380 U	380 U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	990 U	990 U	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	920 U	920 U	370 U	370 U	370 U	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	940 U	940 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	1,000 U	1,000 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	960 U	960 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8	8	8
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Isophorone	3,3'-Dichloro-benzidine	bis(2-Chloroethoxy)-methane	Hexachloro-cyclopentadiene	N-Nitroso-di-n-propylamine	bis(2-chloro-isopropyl)-ether
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380
SB-112		SB112-5JN06-002	A	2-4	µg/kg	380 U	380 UJ	380 U	380 U	380 U	380
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360
SB-116		SB116-5JN06-002	E	2-4	µg/kg	78 J	370 UJ	370 U	370 U	370 U	370
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	370 U	370 UJ	370 U	370 U	370 U	370
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	370 U	370 UJ	370 U	370 U	370 U	370
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-120		SB120-5JN07-002	L	2-4	µg/kg	350 U	350 U	120 J	350 U	350 U	350
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-123		SB123-5MA22-002	M	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	360 U	360 UJ	360 U	360 U	360 U	360
SB-125		SB125-5JN07-002	N	2-4	µg/kg	370 U	370 UJ	370 U	370 U	370 U	370
SB-126		SB126-5JN19-002	N	2-4	µg/kg	410 U	410 U	410 U	410 U	410 U	410
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U	370 U	370
SB-129		SB129-5JN14-002	O	2-4	µg/kg	360 U	360 UJ	360 U	360 U	360 U	360
SB-130		SB130-5MA17-002	O	2-4	µg/kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						23	23	23	23	23	23
Number of Detections						1	0	1	0	0	0
Minimum Detected					ug/kg	78 J		120 J			
Maximum Detected					ug/kg	78 J		120 J			

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	380 U	380 U	380 U	380 U	380 U	380
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	370 UJ	370 U	370 U	370 U	370
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 UJ	380 U	380 U	380 U	380
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 UJ	400 U	400 U	400 U	400
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 UJ	380 U	380 U	380 U	380
Number of Samples						8	8	8	8	8	8
Number of Detections						0	0	0	0	0	0
Minimum Detected					ug/kg						
Maximum Detected					ug/kg						

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	
SB-111		SB111-5JN01-002	A	2-4	µg/kg	U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg	
SB-115		SB115-5JN01-002	D	2-4	µg/kg	U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg	
SB-117		SB117-5JN14-002	J	2-4	µg/kg	U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg	
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg	
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg	
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	U
SB-121		SB121-5JN19-002	L	2-4	µg/kg	U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg	
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg	
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg	
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg	
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg	
SB-124		SB124-5JN07-002	N	2-4	µg/kg	U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg	
SB-131		SB131-5JN20-002	O	0-4	µg/kg	U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg	
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg	
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg	
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg	
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg	
Number of Samples						
Number of Detections						
Minimum Detected					ug/kg	
Maximum Detected					ug/kg	

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	U
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	U
Number of Samples						
Number of Detections						
Minimum Detected					ug/kg	
Maximum Detected					ug/kg	

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	bis(2-Chloroethyl)-ether	4-Bromophenyl-phenylether	4-Chlorophenyl-phenylether	bis(2-Ethylhexyl)-phthalate	Butylbenzyl-phthalate	Di-n-butyl-phthalate
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	380 U	380 U	380 U	380 UJ	380 U	188 J
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U		370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U		390 U	50 J
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg						
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	370 UJ	370 U	370 U
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	370 UJ	370 U	370 U
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg						
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg						
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg						
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg						
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 UJ	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	77 J
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U		390 U	160 J
SB-120		SB120-5JN07-002	L	2-4	µg/kg	350 U	140 J	150 J		150 J	150 J
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	360 U	360 U	360 U		360 U	1400
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg						
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg						
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg						
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg						
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg						
SB-124		SB124-5JN07-002	N	2-4	µg/kg	360 U	360 U	360 U	360 UJ	360 U	360 U
SB-125		SB125-5JN07-002	N	2-4	µg/kg	370 U	370 U	370 U	370 UJ	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	410 U	410 U	410 U	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U		390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg						
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U		390 U	86 J
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U		370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	360 U	360 U	360 U		190 J	360 U
SB-130		SB130-5MA17-002	O	2-4	µg/kg	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ	360 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg						
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg						
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg						
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg						
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg						
Number of Samples						23	23	23	14	23	23
Number of Detections						0	1	1	0	2	7
Minimum Detected					ug/kg		140 J	150 J		150 J	50 J
Maximum Detected					ug/kg		140 J	150 J		190 J	1,400

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	380 U	380 U	380 U		380 U	48 J
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U	400 U	120 J
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	370 U	370 U		370 U	64 J
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	6	8	8
Number of Detections						0	0	0	0	0	3
Minimum Detected					ug/kg						48 J
Maximum Detected					ug/kg						120 J

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units	Diethyl-phthalate	Dimethyl-phthalate	Di-n-octyl-Phthalate	Carbazole
SB-111		SB111-5JN01-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U
SB-112		SB112-5JN06-002	A	2-4	µg/kg	380 U	380 U	380 U	380 U
SB-113		SB113-5JN16-002	B	2-4	µg/kg	370 U	370 U	370 U	370 U
SB-114		SB114-5JN16-002	B	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg				
SB-115		SB115-5JN01-002	D	2-4	µg/kg	360 U	360 U	360 U	360 U
SB-116		SB116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	380
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg	370 U	370 U	370 U	260 J
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg				
SB-117		SB117-5JN14-002	J	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg				
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg				
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg				
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U
SB-118		SB118-5JN07-002	K	2-4	µg/kg	370 U	370 U	370 U	370 U
SB-119		SB119-5JN19-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-122		SB122-5JN13-002	K	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-120		SB120-5JN07-002	L	2-4	µg/kg	190 J	180 J	520 J	210 J
SB-121		SB121-5JN19-002	L	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-123		SB123-5MA22-002	M	2-4	µg/kg	360 U	360 U	360 U	360 U
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg				
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg				
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg				
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg				
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg				
SB-124		SB124-5JN07-002	N	2-4	µg/kg	360 U	360 U	360 U	3,000 J
SB-125		SB125-5JN07-002	N	2-4	µg/kg	370 U	370 U	370 U	370 U
SB-126		SB126-5JN19-002	N	2-4	µg/kg	410 U	410 U	410 U	410 U
SB-127		SB127-5JN19-002	N	2-4	µg/kg	390 U	390 U	390 U	390 U
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg				
SB-131		SB131-5JN20-002	O	0-4	µg/kg	390 U	390 U	390 U	390 U
SB-128		SB128-5MA30-002	O	1-5	µg/kg	370 U	370 U	370 U	370 U
SB-129		SB129-5JN14-002	O	2-4	µg/kg	360 U	360 U	360 U	150 J
SB-130		SB130-5MA17-002	O	2-4	µg/kg	360 UJ	360 UJ	360 UJ	360 UJ
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg				
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg				
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg				
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg				
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg				
Number of Samples						23	23	23	23
Number of Detections						1	1	1	5
Minimum Detected					ug/kg	190 J	180 J	520 J	150 J
Maximum Detected					ug/kg	190 J	180 J	520 J	3,000 J

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg	390 U	390 U	390 U	390 U
SB-132		SB132-5JN19-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U
SB-133		SB133-5JN20-002	BG	2-4	ug/kg	380 U	380 U	380 U	55 J
SB-133		SB133-5JN20-010	BG	10-12	ug/kg	400 U	400 U	400 U	400 U
SB-134		SB134-5JN21-001	BG	1-2	ug/kg	370 U	370 U	370 U	370 U
SB-134		SB134-5JN21-005	BG	5-6	ug/kg	380 U	380 U	380 U	380 U
SB-135		SB135-5JN21-001	BG	1-3	ug/kg	400 U	400 U	400 U	400 U
SB-135		SB135-5JN21-004	BG	4-6	ug/kg	380 U	380 U	380 U	380 U
Number of Samples						8	8	8	8
Number of Detections						0	0	0	0
Minimum Detected					ug/kg				
Maximum Detected					ug/kg				

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation
* = Sample analyzed for PAHs only

SUMMARY OF SOIL ANALYSIS
SEMI-VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location		Sample ID Number	Area	Depth (ft)	Units
SB-111		SB111-5JN01-002	A	2-4	µg/kg
SB-112		SB112-5JN06-002	A	2-4	µg/kg
SB-113		SB113-5JN16-002	B	2-4	µg/kg
SB-114		SB114-5JN16-002	B	2-4	µg/kg
SB-017	*	SB017-5JN14-002	C	1-2.5	µg/kg
SB-115		SB115-5JN01-002	D	2-4	µg/kg
SB-116		SB116-5JN06-002	E	2-4	µg/kg
SB-116-D		DP116-5JN06-002	E	2-4	µg/kg
SB-046	*	SB046-5MA19-013	H	12-14	µg/kg
SB-117		SB117-5JN14-002	J	2-4	µg/kg
SB-040	*	SB040-5JN13-002	J	1-5	µg/kg
SB-049	*	SB049-5MA24-016	J	16-18	µg/kg
SB-050	*	SB050-5JN14-002	J	2.5-6	µg/kg
SB-118 -D		DP118-5JN07-002	K	2-4	µg/kg
SB-118		SB118-5JN07-002	K	2-4	µg/kg
SB-119		SB119-5JN19-002	K	2-4	µg/kg
SB-122		SB122-5JN13-002	K	2-4	µg/kg
SB-120		SB120-5JN07-002	L	2-4	µg/kg
SB-121		SB121-5JN19-002	L	2-4	µg/kg
SB-123		SB123-5MA22-002	M	2-4	µg/kg
SB-067	*	SB067-5JN15-002	M	2-6	µg/kg
SB-074	*	SB074-5JN07-002	M	.5-4.5	µg/kg
SB-071	*	SB071-5JN06-002	M	.5-1	µg/kg
SB-072	*	SB072-5JN06-002	M	.2-4.2	µg/kg
SB-076	*	SB076-5JN07-002	M	.2-.7	µg/kg
SB-124		SB124-5JN07-002	N	2-4	µg/kg
SB-125		SB125-5JN07-002	N	2-4	µg/kg
SB-126		SB126-5JN19-002	N	2-4	µg/kg
SB-127		SB127-5JN19-002	N	2-4	µg/kg
SB-087	*	SB087-5MA31-002	O	2-4	µg/kg
SB-131		SB131-5JN20-002	O	0-4	µg/kg
SB-128		SB128-5MA30-002	O	1-5	µg/kg
SB-129		SB129-5JN14-002	O	2-4	µg/kg
SB-130		SB130-5MA17-002	O	2-4	µg/kg
SB-090	*	SB090-5JN01-002	O	.5-4.5	µg/kg
SB-094	*	SB094-5MA25-009	O	9-11	µg/kg
SB-097	*	SB097-5MA30-002	O	.9-4.9	µg/kg
SB-102	*	SB102-5MA26-007	O	7-9	µg/kg
SB-108		SB108-5MA30-002	O	2.5-4.5	µg/kg
Number of Samples					
Number of Detections					
Minimum Detected					ug/kg
Maximum Detected					ug/kg

BACKGROUND

SB-132		SB132-5JN19-002	BG	2-4	ug/kg
SB-132		SB132-5JN19-010	BG	10-12	ug/kg
SB-133		SB133-5JN20-002	BG	2-4	ug/kg
SB-133		SB133-5JN20-010	BG	10-12	ug/kg
SB-134		SB134-5JN21-001	BG	1-2	ug/kg
SB-134		SB134-5JN21-005	BG	5-6	ug/kg
SB-135		SB135-5JN21-001	BG	1-3	ug/kg
SB-135		SB135-5JN21-004	BG	4-6	ug/kg
Number of Samples					
Number of Detections					
Minimum Detected					ug/kg
Maximum Detected					ug/kg

U = Undetected at the quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration, biased low
K = Estimated concentraion, biased high
R = Data rejected due to data validation violation.
* = Sample analyzed for PAHs only

SOILS:

PESTICIDES

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSIS
PESTICIDES
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units	Aldrin	alpha-BHC	beta-BHC	gamma-BHC (Lindane)	delta-BHC
SB-111	SB111-5JN01-002	A	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-112	SB112-5JN06-002	A	2-4	µg/kg	1.9 UL	1.9 UL	3.2 L	1.9 UL	1.9 UL
SB-113	SB113-5JN16-002	B	2-4	µg/kg	25	1.9 U	1.9 U	1.9 U	1.9 U
SB-114	SB114-5JN16-002	B	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-115	SB115-5JN01-002	D	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-116	SB116-5JN06-002	E	2-4	µg/kg	1.8 U	1.8 U	30 J	1.8 U	1.8 U
SB-116-D	DP116-5JN06-002	E	2-4	µg/kg	1.8 U	1.8 U	37 J	1.8 U	1.8 U
SB-117	SB117-5JN14-002	J	2-4	µg/kg	2 U	2 U	4.5	2 U	2 U
SB-118	SB118-5JN07-002	K	2-4	µg/kg	1.8 U	1.8 U	1.9 J	1.8 U	1.8 U
SB-118-D	DP118-5JN07-002	K	2-4	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SB-119	SB119-5JN19-002	K	2-4	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SB-122	SB122-5JN13-002	K	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-120	SB120-5JN07-002	L	2-4	µg/kg	1.8 U	1.8 U	12	1.8 U	1.8 U
SB-121	SB121-5JN19-002	L	2-4	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SB-123	SB123-5MA22-002	M	2-4	µg/kg	2 U	2 U	5 U	2 U	2 U
SB-124	SB124-5JN07-002	N	2-4	µg/kg	1.8 UJ	1.8 UJ	59 J	1.8 UJ	1.8 UJ
SB-125	SB125-5JN07-002	N	2-4	µg/kg	15	1.8 U	1.8 U	1.8 U	1.8 U
SB-126	SB126-5JN19-002	N	2-4	µg/kg	2.1 U	2.1 U	4	2.1 U	2.1 U
SB-127	SB127-5JN19-002	N	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-128	SB128-5MA30-002	O	2-4	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
SB-129	SB129-5JN14-002	O	2-4	µg/kg	18 U	18 U	18 U	18 U	18 U
SB-130	SB130-5MA17-002	O	2-4	µg/kg	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
SB-131	SB131-5JN20-002	O	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
Number of Samples					23	23	23	23	23
Number of Detections					2	0	8	0	0
Minimum Detected				µg/kg	15		1.9 J		
Maximum Detected				µg/kg	25		59 J		

BACKGROUND

SB-132	SB132-5JN19-002	BG	2-4	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-132	SB132-5JN19-010	BG	10-12	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SB-133	SB133-5JN20-002	BG	2-4	µg/kg	1.9 U	1.9 U	7.3 J	1.9 U	1.9 U
SB-133	SB133-5JN20-010	BG	10-12	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-134	SB134-5JN21-001	BG	1-3	µg/kg	1.8 U	1.8 U	2.4 J	1.8 U	1.8 U
SB-134	SB134-5JN21-005	BG	5-7	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SB-135	SB135-5JN21-001	BG	1-3	µg/kg	2 U	2 U	2 U	2 U	2 U
SB-135	SB135-5JN21-004	BG	4-6	µg/kg	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Number of Samples					8	8	8	8	8
Number of Detections					0	0	2	0	0
Minimum Detected				µg/kg			2.4 J		
Maximum Detected				µg/kg			7.3 J		

SUMMARY OF SOIL ANALYSIS
PESTICIDES
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	alpha-Chlordane	gamma-Chlordane	4, 4'-DDD	4, 4'-DDE	4, 4'-DDT	Dieldrin
SB-111	SB111-5JN01-002	2 U	2 U	4 U	4 U	4 U	4 U
SB-112	SB112-5JN06-002	1.9 UL	1.9 UL	3.7 UL	3.7 UL	3.7 UL	3.7 UL
SB-113	SB113-5JN16-002	1.9 U	1.9 U	3.7 U	3.7 U	14 J	27
SB-114	SB114-5JN16-002	2 U	2 U	4 U	4 U	4 U	4 U
SB-115	SB115-5JN01-002	2 U	2 U	4 U	4 U	4 U	4 U
SB-116	SB116-5JN06-002	1.8 U	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U
SB-116-D	DP116-5JN06-002	1.8 U	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-117	SB117-5JN14-002	2 U	2 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-118	SB118-5JN07-002	1.8 U	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U
SB-118-D	DP118-5JN07-002	1.9 U	1.9 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-119	SB119-5JN19-002	1.9 U	1.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-122	SB122-5JN13-002	2 U	2 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-120	SB120-5JN07-002	1.8 U	1.8 U	3.6	4 J	22 J	3.6 U
SB-121	SB121-5JN19-002	1.9 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U
SB-123	SB123-5MA22-002	2 U	2 U	4 U	4 U	4 U	4 U
SB-124	SB124-5JN07-002	1.8 UJ	1.8 UJ	3.6 UJ	3.6 UJ	3.6 UJ	3.6 UJ
SB-125	SB125-5JN07-002	1.8 U	1.8 U	3.7 U	3.7 U	3.7 U	12 J
SB-126	SB126-5JN19-002	2.1 U	2.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SB-127	SB127-5JN19-002	2 U	2 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-128	SB128-5MA30-002	1.8 U	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-129	SB129-5JN14-002	18 U	18 U	36 U	36 U	36 U	36 U
SB-130	SB130-5MA17-002	1.8 U	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-131	SB131-5JN20-002	2 U	2 U	4 U	4 U	4 U	4 U
Number of Samples		23	23	23	23	23	23
Number of Detections		0	0	1	1	2	2
Minimum Detected				3.6	4 J	14 J	12 J
Maximum Detected				3.6	4 J	22 J	27

BACKGROUND

SB-132	SB132-5JN19-002	2 U	2 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-132	SB132-5JN19-010	1.9 U	1.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-133	SB133-5JN20-002	1.9 U	1.9 U	3.8 U	4.6 J	14 J	3.8 U
SB-133	SB133-5JN20-010	2 U	2 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-134	SB134-5JN21-001	1.8 U	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U
SB-134	SB134-5JN21-005	1.9 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U
SB-135	SB135-5JN21-001	2 U	2 U	4.1 U	4.1 U	4.1 U	4.1 U
SB-135	SB135-5JN21-004	1.9 U	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U
Number of Samples		8	8	8	8	8	8
Number of Detections		0	0	0	1	1	0
Minimum Detected					4.6 J	14 J	
Maximum Detected					4.6 J	14 J	

SUMMARY OF SOIL ANALYSIS
PESTICIDES
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone
SB-111	SB111-5JN01-002	2 U	4 U	4 U	4 U	4 U	4 U
SB-112	SB112-5JN06-002	1.9 UL	3.7 UL	3.7 UL	3.7 UL	3.7 UL	3.7 UL
SB-113	SB113-5JN16-002	1.9 U	3.7 U	3.7 U	6	3.7 U	9.1 J
SB-114	SB114-5JN16-002	2 U	4 U	4 U	4 U	4 U	4 U
SB-115	SB115-5JN01-002	2 U	4 U	4 U	4 U	4 U	4 U
SB-116	SB116-5JN06-002	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U	4 U
SB-116-D	DP116-5JN06-002	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-117	SB117-5JN14-002	2 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-118	SB118-5JN07-002	1.8 U	3.6 U	4 U	3.6 U	3.6 U	3.6 U
SB-118-D	DP118-5JN07-002	1.9 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-119	SB119-5JN19-002	1.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-122	SB122-5JN13-002	2 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-120	SB120-5JN07-002	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
SB-121	SB121-5JN19-002	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB-123	SB123-5MA22-002	2 U	4 U	4 U	4 U	4 U	4 U
SB-124	SB124-5JN07-002	1.8 UJ	3.6 UJ	3.6 UJ	6.4 J	3.6 UJ	3.6 UJ
SB-125	SB125-5JN07-002	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-126	SB126-5JN19-002	2.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SB-127	SB127-5JN19-002	2 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-128	SB128-5MA30-002	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-129	SB129-5JN14-002	18 U	36 U	36 U	36 U	36 U	36 U
SB-130	SB130-5MA17-002	1.8 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
SB-131	SB131-5JN20-002	2 U	4 U	4 U	4 U	4 U	4 U
Number of Samples		23	23	23	23	23	23
Number of Detections		0	0	0	2	0	1
Minimum Detected					6		9.1 J
Maximum Detected					6.4 J		9.1 J

BACKGROUND

SB-132	SB132-5JN19-002	2 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-132	SB132-5JN19-010	1.9 U	3.9 U	3.9 U	3.9 U	3.9 U	3.9 U
SB-133	SB133-5JN20-002	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB-133	SB133-5JN20-010	2 U	3.9 U	4 U	3.9 U	3.9 U	3.9 U
SB-134	SB134-5JN21-001	1.8 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
SB-134	SB134-5JN21-005	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
SB-135	SB135-5JN21-001	2 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U
SB-135	SB135-5JN21-004	1.9 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
Number of Samples		8	8	8	8	8	8
Number of Detections		0	0	0	0	0	0
Minimum Detected							
Maximum Detected							

SUMMARY OF SOIL ANALYSIS
PESTICIDES
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene
SB-111	SB111-5JN01-002	2 U	2 U	19 U	190 U
SB-112	SB112-5JN06-002	1.9 UL	1.9 UL	19 UL	190 UL
SB-113	SB113-5JN16-002	1.9 U	1.9 U	19 U	190 U
SB-114	SB114-5JN16-002	2 U	2 U	20 U	200 U
SB-115	SB115-5JN01-002	2 U	2 U	19 U	190 U
SB-116	SB116-5JN06-002	1.8 U	1.8 U	18 U	180 U
SB-116-D	DP116-5JN06-002	1.8 U	1.8 U	18 U	180 U
SB-117	SB117-5JN14-002	2 U	2 U	20 U	200 U
SB-118	SB118-5JN07-002	1.8 U	2 U	18 U	180 U
SB-118-D	DP118-5JN07-002	1.9 U	1.9 U	19 U	190 U
SB-119	SB119-5JN19-002	1.9 U	1.9 U	19 U	190 U
SB-122	SB122-5JN13-002	2 U	2 U	20 U	200 U
SB-120	SB120-5JN07-002	2 J	1.8 U	18 U	180 U
SB-121	SB121-5JN19-002	1.9 U	1.9 U	19 U	190 U
SB-123	SB123-5MA22-002	2 U	2 U	18 U	180 U
SB-124	SB124-5JN07-002	1.8 UJ	1.8 UJ	18 UJ	180 UJ
SB-125	SB125-5JN07-002	1.8 U	1.8 U	18 U	180 U
SB-126	SB126-5JN19-002	2.1 U	2.1 U	21 U	210 U
SB-127	SB127-5JN19-002	2 U	2 U	20 U	200 U
SB-128	SB128-5MA30-002	1.8 U	1.8 U	18 U	180 U
SB-129	SB129-5JN14-002	18 U	18 U	180 U	1800 U
SB-130	SB130-5MA17-002	1.8 U	1.8 U	1.8 U	180 U
SB-131	SB131-5JN20-002	2 U	2 U	20 U	200 U
Number of Samples		23	23	23	23
Number of Detections		1	0	0	0
Minimum Detected		2 J			
Maximum Detected		2 J			

BACKGROUND

SB-132	SB132-5JN19-002	2 U	2 U	20 U	200 U
SB-132	SB132-5JN19-010	1.9 U	1.9 U	19 U	190 U
SB-133	SB133-5JN20-002	1.9 U	1.9 U	19 U	190 U
SB-133	SB133-5JN20-010	2 U	2 U	20 U	200 U
SB-134	SB134-5JN21-001	1.8 U	1.8 U	18 U	180 U
SB-134	SB134-5JN21-005	1.9 U	1.9 U	19 U	190 U
SB-135	SB135-5JN21-001	2 U	2 U	20 U	200 U
SB-135	SB135-5JN21-004	1.9 U	1.9 U	19 U	190 U
Number of Samples		8	8	8	8
Number of Detections		0	0	0	0
Minimum Detected					
Maximum Detected					

SOILS:

PCB'S

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMMARY OF SOIL ANALYSIS
POLYCHLORINATED BIPHENYLS (PCBs)
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1016
SB-111	SB111-5JN01-002	A	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-112	SB112-5JN06-002	A	2-4	µg/kg	74 UL	37 UL	37 UL	37 UL	37 UL	64 L	37 UL
SB-113	SB113-5JN16-002	B	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-114	SB114-5JN16-002	B	2-4	µg/kg	80 U	40 U	40 U	40 U	40 U	40 U	40 U
SB-115	SB115-5JN01-002	D	2-4	µg/kg	76 U	38 U	38 U	38 U	38 U	38 U	38 U
SB-116	SB116-5JN06-002	E	2-4	µg/kg	72 U	36 U	36 U	36 U	36 U	36 U	36 U
SB-116-D	DP116-5JN06-002	E	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-022	SB022-5JN06-002	F	2-4	µg/kg	22 U	22 U	22 U	22 U	44 U	120	22 U
SB-117	SB117-5JN14-002	J	2-4	µg/kg	78 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-118	SB118-5JN07-002	K	2-4	µg/kg	72 U	36 U	36 U	36 U	36 U	36 U	36 U
SB-118	DP118-5JN07-002	K	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-119	SB119-5JN19-002	K	2-4	µg/kg	78 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-122	SB122-5JN13-002	K	2-4	µg/kg	78 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-120	SB120-5JN07-002	L	2-4	µg/kg	71 U	36 U	36 U	36 U	36 U	113 J	36 U
SB-121	SB121-5JN19-002	L	2-4	µg/kg	75 U	38 U	38 U	38 U	38 U	38 U	38 U
SB-123	SB123-5MA22-002	M	2-4	µg/kg	73 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-124	SB124-5JN07-002	N	2-4	µg/kg	72 UJ	36 UJ	36 UJ	36 UJ	36 UJ	36 UJ	36 UJ
SB-125	SB125-5JN07-002	N	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	78 J	37 U
SB-126	SB126-5JN19-002	N	2-4	µg/kg	82 U	41 U	41 U	41 U	41 U	41 U	41 U
SB-127	SB127-5JN19-002	N	2-4	µg/kg	78 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-088	SB088-5JN01-002	O	2-4	µg/kg	22 U	22 U	22 U	22 U	45 U	240	22 U
SB-088-D	DB088-5JN01-002	O	2-4	µg/kg	23 U	23 U	23 U	23 U	45 U	250	23 U
SB-089	SB089-5JN01-002	O	2-4	µg/kg	21 U	21 U	21 U	21 U	43 U	690	21 U
SB-090	SB090-5JN01-002	O	2-4	µg/kg	26 U	26 U	26 U	26 U	52 U	430	26 U
SB-128	SB128-5MA30-002	O	2-4	µg/kg	73 U	37 U	37 U	37 U	37 U	37 U	37 U
SB-129	SB129-5JN14-002	O	2-4	µg/kg	730 U	360 U	360 U	2400 J	360 U	360 U	360 U
SB-130	SB130-5MA17-002	O	2-4	µg/kg	74 U	37 U	37 U	37 U	37 U	830 J	37 U
SB-131	SB131-5JN20-002	O	2-4	µg/kg	79 U	40 U	40 U	40 U	40 U	40 U	40 U
Number of Samples					28	28	28	28	28	28	28
Number of Detections					0	0	0	1	0	9	0
Minimum Detected				µg/kg				2,400 J		64 L	
Maximum Detected				µg/kg				2,400 J		830 J	

BACKGROUND

SB-132	SB132-5JN19-002	BG	2-4	µg/kg	79 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-132	SB132-5JN19-010	BG	10-12	µg/kg	77 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-133	SB133-5JN20-002	BG	2-4	µg/kg	77 U	38 U	38 U	38 U	38 U	38 U	38 U
SB-133	SB133-5JN20-010	BG	10-12	µg/kg	78 U	39 U	39 U	39 U	39 U	39 U	39 U
SB-134	SB134-5JN21-001	BG	1-3	µg/kg	73 U	36 U	36 U	36 U	36 U	36 U	36 U
SB-134	SB134-5JN21-005	BG	5-7	µg/kg	77 U	38 U	38 U	38 U	38 U	38 U	38 U
SB-135	SB135-5JN21-001	BG	1-3	µg/kg	81 U	41 U	41 U	41 U	41 U	41 U	41 U
SB-135	SB135-5JN21-004	BG	4-6	µg/kg	77 U	38 U	38 U	38 U	38 U	38 U	38 U
Number of Samples					8	8	8	8	8	8	8
Number of Detections					0	0	0	0	0	0	0

[1] Tier I value for total PCBs
U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K Estimated concentration biased high

SOILS:

TOTAL PETROLEUM HYDROCARBONS

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSES
TOTAL PETROLEUM HYDROCARBONS (TPH)
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Depth	Area	Units	Total Petroleum Hydrocarbon	
SB-001	SB001-5MA25-013		H	mg/kg	18	U
SB-002	SB002-5MA24-013		H	mg/kg	20	U
SB-003	SB003-5MA23-008		H	mg/kg	21	U
SB-004	SB004-5MA23-008		H	mg/kg	19	U
SB-005	SB005-5MA23-013		H	mg/kg	19	U
SB-006	SB006-5MA24-013		H	mg/kg	490	HJ
SB-007	SB007-5MA19-013		H	mg/kg	1,200	HJ
SB-008	SB008-5MA23-008		H	mg/kg	840	HJ
SB-009	SB009-5MA24-008		H	mg/kg	1,600	HJ
SB-011	SB011-5MA30-003		H	mg/kg	11,000	HJ
SB-012	SB012-5MA30-013		H	mg/kg	19	U
SB-013	SB013-5MA30-018		H	mg/kg	3,200	HJ
SB-015	SB015-5JN01-008		H	mg/kg	79	H
SB-015	SB015-5JN01-018		H	mg/kg	20	U
SB-015D	DP015-5JN01-018		H	mg/kg	21	U
SB-016	SB016-5JN05-003		H	mg/kg	7,000	HJ
SB-016D	DP016-5JN05-003		H	mg/kg	4,600	HJ
SB-022	SB022-5JN06-002		F	mg/kg	2,100	SHJ
SB-010	SB010-5MA30-013		O	mg/kg	1,700	
SB-014	SB014-5MA31-013		O	mg/kg	46	HJ
Number of Samples					20	
Number of Detections					10	
Minimum Detected					46	HJ
Maximum Detected					11,000	HJ

U = Undetected at quantitation limit presented
J = Estimated Concentration
H = Hydrocarbon heavier than diesel

SOILS:

INORGANIC CONSTITUENTS

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSIS
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units	Aluminum	Antimony	Barium	Beryllium	Calcium	Cadmium
SB-111	SB111-5JN01-002	A	2-4	mg/kg	5,490	4.6 UL	40.2 K	0.5 K	15,900	0.46
SB-112	SB112-5JN06-002	A	2-4	mg/kg	7,970	4.7 UL	86.5 K	0.47 U	4,250 J	0.47
SB-113	SB113-5JN16-002	B	2-4	mg/kg	2,430 J	4.5 UL	22.7 U	0.45 U	2,560	0.45
SB-114	SB114-5JN16-002	B	2-4	mg/kg	9,870 J	4.7 UL	65	1.3 K	2,780	0.47
SB-115	SB115-5JN01-002	D	2-4	mg/kg	4,640	4.6 UL	22.9 U	0.46 U	3,140	0.46
SB-116	SB116-5JN06-002	E	2-4	mg/kg	8,420	4.5 UL	130	0.61 K	20,500 J	0.45
SB-116	DP116-5JN06-002	E	2-4	mg/kg	9,710	4.6 UL	142	0.65 K	25,600 J	0.46
SB-117	SB117-5JN14-002	J	2-4	mg/kg	9,500	4.8 UL	67.4 K	0.78 K		0.48
SB-118	SB118-5JN07-002	K	2-4	mg/kg	6,740	4.3 UL	47.5 K	0.49 K	5,900 J	0.43
SB-118-D	DP118-5JN07-002	K	2-4	mg/kg	4,840	4.6 UL	37.3 K	0.51 K	3,230 J	0.46
SB-119	SB119-5JN19-002	K	2-4	mg/kg	3,100 J	4.8 UL	32.7 J	0.89 K		0.48
SB-122	SB122-5JN13-002	K	2-4	mg/kg	5,940	4.8 UL	68.3	0.85 K		0.48
SB-120	SB120-5JN07-002	L	2-4	mg/kg	4,870	4.2 UL	73.7 K	0.54 K	8,620 J	0.42
SB-121	SB121-5JN19-002	L	2-4	mg/kg	7,090 J	4.9 UL	132 J	0.77 K	2,920	0.49
SB-123	SB123-5MA22-002	M	2-4	mg/kg	6,900	B	39 J	0.45 U	5,260 J	0.45
SB-124	SB124-5JN07-002	N	2-4	mg/kg	4,310	4.3 UL	39.1 K	0.82 K	4,030 J	0.43
SB-125	SB125-5JN07-002	N	2-4	mg/kg	4,460	4.4 UL	39.8 K		4,060 J	0.44
SB-126	SB126-5JN19-002	N	2-4	mg/kg	11,100 J	5 UL	157 J	0.86 K	5,740	0.5
SB-127	SB127-5JN19-002	N	2-4	mg/kg	5,610 J	4.6 UL	62 J	0.88 K	3,820	0.46
SB-128	SB128-5MA30-002	O	2-4	mg/kg	4,750	4.5 UL	77 K	1.1 K	7,750	0.45
SB-129	SB129-5JN14-002	O	2-4	mg/kg	4,400	4.4 UL	67.8 K	0.44 U	36,400 J	0.64
SB-130	SB130-5MA17-002	O	2-4	mg/kg	5,860	B	81.2	0.52 J	29,300 J	2
SB-131	SB131-5JN20-002	O/N	2-4	mg/kg	6,350	4.6 UL	328 J	0.47 J	3,180	0.92
Number of Samples					23	21	23	22	20	23
Number of Detections					23	0	21	17	20	2
MAXIMUM DETECTED				mg/kg	11,100	ND	328 J	1.30 K	36,400 J	2.00

BACKGROUND SAMPLES

SB-132	SB132-5JN19-002	BG	2-4	mg/kg	10,100 J	4.7 UL	26.7 J	0.5 K		0.47
SB-132	SB132-5JN19-010	BG	10-12	mg/kg	8,560 J	5 UL	89.8 J	0.78 K		0.5
SB-133	SB133-5JN20-002	BG	2-4	mg/kg	17,300	4.7 UL	312 L	2.1 K	86,800	0.94
SB-133	SB133-5JN20-010	BG	10-12	mg/kg	6,910	4.6 UL	111 L	1 K		0.92
SB-134	SB134-5JN21-001	BG	1-3	mg/kg	5,900	4.3 UL	132 J	0.43 U		0.43
SB-134	SB134-5JN21-005	BG	5-7	mg/kg	14,700	4.8 UL	39 J	0.58 J		0.48
SB-135	SB135-5JN21-001	BG	1-3	mg/kg	12,400	4.9 UL	85.3 J	0.67 J		0.49
SB-135	SB135-5JN21-004	BG	4-6	mg/kg	14,100	4.8 UL	36.5 J	0.48 U		0.48
TEST OF NORMALITY										
Ho: Data are normally distributed; reject if $W_{calc} < W_{0.05}$										
Calculated W (W_{calc})					0.961		0.782	0.813		
Calculated p Value					0.822		0.02	0.041		
$W_{0.05}$					0.818		0.818	0.818		
Are data normally distributed?					Yes		No	No		
NORMAL DISTRIBUTION										
Mean				mg/kg	11,246	NA			NA	NA
Standard Deviation					4,035					
n					8					
$t_{(0.95)}$ @ df = (n-1)					1.8946					
95% UCL- normal distribution				mg/kg	13,949					
LOG NORMAL DISTRIBUTION										
Mean of ln value							4.353	-0.242		
Standard Deviation of ln value							0.807	0.446		
n							8	8		
$H_{(0.95)}$							2.965	2.361		
95% UCL - log normal distribution				mg/kg			266	2.00		

Arsenic and lead are presented on a separate table

U = Undetected at quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration biased low
K = Estimated concentration biased high
B = Sample result invalid due to blank contamination
NA = Not applicable or not available
Action levels presented as > 1,000,000 indicates that the calculated action level exceeded 100% concentration of the chemical
Bold Bold value indicates the applicable comparison value

SUMMARY OF SOIL ANALYSIS
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units		Cobalt	Chromium	Copper	Iron	Magnesium
SB-111	SB111-5JN01-002	A	2-4	mg/kg	U	2.7 K	12.9 J	11.9	19,000	3,650
SB-112	SB112-5JN06-002	A	2-4	mg/kg	U	10.7 K	19.1	34.1 L	15,400 J	5,080 J
SB-113	SB113-5JN16-002	B	2-4	mg/kg	U	1.1 U		2.6 K	3,610 J	1,560
SB-114	SB114-5JN16-002	B	2-4	mg/kg	U	23.2	19.5 L	21.7	35,500 J	1,780
SB-115	SB115-5JN01-002	D	2-4	mg/kg	U	1.3 K		5.7 K	5,430	1,130 K
SB-116	SB116-5JN06-002	E	2-4	mg/kg	U	10.8 J	25.4	89.9 L	17,200 J	4,450 J
SB-116	DP116-5JN06-002	E	2-4	mg/kg	U	12.5 K	48.7	60.1 L	17,700 J	6,550 J
SB-117	SB117-5JN14-002	J	2-4	mg/kg	U	10.6 K	13.8	17.6 L	28,200	1,890 J
SB-118	SB118-5JN07-002	K	2-4	mg/kg	U	6.4 K		31.4 L	13,500 J	2,560 J
SB-118-D	DP118-5JN07-002	K	2-4	mg/kg	U	3.6 K		14.8 L	8,690 J	1,340 J
SB-119	SB119-5JN19-002	K	2-4	mg/kg	U	3.3 K	51.5 L	16.1 J	34,700 J	1,220
SB-122	SB122-5JN13-002	K	2-4	mg/kg	U	8.7 K	12.8	14.4 L	18,300 J	1,230 J
SB-120	SB120-5JN07-002	L	2-4	mg/kg	U	6.2 K	21	27.7 L	11,100 J	2,120 J
SB-121	SB121-5JN19-002	L	2-4	mg/kg	U	10.1 K	15.5 L	288 J	24,900 J	1,350
SB-123	SB123-5MA22-002	M	2-4	mg/kg	U		15.5	14.4	10,900 J	
SB-124	SB124-5JN07-002	N	2-4	mg/kg	U	2.7 K	9.6	6.8 L	14,600 J	1,170 J
SB-125	SB125-5JN07-002	N	2-4	mg/kg	U	5.2 K	10.1	9 L	9,160 J	956 J
SB-126	SB126-5JN19-002	N	2-4	mg/kg	U	11.5 K	18.2 L	34.2 J	16,100 J	2,370
SB-127	SB127-5JN19-002	N	2-4	mg/kg	U	8.9 K	13.1 L	24.6 J	26,400 J	1,140 J
SB-128	SB128-5MA30-002	O	2-4	mg/kg	U	8.5 K	26.1 J	19.5	27,000	1,110 K
SB-129	SB129-5JN14-002	O	2-4	mg/kg	K	6.9 K	30.3	41.2 L	10,600	11,700 J
SB-130	SB130-5MA17-002	O	2-4	mg/kg		9.3 J	33.5	559	15,300 J	7,870
SB-131	SB131-5JN20-002	O/N	2-4	mg/kg	U	6.2 J	15.5 J	161 L	12,200	
Number of Samples						22	19	23	23	21
Number of Detections						21	19	23	23	21
MAXIMUM DETECTED				mg/kg		23.20	51.50 L	559	35,500 J	11,700 J

BACKGROUND SAMPLES

SB-132	SB132-5JN19-002	BG	2-4	mg/kg	U	2.4 K	17.6 L	10.4 J	22,500 J	823 J
SB-132	SB132-5JN19-010	BG	10-12	mg/kg	U	7.5 K	14.1 L	16 J	27,300 J	1,830
SB-133	SB133-5JN20-002	BG	2-4	mg/kg	U	5.7 K	11.5 J	18.2 L	7,760	20,100
SB-133	SB133-5JN20-010	BG	10-12	mg/kg	U	9 K	16 J	19 L	21,000	1,630
SB-134	SB134-5JN21-001	BG	1-3	mg/kg	U	3.7 J	11.8 J	10.7 L	8,750	B
SB-134	SB134-5JN21-005	BG	5-7	mg/kg	U	3.5 J	24.3 J	21.5 L	32,200	797 J
SB-135	SB135-5JN21-001	BG	1-3	mg/kg	U	3.8 J	19.7 J	7.2 L	21,400	1,260
SB-135	SB135-5JN21-004	BG	4-6	mg/kg	U	10.6 J	23.7 J	14.8 L	29,200	B
TEST OF NORMALITY										
Ho: Data are normally distributed; reject if $W_{calc} < W_{0.05}$										
Calculated W (W_{calc})						0.91	0.94	0.961	0.988	0.547
Calculated p Value						0.36	0.655	0.818	0.288	0
$W_{0.05}$						0.818	0.818	0.818	0.818	0.788
Are data normally distributed?						**Yes**	**Yes**	**Yes**	**Yes**	**No**
NORMAL DISTRIBUTION										
Mean				mg/kg		5.78	16.43	14.73	21,264	
Standard Deviation						2.96	4.57	4.92	8,941	
n						8	8	8	8	
$t_{(0.95)}$ @ df = (n-1)						1.8946	1.8946	1.8946	1.8946	
95% UCL- normal distribution				mg/kg		7.76	19.49	18.02	27,253	
LOG NORMAL DISTRIBUTION										
Mean of ln value										7.558
Standard Deviation of ln value										1.201
n										6
$H_{(0.95)}$										4.617
95% UCL - log normal distribution				mg/kg						27,647

Arsenic and lead are presented on a separate table

U = Undetected at quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration biased low
K = Estimated concentration biased high
B = Sample result invalid due to blank contamination
NA = Not applicable or not available
Action levels presented as > 1,000,000 indicates that the calculated action level exceeded 100% concentration of the chemical
Bold Bold value indicates the applicable comparison valu

SUMMARY OF SOIL ANALYSIS
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units	Manganese	Mercury	Nickel	Potassium	Selenium	Silver
SB-111	SB111-5JN01-002	A	2-4	mg/kg	94.3 L	0.09 L		420 L	0.46 UL	1.8
SB-112	SB112-5JN06-002	A	2-4	mg/kg	246 J	0.15 L		4,700	0.47 UJ	1.9
SB-113	SB113-5JN16-002	B	2-4	mg/kg		0.11 U	3.4 U	280 J	0.44 UL	1.8
SB-114	SB114-5JN16-002	B	2-4	mg/kg	273 J	0.12 U		1,060 J	0.46 UL	1.9
SB-115	SB115-5JN01-002	D	2-4	mg/kg	63.7 L	0.1 L	2.3 U	464 L	0.46 UL	1.8
SB-116	SB116-5JN06-002	E	2-4	mg/kg	538 J	0.09 UL		2,550	0.43 UL	1.8
SB-116	DP116-5JN06-002	E	2-4	mg/kg	590 J	0.16 L		3,830	0.43 UL	1.8
SB-117	SB117-5JN14-002	J	2-4	mg/kg	383 J	0.12 U	33.3	1,020 L	0.46 UL	1.9
SB-118	SB118-5JN07-002	K	2-4	mg/kg	103 J	0.08 UL		638 J	0.44 UL	1.7
SB-118-D	DP118-5JN07-002	K	2-4	mg/kg	59.4 J	0.07 UL		572 J	0.43 UL	1.8
SB-119	SB119-5JN19-002	K	2-4	mg/kg	185 K	0.12 U		595 J	0.49 L	1.9
SB-122	SB122-5JN13-002	K	2-4	mg/kg	228 J	0.12 UL		728 J	0.49 UL	1.9
SB-120	SB120-5JN07-002	L	2-4	mg/kg	220 J	0.11 L		700 J	0.43 UL	1.7
SB-121	SB121-5JN19-002	L	2-4	mg/kg	387 K	0.12 U	305 K		0.49 UL	2
SB-123	SB123-5MA22-002	M	2-4	mg/kg	140 J			814 J		1.8
SB-124	SB124-5JN07-002	N	2-4	mg/kg	169 J	0.11 UL		510 J	0.44 UL	1.7
SB-125	SB125-5JN07-002	N	2-4	mg/kg	93.9 J	0.9 UL		668 J	0.44 UL	1.8
SB-126	SB126-5JN19-002	N	2-4	mg/kg	139 K	0.43		1,190 J	0.49 UL	2
SB-127	SB127-5JN19-002	N	2-4	mg/kg	129 K	0.12 U		813 J	0.49 UL	1.8
SB-128	SB128-5MA30-002	O	2-4	mg/kg	322 L	0.14 L		815 L	0.45 UL	1.8
SB-129	SB129-5JN14-002	O	2-4	mg/kg	171 J	0.62	67.2	709 L	0.45 UL	1.7
SB-130	SB130-5MA17-002	O	2-4	mg/kg	432 J	0.68 L	97.7 K			1.8
SB-131	SB131-5JN20-002	O/N	2-4	mg/kg	139	0.12 U		692 J	0.49 UL	1.8
Number of Samples					22	22	6	21	21	23
Number of Detections					22	9	4	21	1	0
MAXIMUM DETECTED				mg/kg	590 J	0.68 L	305 K	4,700	0.49 L	ND

BACKGROUND SAMPLES

SB-132	SB132-5JN19-002	BG	2-4	mg/kg	73.4 K	0.12 U		697 J	0.46 UL	1.9
SB-132	SB132-5JN19-010	BG	10-12	mg/kg	55.9 K	0.12 U		973 J	0.46 L	2
SB-133	SB133-5JN20-002	BG	2-4	mg/kg	2,520	0.18		989 J	2.23 UL	1.9
SB-133	SB133-5JN20-010	BG	10-12	mg/kg	185	0.12 U		788 J	0.49 UL	1.8
SB-134	SB134-5JN21-001	BG	1-3	mg/kg	172	0.25 J		437 J	0.43 UL	1.7
SB-134	SB134-5JN21-005	BG	5-7	mg/kg	95.1	0.12 UJ		949 J	0.48 UL	1.9
SB-135	SB135-5JN21-001	BG	1-3	mg/kg	173	0.12 UJ		535 J	0.47 UL	2
SB-135	SB135-5JN21-004	BG	4-6	mg/kg	428	0.14 J		665 J	0.46 UL	1.9
TEST OF NORMALITY										
Ho: Data are normally distributed; reject if $W_{calc} < W_{0.05}$										
Calculated W (W_{calc})					0.53	0.736		0.922		
Calculated p Value					4.35E-05	0.006		0.454		
$W_{0.05}$					8.18E-01	0.818		0.818		
Are data normally distributed?					**No**	**No**		**Yes**		
NORMAL DISTRIBUTION										
Mean				mg/kg			NA	754	NA	NA
Standard Deviation								208		
n								8		
$t_{(0.95)}$ @ df = (n-1)								1.8946		
95% UCL- normal distribution				mg/kg				893		
LOG NORMAL DISTRIBUTION										
Mean of ln value					5.286	-1.296				
Standard Deviation of ln value					1.209	0.361				
n					8	8				
$H_{(0.95)}$					4.091	2.201				
95% UCL - log normal distribution				mg/kg	1,544	0.677				

Arsenic and lead are presented on a separate table

U = Undetected at quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration biased low
K = Estimated concentration biased high
B = Sample result invalid due to blank contamination
NA = Not applicable or not available
Action levels presented as > 1,000,000 indicates that the calculated action level exceeded 100% concentration of the chemical
Bold Bold value indicates the applicable comparison valu

SUMMARY OF SOIL ANALYSIS
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth (ft)	Units		Sodium	Thallium	Vanadium	Zinc	Cyanide
SB-111	SB111-5JN01-002	A	2-4	mg/kg	U		1.2 U	12.6 K		1.2 U
SB-112	SB112-5JN06-002	A	2-4	mg/kg	U	233 U	1.2 U	16.3 K	79.3 J	1.2 U
SB-113	SB113-5JN16-002	B	2-4	mg/kg	U	227 U	1.1 U	9.2 J		
SB-114	SB114-5JN16-002	B	2-4	mg/kg	U		1.2 U	25.2 J	554	
SB-115	SB115-5JN01-002	D	2-4	mg/kg	U	229 U	1.1 U	10.4 K		1.1 U
SB-116	SB116-5JN06-002	E	2-4	mg/kg	U		1.1 U	20.7 K	130 J	1.1 U
SB-116	DP116-5JN06-002	E	2-4	mg/kg	U		1.1 UL	30.7	116 J	1.1 U
SB-117	SB117-5JN14-002	J	2-4	mg/kg	U	242 U	1.1 UL	14.4 K	66.4 J	1.2 U
SB-118	SB118-5JN07-002	K	2-4	mg/kg	U		1.1 U	32.4	32.7 J	1.1 U
SB-118-D	DP118-5JN07-002	K	2-4	mg/kg	U		1.1 U	15.8 K	24.8 J	1.1 U
SB-119	SB119-5JN19-002	K	2-4	mg/kg	U	240 U	1.2 U	50.7 J	26.1 L	1.2 U
SB-122	SB122-5JN13-002	K	2-4	mg/kg	U		1.2 U	14	45.3 J	1.2 U
SB-120	SB120-5JN07-002	L	2-4	mg/kg	U		1.1 U	15 K	74.8 J	1.1 U
SB-121	SB121-5JN19-002	L	2-4	mg/kg	U		1.2 U	24.3 J	126 L	1.2 U
SB-123	SB123-5MA22-002	M	2-4	mg/kg	U	224 U	1.1 U	17.2	25.1	1.1 U
SB-124	SB124-5JN07-002	N	2-4	mg/kg	U	216 U	1.1 U	11.9 K		1.1 U
SB-125	SB125-5JN07-002	N	2-4	mg/kg	U		1.1 UL	12.6 K	28.4 J	1.1 U
SB-126	SB126-5JN19-002	N	2-4	mg/kg	U		1.2 U	28.9 J	106 L	1.3 U
SB-127	SB127-5JN19-002	N	2-4	mg/kg	U	229 U	1.2 U	18.3 L	116 L	1.2 U
SB-128	SB128-5MA30-002	O	2-4	mg/kg	U	225 U	1.1 U	14.4 K	40.7	1.1 U
SB-129	SB129-5JN14-002	O	2-4	mg/kg	U		1.1 UL	10.6 K	286 J	
SB-130	SB130-5MA17-002	O	2-4	mg/kg	U		1.1 U	34.1	821	1.1 U
SB-131	SB131-5JN20-002	O/N	2-4	mg/kg	U		1.2 U	18.3	95.5 J	1.2 U
Number of Samples						9	23	23	19	20
Number of Detections						0	0	23	19	0
MAXIMUM DETECTED				mg/kg		ND	ND	50.7 J	821	ND

BACKGROUND SAMPLES

SB-132	SB132-5JN19-002	BG	2-4	mg/kg	U	235 U	1.1 U	27.1 J		1.2 U
SB-132	SB132-5JN19-010	BG	10-12	mg/kg	U	249 U	1.2 U	19 J	82 L	1.2 U
SB-133	SB133-5JN20-002	BG	2-4	mg/kg	U		1.1 UL	25.5	45.7 J	1.3
SB-133	SB133-5JN20-010	BG	10-12	mg/kg	U	231 U	1.2 U	19 K	54 J	1.2 U
SB-134	SB134-5JN21-001	BG	1-3	mg/kg	U	215 U	1.1 U	13.2 K	68.2 J	1.1 U
SB-134	SB134-5JN21-005	BG	5-7	mg/kg	U	240 U	1.2 U	44.3	34.8 J	1.2 U
SB-135	SB135-5JN21-001	BG	1-3	mg/kg	U	247 U	1.2 U	32.7	44.9 J	1.2 U
SB-135	SB135-5JN21-004	BG	4-6	mg/kg	U	241 U	1.1 U	36.4		1.2 U
TEST OF NORMALITY										
Ho: Data are normally distributed; reject if $W_{calc} < W_{0.05}$										
Calculated W (W_{calc})								0.971	0.943	
Calculated p Value								0.902	0.703	
$W_{0.05}$								0.818	0.788	
Are data normally distributed?								Yes	Yes	
NORMAL DISTRIBUTION										
Mean				mg/kg		NA	NA	27.15	54.93	NA
Standard Deviation								10.29	17.32	
n								8	6	
$t_{(0.95)}$ @ df = (n-1)								1.8946	2.015	
95% UCL- normal distribution				mg/kg				34.04	69.19	
LOG NORMAL DISTRIBUTION										
Mean of ln value										
Standard Deviation of ln value										
n										
$H_{(0.95)}$										
95% UCL - log normal distribution				mg/kg						

Arsenic and lead are presented on a separate table

U = Undetected at quantitation limit presented
J = Estimated concentration below quantitation limit
L = Estimated concentration biased low
K = Estimated concentration biased high
B = Sample result invalid due to blank contamination
NA = Not applicable or not available
Action levels presented as > 1,000,000 indicates that the calculated action level exceeded 100% concentration of the chemical
Bold Bold value indicates the applicable comparison valu

SOILS:

LEAD & ARSENIC

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF SOIL ANALYSIS
LEAD AND ARSENIC
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth	Units	Lead	Arsenic
SB-111	* SB111-5JN01-002	A	2-4	mg/kg	26.7 K	
SB-112	* SB112-5JN06-002	A	2-4	mg/kg	77.1 L	0.95 U
SB-113	* SB113-5JN16-002	B	2-4	mg/kg	4.7 J	0.89 U
SB-114	* SB114-5JN16-002	B	2-4	mg/kg	14.3 J	
SB-115	* SB115-5JN01-002	D	2-4	mg/kg	10.2 K	0.92 UL
SB-116	* SB116-5JN06-002	E	2-4	mg/kg	282 L	
SB-116	* DP116-5JN06-002	E	2-4	mg/kg	209 L	0.86 UL
SB-034	SB034-5MA23-003	H	0-4	mg/kg	18.4	
SB-035	SB035-5MA22-002	H	.5-4.5	mg/kg	4,100	
SB-036	SB036-5MA22-002	H	.5-4.5	mg/kg	932	
SB-037	SB037-5MA23-002	H	2-4	mg/kg	41.8	
SB-039	SB039-5JN13-002	J	1.5-6.5	mg/kg		1.1 U
SB-040	SB040-5JN13-002	J	1-5	mg/kg		12.6
SB-041	SB041-5JN13-002	J	1-5	mg/kg		45.4
SB-042	SB042-5MA24-006	J	6-10	mg/kg	106	
SB-043	SB043-5MA24-006	J	6-10	mg/kg	35.2	
SB-044	SB044-5MA24-006	J	6-10	mg/kg	43.4	
SB-045	SB045-5MA24-006	J	6-10	mg/kg	68	
SB-046	SB046-5MA19-002	J	1.5-4	mg/kg	110 L	23 L
SB-046	SB046-5MA19-013	J	12-14	mg/kg	2,610	30
SB-047	SB047-5MA25-002	J	1.5-5.5	mg/kg	33.2 L	
SB-047	SB047-5MA25-012	J	12-14	mg/kg	185 L	
SB-048	SB048-5MA24-001	J	1-5	mg/kg	146 L	
SB-048	SB048-5MA24-016	J	16-20	mg/kg	94.6 L	
SB-049	SB049-5MA24-001	J	1-5	mg/kg	112 L	
SB-049	SB049-5MA24-016	J	16-20	mg/kg	224 L	
SB-050	SB050-5JN14-002	J	1-6	mg/kg	72.4 J	
SB-117	* SB117-5JN14-002	J	2-4	mg/kg	72.4 L	0.91 U
SB-051	SB051-5JN13-002	K	1-5	mg/kg	268 J	39.6 K
SB-052	SB052-5JN13-002	K	1-5	mg/kg	175 J	6
SB-052-D	DP052-5JN13-002	K	1-5	mg/kg	210 J	
SB-053	SB053-5JN13-002	K	1-5	mg/kg	271	
SB-054	SB054-5JN13-002	K	1-5	mg/kg	374	
SB-055	SB055-5JN13-002	K	1-4	mg/kg	167 J	
SB-056	SB056-5JN13-002	K	1-4	mg/kg	58.4 J	
SB-118	* SB118-5JN07-002	K	2-4	mg/kg	13 L	0.88 U
SB-118-D	* DP118-5JN07-002	K	2-4	mg/kg	10.9 L	0.86 U
SB-119	* SB119-5JN19-002	K	2-4	mg/kg	12.1 L	
SB-122	* SB122-5JN13-002	K	2-4	mg/kg	16.1 L	
SB-120	* SB120-5JN07-002	L	2-4	mg/kg	81.2 L	
SB-121	* SB121-5JN19-002	L	2-4	mg/kg	115 L	
SB-123	* SB123-5MA22-002	M	2-4	mg/kg	44.6	
SB-124	* SB124-5JN07-002	N	2-4	mg/kg	7.4 L	
SB-125	* SB125-5JN07-002	N	2-4	mg/kg	9.7 L	
SB-126	* SB126-5JN19-002	N	2-4	mg/kg	431 L	
SB-127	* SB127-5JN19-002	N	2-4	mg/kg	43.6 L	
SB-081	SB081-5MA31-002	O	0-4	mg/kg	105 J	
SB-082	SB082-5MA31-002	O	0-4	mg/kg	358 J	
SB-083	SB083-5MA31-002	O	0-4	mg/kg	34.8 J	
SB-084	SB084-5MA31-002	O	0-4	mg/kg	51.1 J	
SB-085	SB085-5JN01-002	O	2-4	mg/kg	271 J	
SB-086	SB086-5MA31-002	O	0-2.4	mg/kg	173 J	14.1
SB-087	SB087-5MA31-002	O	0-4	mg/kg	49.3 J	
SB-088	SB088-5JN01-002	O	.5-4.5	mg/kg	232 J	
SB-088-D	DP088-5JN01-002	O	.5-4.5	mg/kg	226 J	15.2
SB-089	SB089-5JN01-002	O	.5-4.5	mg/kg	252 J	
SB-090	SB090-5JN01-002	O	.5-4.5	mg/kg	294 J	18.3
SB-096	SB096-5MA30-002	O	1-5	mg/kg	480	
SB-096-D	DP096-5MA30-002	O	2-4	mg/kg	477	13
SB-097	SB097-5MA30-002	O	1-4.9	mg/kg	2,630	
SB-098	SB098-5MA30-002	O	.7-1.3	mg/kg	148	
SB-099	SB099-5MA30-002	O	1-5	mg/kg	630	
SB-100	SB100-5MA26-007	O	7-9	mg/kg	1,970	22.3
SB-101	SB101-5MA26-007	O	7-9	mg/kg	48.9 L	
SB-102	SB102-5MA26-007	O	7-9	mg/kg	30.6 L	

SUMMARY OF SOIL ANALYSIS
LEAD AND ARSENIC
SOUTHEAST FEDERAL CENTER

Sample Location	Sample ID Number	Area	Depth	Units	Lead	Arsenic
SB-103	SB103-5MA26-007	O	7-9	mg/kg	44.2	
SB-104	SB104-5MA25-002	O	.5-4.5	mg/kg	304	14
SB-105	SB105-5MA25-002	O	.7-4.7	mg/kg	128	
SB-106	SB106-5MA25-002	O	.5-3.5	mg/kg	7.3	
SB-107	SB107-5MA30-002	O	.8-4.8	mg/kg	131	22.7
SB-108	SB108-5MA30-002	O	2.5-4.5	mg/kg	31.6	
SB-108	SB108-5MA30-007	O	7-8.5	mg/kg	89.5	
SB-109	SB109-5MA31-002	O	1-4	mg/kg	40.2 J	
SB-109	SB109-5MA31-007	O	7.5-9.5	mg/kg	3 J	
SB-110	SB110-5MA31-009	O	9-11	mg/kg	213	31.2
SB-128	* SB128-5MA30-002	O	1-4	mg/kg	29.2 K	13.9 L
SB-129	* SB129-5JN14-002	O	1-4	mg/kg	139 L	0.9 U
SB-130	* SB130-5MA17-002	O	0-4	mg/kg	542	
SB-131	* SB131-5JN20-002	O	1-5	mg/kg	2,540 J	
Number of samples					76	24
Number of detections					76	15
Minimum detected					3 J	6
Maximum detected					4,100	45.4

BACKGROUND LOCATIONS

SB-132	SB132-5JN19-002	BG	0-5	mg/kg	10.8 L	
SB-132	SB132-5JN19-010	BG	10-12	mg/kg	10.9 L	
SB-133	SB133-5JN20-002	BG	1-5	mg/kg	49.5 J	4.45 U
SB-133	SB133-5JN20-010	BG	10-12	mg/kg	15 J	
SB-134	SB134-5JN21-001	BG	1-3	mg/kg	584 J	
SB-134	SB134-5JN21-005	BG	4-6	mg/kg	29.3 J	
SB-135	SB135-5JN21-001	BG	0-4.5	mg/kg	20.3 J	
SB-135	SB135-5JN21-004	BG	4.5-5.2	mg/kg	12.5 J	
TEST OF NORMALITY						
Ho: Data are normally distributed; reject if Wcalc< W 0.05						
Calculated W (Wcalc)					0.47	NA
W 0.05					0.818	
Are data normally distributed?					No	
n					8	
Mean of ln value					3.33	
Standard Deviation of ln value					1.34	
H					4.428	
95% UCL (lognormal)					640	NA

No entry = no analysis
U = Undetected at the quantitation limit presented
J = Estimated concentration
L = Estimated result biased low
K = Estimated result biased high.
* indicates CLP data

GROUNDWATER:

MONITORING WELL DATA

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF GROUNDWATER ANALYSIS
TOTAL PETROLEUM HYDROCARBONS (TPH)
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Depth (ft)	Units	Total Petroleum Hydrocarbon
MW-03	MW003-5JL06	B		mg//L	0.65 U
MW-12	MW012-5JL07	B		mg//L	0.55 U
MW-10	MW010-5JL06	B		mg//L	1.1 SJ
MW-10-D	DP010-5JL06	B		mg//L	1.2 SHJ
MW-13	MW013-5JL06	B		mg//L	1.6
MW-09	MW009-5JL06	M		mg//L	0.53 U
MW-21	MW021-5JL06	M		mg//L	0.54 U
Number of Samples					7
Number of Detections					3
Minimum Detected				mg//L	1.1 SJ
Maximum Detected				mg//L	1.6

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	Acetone	Benzene	Bromodichloro-methane	Bromoform	Bromomethane	2-Butanone	Carbon Disulfide
MW-03	MW003-5JL06	B	µg/L	10 U	79	10 U	10 U	10 U	10 U	10 U
MW-10	MW010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10-D	DP010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-12	MW012-5JL07	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-13	MW013-5JL06	B	µg/L	10 U	80	10 U	10 U	10 U	10 U	10 U
MW-11	MW011-5JL06	C	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-18	MW018-5JL07	E	µg/L		10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-09	MW009-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L		10 U	10 U	10 U	10 U	10 U	18
MW-16	MW016-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	12
Number of Samples				14	16	16	16	16	16	16
Number of Detections				0	2	0	0	0	0	2
Minimum Detected			µg/L		79					12
Maximum Detected			µg/L		80					18
Maximum Contaminant Level (MCL) [1]			µg/L		5					NA
Risk-based Concentration [2]			µg/L							3,500

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Dibromo-chloromethane	1,1-Dichloroethane
MW-03	MW003-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10	MW010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10-D	DP010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-12	MW012-5JL07	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-13	MW013-5JL06	B	µg/L	10 U	10 U	10 U	7 J	10 U	10 U	10 U
MW-11	MW011-5JL06	C	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	10 U	10 U	10 U	4 J	10 U	10 U	10 U
MW-09	MW009-5JL06	M	µg/L	10 U	10 U	10 U	5 J	10 U	10 U	10 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	19	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	20	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	6 J	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	10 U	10 U	10 U	5 J	10 U	10 U	10 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	3 J	10 U	10 U	10 U
Number of Samples				16	16	16	16	16	16	16
Number of Detections				0	0	0	8	0	0	0
Minimum Detected			µg/L				3 J			
Maximum Detected			µg/L				20			
Maximum Contaminant Level (MCL) [1]			µg/L				100 [3]			
Risk-based Concentration [2]			µg/L							

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene
MW-03	MW003-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10	MW010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10-D	DP010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-12	MW012-5JL07	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-13	MW013-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-11	MW011-5JL06	C	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-09	MW009-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				16	16	16	16	16	16	16
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
Maximum Contaminant Level (MCL) [1]			µg/L							
Risk-based Concentration [2]			µg/L							

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	Ethylbenzene	2-Hexanone	Methylene Chloride	4-Methyl-2-pentanone	Styrene	1,1,2,2-Tetrachloro-ethane	Tetrachloro-ethene
MW-03	MW003-5JL06	B	µg/L	24	10 U	10 U	10 U	10 U	10 U	10 U
MW-10	MW010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10-D	DP010-5JL06	B	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-12	MW012-5JL07	B	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-13	MW013-5JL06	B	µg/L	9.8 J	10 U		10 U	10 U	10 U	10 U
MW-11	MW011-5JL06	C	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-09	MW009-5JL06	M	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	6 J	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U		10 U	10 U	10 U	10 U
Number of Samples				16	16	6	16	16	16	16
Number of Detections				2	0	0	1	0	0	0
Minimum Detected			µg/L	9.8 J			6 J			
Maximum Detected			µg/L	24			6 J			
Maximum Contaminant Level (MCL) [1]			µg/L	700			NA			
Risk-based Concentration [2]			µg/L				1,750			

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	o-Xylene	m + p-Xylene
MW-03	MW003-5JL06	B	µg/L	7.9 J	10 U	10 U	10 U	10 U	3.1 J	19
MW-10	MW010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-10-D	DP010-5JL06	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-12	MW012-5JL07	B	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-13	MW013-5JL06	B	µg/L	2.2 J	10 U	10 U	10 U	10 U	2.4 J	5.5 J
MW-11	MW011-5JL06	C	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-09	MW009-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				16	16	16	16	16	16	16
Number of Detections				2	0	0	0	0	2	2
Minimum Detected			µg/L	2.2 J					2.4 J	5.5 J
Maximum Detected			µg/L	7.9 J					3.1 J	19
Maximum Contaminant Level (MCL) [1]			µg/L	1,000					10,000 [4]	10,000 [4]
Risk-based Concentration [2]			µg/L							

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

GROUNDWATER ANALYTICAL DATA
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Well Identification No.	Area	Units	Total Xylenes
MW-03	MW003-5JL06	B	µg/L	22.1 J
MW-10	MW010-5JL06	B	µg/L	20 U
MW-10-D	DP010-5JL06	B	µg/L	20 U
MW-12	MW012-5JL07	B	µg/L	20 U
MW-13	MW013-5JL06	B	µg/L	7.9 J
MW-11	MW011-5JL06	C	µg/L	20 U
MW-18	MW018-5JL07	E	µg/L	20 U
MW-19	MW019-5JL06	H	µg/L	20 U
MW-09	MW009-5JL06	M	µg/L	20 U
MW-17	MW017-5JL07	M	µg/L	20 U
MW-17-D	DP017-5JL07	M	µg/L	20 U
MW-21	MW021-5JL06	M	µg/L	20 U
MW-14	MW014-5JL06	O	µg/L	20 U
MW-15	MW015-5JL06	O	µg/L	20 U
MW-16	MW016-5JL07	O	µg/L	20 U
MW-20	MW020-5JL07	O	µg/L	20 U
Number of Samples				16
Number of Detections				2
Minimum Detected			µg/L	7.9 J
Maximum Detected			µg/L	22.1 J
Maximum Contaminant Level (MCL) [1]			µg/L	10,000 [4]
Risk-based Concentration [2]			µg/L	

U = Undetected at quantitation limit presented
J = Estimated value

[1] "Drinking Water Regulations and Health Advisories" U.S. EPA, 1995.
[2] Calculated for lifetime drinking water consumption
[3] MCL value for total trihalomethanes
[4] MCL for total xylenes

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Acenaphthylene	Acenaphthene	Anthracene	Benzo[g,h,i]-perylene	Dibenzofuran	Fluoranthene	Fluorene
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	2 J	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	1	0	0	0	0	0
Minimum Detected			µg/L		2 J					
Maximum Detected			µg/L		2 J					
U.S. EPA MCL [1]					NA					
Risk-based Value [2]					2,100					

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Naphthalene	2-Methyl-naphthalene	2-Chloro-naphthalene	Phenanthrene	Pyrene	Benzo[a]-anthracene	Benzo[a]pyrene
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Benzo[b]-fluoranthene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene	Indeno[1,2,3-cd]pyrene	1,2-Dichlorobenzene	1,3-Dichlorobenzene
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	1,4-Dichlorobenzene	1,2,4-Trichloro-benzene	Hexachloro-benzene	Phenol	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	4-Chloro-3-methylphenol	Pentachloro-phenol	Nitrobenzene
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	27 U	11 U	11 U	27 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	25 U	10 U	10 U	25 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	29 U	11 U	11 U	29 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	26 U	10 U	10 U	26 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	25 U	10 U	10 U	25 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	28 U	11 U	11 U	28 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	25 U	10 U	10 U	25 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	25 U	10 U	10 U	25 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	27 U	11 U	11 U	27 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	26 U	10 U	10 U	26 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	2-Nitrophenol	4-Nitrophenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitroaniline
MW-11	MW011-5JL06	C	µg/L	11 U	27 U	27 U	27 U	11 U	11 U	27 U
MW-18	MW018-5JL07	E	µg/L	10 U	25 U	25 U	25 U	10 U	10 U	25 U
MW-19	MW019-5JL06	H	µg/L	11 U	29 U	29 U	29 U	11 U	11 U	29 U
MW-17	MW017-5JL07	M	µg/L	10 U	26 U	26 U	26 U	10 U	10 U	26 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	25 U	25 U	25 U	10 U	10 U	25 U
MW-21	MW021-5JL06	M	µg/L	11 U	28 U	28 U	28 U	11 U	11 U	28 U
MW-14	MW014-5JL06	O	µg/L	10 U	25 U	25 U	25 U	10 U	10 U	25 U
MW-15	MW015-5JL06	O	µg/L	10 U	25 U	25 U	25 U	10 U	10 U	25 U
MW-16	MW016-5JL07	O	µg/L	11 U	27 U	27 U	27 U	11 U	11 U	27 U
MW-20	MW020-5JL07	O	µg/L	10 U	26 U	26 U	26 U	10 U	10 U	26 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	3-Nitroaniline	4-Nitroaniline	4-Chloroaniline	Hexachloro-butadiene	Hexachloroethane	n-Nitroso-diphenylamine	N-Nitroso-di-n-propylamine
MW-11	MW011-5JL06	C	µg/L	27 U	27 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	25 U	25 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	29 U	29 U	11 U	11 U	11 U	2.9 J	11 U
MW-17	MW017-5JL07	M	µg/L	26 U	26 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	25 U	25 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	28 U	28 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	25 U	25 U	10 U	10 U	10 U	2.7 J	10 U
MW-15	MW015-5JL06	O	µg/L	25 U	25 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	27 U	27 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	26 U	26 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	2	0
Minimum Detected			µg/L						2.7 J	
Maximum Detected			µg/L						2.9 J	
U.S. EPA MCL [1]									NA	
Risk-based Value [2]									7	

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Isophorone	3,3'-Dichlorobenzidine	bis-(2-Chloroethoxy)-methane	Hexachloro-cyclopentadiene	bis(2-Chloroethyl)ether	bis(2-Chloro-isopropyl)ether	4-Bromophenyl-phenylether
MW-11	MW011-5JL06	C	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-21	MW021-5JL06	M	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
MW-16	MW016-5JL07	O	µg/L	11 U	11 U	11 U	11 U	11 U	11 U	11 U
MW-20	MW020-5JL07	O	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	0	0	0	0	0	0
Minimum Detected			µg/L							
Maximum Detected			µg/L							
U.S. EPA MCL [1]										
Risk-based Value [2]										

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	4-Chlorophenyl-phenylether	bis(2-Ethylhexyl)-phthalate	Butylbenzyl-phthalate	Di-n-butylphthalate	Diethylphthalate	Dimethylphthalate	Di-n-octylphthalate
MW-11	MW011-5JL06	C	µg/L	11 U	80	11 U	11 U	11 U	11 U	11 U
MW-18	MW018-5JL07	E	µg/L	10 U	14	10 U	10 U	10 U	10 U	10 U
MW-19	MW019-5JL06	H	µg/L	11 U	3.3 J	11 U	11 U	11 U	11 U	11 U
MW-17	MW017-5JL07	M	µg/L	10 U	8.9 J	10 U	10 U	10 U	10 U	1.5 J
MW-17-D	DP017-5JL07	M	µg/L	10 U	9.4 J	10 U	10 U	10 U	10 U	1.6 J
MW-21	MW021-5JL06	M	µg/L	11 U	17	11 U	11 U	11 U	11 U	11 U
MW-14	MW014-5JL06	O	µg/L	10 U	10 U	10 U	1.2 J	10 U	10 U	10 U
MW-15	MW015-5JL06	O	µg/L	10 U	69	10 U	10 U	10 U	10 U	3 J
MW-16	MW016-5JL07	O	µg/L	11 U	6.5 J	11 U	11 U	11 U	11 U	2.3 J
MW-20	MW020-5JL07	O	µg/L	10 U	15	10 U	6 J	10 U	10 U	10 U
Number of Samples				10	10	10	10	10	10	10
Number of Detections				0	9	0	2	0	0	4
Minimum Detected			µg/L		3.3 J		1.2 J			1.5 J
Maximum Detected			µg/L		80		6 J			3 J
U.S. EPA MCL [1]					6		NA			NA
Risk-based Value [2]							3,500			700

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
SEMIVOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Carbazole
MW-11	MW011-5JL06	C	µg/L	11 U
MW-18	MW018-5JL07	E	µg/L	10 U
MW-19	MW019-5JL06	H	µg/L	11 U
MW-17	MW017-5JL07	M	µg/L	10 U
MW-17-D	DP017-5JL07	M	µg/L	10 U
MW-21	MW021-5JL06	M	µg/L	11 U
MW-14	MW014-5JL06	O	µg/L	10 U
MW-15	MW015-5JL06	O	µg/L	10 U
MW-16	MW016-5JL07	O	µg/L	11 U
MW-20	MW020-5JL07	O	µg/L	10 U
Number of Samples				10
Number of Detections				0
Minimum Detected			µg/L	
Maximum Detected			µg/L	
U.S. EPA MCL [1]				
Risk-based Value [2]				

U = Undetected at quantitation limit presented
J = Estimated concentration
NA = Not available or not applicable
[1] From "Drinking Water Regulations and Health Advisories (EPA,1995)
[2] Calculated for lifetime water consumption

SUMMARY OF GROUNDWATER ANALYSIS
METALS AND INORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Calcium	Cadmium	Chromium	Cobalt
MW-03	MW003-5JL06	B	µg/L									
MW-12	MW012-5JL07	B	µg/L									
MW-10	MW010-5JL06	B	µg/L									
MW-10-D	DP010-5JL06	B	µg/L									
MW-13	MW013-5JL06	B	µg/L									
MW-11	MW011-5JL06	C	µg/L	100 U	20 U	4 U	354	2 U	78,700	2 U	5 U	5 U
MW-18	MW018-5JL07	E	µg/L	100 U	20 U	4 U	100 U	2 U	17,300	2 U	5 U	5 U
MW-19	MW019-5JL06	H	µg/L	4,600	20 U	4 U	166	2 U	39,100	2 U	10 U	5 U
MW-09	MW009-5JL06	M	µg/L									
MW-17	MW017-5JL07	M	µg/L	100 U	20 U	4 U	112	2 U		2 U	5 U	5 U
MW-17-D	DP017-5JL07	M	µg/L	100 U	20 U	4 U	112	2 U		2 U	5 U	5 U
MW-21	MW021-5JL06	M	µg/L	100 U	20 U	4 U	185	2 U	53,100	2 U	57.9	5 U
MW-14	MW014-5JL06	O	µg/L	100 U	20 U	4 U	294	2 U	114,000	2 U	15.5	
MW-15	MW015-5JL06	O	µg/L	100 U	20 U	4 U	527	2 U	79,400	2 U	10 U	
MW-16	MW016-5JL07	O	µg/L	100 U	20 U	4 U	133	2 U	21,000	2 U	5 U	5 U
MW-20	MW020-5JL07	O	µg/L	100 U	20 U	4 U	266	2 U	36,300	2 U	5 U	5 U
Number of Samples				10	10	10	10	10	8	10	10	8
Number of Detections				1	0	0	9	0	8	0	2	0
Minimum Detected			µg/L	4,600			112		17,300		15.5	
Maximum Detected			µg/L	4,600			527		114,000		57.9	
U.S. EPA MCL [1]			µg/L	NA			2,000		NA		100	
Risk-based level [2]			µg/L	35,000					1,855,000			

SUMMARY OF GROUNDWATER ANALYSIS
METALS AND INORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium
MW-03	MW003-5JL06	B	µg/L			3 U						
MW-12	MW012-5JL07	B	µg/L			3 UL						
MW-10	MW010-5JL06	B	µg/L			3 U						
MW-10-D	DP010-5JL06	B	µg/L			3 U						
MW-13	MW013-5JL06	B	µg/L			3 U						
MW-11	MW011-5JL06	C	µg/L	5 U	50 U	3 U	500 U	5 U	0.2 U	10 U	56,400	2 UL
MW-18	MW018-5JL07	E	µg/L	5 U	50 U	3 U	2,840	105	0.2 U	10 U	8,000	2 UL
MW-19	MW019-5JL06	H	µg/L	5 U	2,410	4	7,860	329	0.2 U	30	5,760	2 U
MW-09	MW009-5JL06	M	µg/L			4.2						
MW-17	MW017-5JL07	M	µg/L	5 U	50 U	11.3	500 U	5 U	0.2 U	10 U	139,000	2 UL
MW-17-D	DP017-5JL07	M	µg/L	5 U	50 U	3 U	500 U	5 U	0.2 U	10 U	137,000	2 UL
MW-21	MW021-5JL06	M	µg/L	5 U	355	3 U	13,800	476 J	0.27	102	9,530	2 UL
MW-14	MW014-5JL06	O	µg/L	5 U	207	3 U	12,000	558 J	0.2 U	31.7	17,800	2 UL
MW-15	MW015-5JL06	O	µg/L	5 U	100 U	3 U	29,200	1,400 J	0.2 U	213	34,400	2 UL
MW-16	MW016-5JL07	O	µg/L	5 U		3 U	5,640	307	0.2 U	10 U	41,400	2 UL
MW-20	MW020-5JL07	O	µg/L	5 U	567	3 U	15,000	821	0.2 U	10 U	11,500	2 UL
Number of Samples				10	9	16	10	10	10	10	10	10
Number of Detections				0	4	3	7	7	1	4	10	0
Minimum Detected			µg/L		50	4	2,840	105	0.27	30	5,760	
Maximum Detected			µg/L		2,410	11.3	29,200	1,400 J	0.27	213	139,000	
U.S. EPA MCL [1]			µg/L		NA	15	NA	NA	2	100	NA	
Risk-based level [2]			µg/L		17,500		203,000	4,900			1,365,000	

SUMMARY OF GROUNDWATER ANALYSIS
METALS AND INORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Well Location	Sample Identifier	Area	Units	Silver	Sodium	Thallium	Vanadium	Zinc
MW-03	MW003-5JL06	B	µg/L					
MW-12	MW012-5JL07	B	µg/L					
MW-10	MW010-5JL06	B	µg/L					
MW-10-D	DP010-5JL06	B	µg/L					
MW-13	MW013-5JL06	B	µg/L					
MW-11	MW011-5JL06	C	µg/L	8 U	73,000	5 U	5 U	
MW-18	MW018-5JL07	E	µg/L	8 U		5 U	5 U	
MW-19	MW019-5JL06	H	µg/L	8 U	70,400	5 U	5.1 L	
MW-09	MW009-5JL06	M	µg/L					
MW-17	MW017-5JL07	M	µg/L	8 U	51,300	5 U	5 U	
MW-17-D	DP017-5JL07	M	µg/L	8 U	51,600	5 U	5 U	
MW-21	MW021-5JL06	M	µg/L	8 U	86,300 J	5 UL	5 U	
MW-14	MW014-5JL06	O	µg/L	8 U	54,100 J	5 U	5 UL	
MW-15	MW015-5JL06	O	µg/L	8 U	44,200 J	5 U	5 UL	
MW-16	MW016-5JL07	O	µg/L	8 U	27,800	5 U	5 U	
MW-20	MW020-5JL07	O	µg/L	8 U	32,100	5 U	5 U	
Number of Samples				10	9	10	10	0
Number of Detections				0	9	0	1	
Minimum Detected			µg/L		32,100		5.1 L	
Maximum Detected			µg/L		86,300		5.1 L	
U.S. EPA MCL [1]			µg/L		NA		NA	
Risk-based level [2]			µg/L		4,900		315	

GROUNDWATER:

HYDROPUNCH DATA

GLOSSARY OF DATA QUALIFIER CODES

CONVENTIONAL QUALIFIERS

U	=	Not detected. The associated number indicates approximate sample concentration necessary to be detected.
B	=	Not detected substantially above the level reported in laboratory or field blanks.
R	=	Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
N	=	Tentative identification. Consider present. Special methods may be needed to conform its presence or absence in future sampling efforts.
J	=	Analyte present. Reported value may not be accurate or precise.
K	=	Analyte present. Reported value may be biased high. Actual value is expected lower.
L	=	Analyte present. Reported value may be biased low Actual value is expected to be higher.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.
UL	=	Not detected, quantitation limit is probably higher.

LAB QUALIFIERS

H	=	Hydrocarbon heavier than diesel.
S	=	Hydrocarbon lighter than diesel.

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Acetone	Benzene	Bromo-dichloromethane	Bromoform	Bromomethane
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	2,300	100 U	100 U	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10	19	10 U	10 U	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	700	100 U	100 U	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	85 J	100 U	100 U	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	15,000	1000 U	1000 U	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	77	10 U	10 U	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	22,000	1000 U	1000 U	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	120	10 U	10 U	10 U
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	32	10 U	10 U	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	39	11	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	55	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	2,700	1000 U	1000 U	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	340	200 U	200 U	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	42	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	38	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	27	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	95	10 U	10 U	10 U	10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	28	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	42	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	120	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	45	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	15	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					83	83	83	83	83
Number of Detections					12	13	0	0	0
Minimum Detected				µg/L	10	11			
Maximum Detected				µg/L	120	22,000			

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	2-Butanone	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane
HP-01	HP001-5MA04-027	B	27-29	µg/L	1,300	100 U	100 U	100 U	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10 U	10 U	10 U	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	100 U	100 U	100 U	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	100 U	100 U	100 U	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	32	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	200 U	200 U	200 U	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	47	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	28	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L		10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	3 1 J	10 U	10 U	10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					82	83	83	83	83
Number of Detections					3	1	0	1	0
Minimum Detected				µg/L	28	3 1 J		47	
Maximum Detected				µg/L	1 300	3 1 J		47	

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Chloroform	Chloromethane	Dibromo-chloromethane	1,1-Dichloroethane	1,2-Dichloroethane
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	100 U	100 U	100 U	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10 U	10 U	10 U	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	100 U	100 U	100 U	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	100 U	100 U	100 U	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	200 U	200 U	200 U	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	31 J	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	94 J	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	12	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	55 J	10 U	10 U	10 U	10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					83	83	83	83	83
Number of Detections					4	0	0	0	0
Minimum Detected				µg/L	31 J				
Maximum Detected				µg/L	12				

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	cis-1,3-Dichloropropene
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	100 U	100 U	100 U	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10 U	10 U	10 U	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	100 U	100 U	100 U	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	100 U	100 U	100 U	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	1000 U	1000 U	1000 U	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	2,004	200 U	200 U	200 U	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					83	83	83	83	83
Number of Detections					1	0	0	0	0
Minimum Detected				µg/L	2004				
Maximum Detected				µg/L	2004				

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	trans-1,3-Dichloropropene	Ethylbenzene	2-Hexanone	Methylene Chloride	4-Methyl-2-Pentanone
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	1,700	100 U	100 U	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10	10 U	10 U	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	780	100 U	100 U	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	340	100 U	100 U	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	2,300	1000 U	1000 U	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	14	10 U	10 U	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	2,300	1000 U	1000 U	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	45	10 U	10 U	10 U
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U		10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	90	10 U	10 U	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	1.7 J	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	2,000	1000 U	1000 U	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	650	200 U	200 U	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U		10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U		10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U		10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U		10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U		10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U		10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U		10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U		10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U		10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U		10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U		10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U		10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U		10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U		10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U		10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U		10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					83	83	83	66	83
Number of Detections					0	12	0	0	0
Minimum Detected				µg/L		1.7 J			
Maximum Detected				µg/L		2,300			

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Styrene	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,1,1-Trichloroethane
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	100 U	100 U	1,200	100 U
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10 U	10 U	20	10 U
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	100 U	100 U	750	100 U
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	100 U	100 U	710	100 U
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	1000 U	1000 U	15,000	1000 U
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	10 U	10 U	20	10 U
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	1000 U	1000 U	18,000	1000 U
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	10 U	10 U	5.2 J	32
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	34
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	36
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	39	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	1000 U	1000 U	7,500	1000 U
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	200 U	200 U	2,300	200 U
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U
Number of Samples					83	83	83	83	83
Number of Detections					0	0	0	11	3
Minimum Detected				µg/L			0	5.2 J	32
Maximum Detected				µg/L			0	18,000	36

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
VOLATILE ORGANIC COMPOUNDS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth (ft)	Units	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	o-Xylene	m + p-Xylene	Total Xylenes
HP-01	HP001-5MA04-027	B	27-29	µg/L	100 U	100 U	100 U	1,700	2,700	4,400
HP-01	HP001-5MA05-079	B	79-81	µg/L	10 U	10 U	10 U	9.4 J	24	33.4 J
HP-03	HP003-5MA08-025	B	25-27	µg/L	100 U	100 U	100 U	630	1,600	2,230
HP-03	HP003-5MA10-074	B	74-76	µg/L	100 U	100 U	100 U	440	1,100	1,540
HP-05	HP005-5AP27-022	B	22-24	µg/L	1000 U	1000 U	1000 U	2,900	6,400	9,300
HP-05	HP005-5AP28-072	B	72-74	µg/L	10 U	10 U	10 U	16	30	46
HP-06	HP006-5AP27-020	B	20-22	µg/L	1000 U	1000 U	1000 U	3,200	7,100	10,300
HP-07	HP007-5MA09-021	B	21-23	µg/L	10 U	10 U	10 U	5.8 J	14	19.8 J
HP-07	HP007-5MA10-065	B	65-67	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-13	HP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	54	300	354
HP-14	HP014-5MA08-070	B	70-72	µg/L	10 U	7.2 J	10 U	1.3 J	6.6 J	7.9 J
HP-15	HP015-5MA09-029	B	29-31	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-04	HP004-5MA11-021	C	21-23	µg/L	1000 U	1000 U	1000 U	2,500	5,500	8,000
HP-04	HP004-5MA12-071	C	71-73	µg/L	200 U	720	200 U	910	2,100	3,010
HP-08	HP008-5MA11-022	C	22-24	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-08	HP008-5MA12-073	C	73-75	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-10	HP010-5MA16-023	C	23-25	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-10	HP010-5MA16-077	C	77-79	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-02	HP002-5JN13-016	F	16-18	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-02	HP002-5JN14-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	10 U	10 U	10 U	10	2.9 J	12.9 J
HP-36	HP036-5MA08-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-09	HP009-5MA15-021	G	21-23	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-09	HP009-5MA15-071	G	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-11	HP011-5MA16-018	G	18-20	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-11	HP011-5MA17-068	G	68-70	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-32	HP032-5MA19-011	H	11-13	µg/L	10 U	4.6 J	10 U	10 U	10 U	20 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-12	HP012-5MA23-022	M	22-24	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-12	HP012-5MA24-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	10 U	10 U	10 U	10 U	3 J	3 J
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-33	HP033-5MA23-019	O	19-21	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	10 U	10 U	10 U	10 U	10 U	20 U
Number of Samples					83	83	83	83	83	83
Number of Detections					0	3	0	13	14	14
Minimum Detected				µg/L		4.6 J		1.3 J	2.9 J	3 J
Maximum Detected				µg/L		720		3,200	7,100	10,300

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Acenaphthene	Acenaphthylene	Anthracene	Benzo[g,h,i]-perylene	Dibenzofuran	Fluorene
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 U	12 U	12 UJ	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	11 U	11 U	11 UJ	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	1.4 J	13 U	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	21	14 U	14 U	14 U	2.2 J	10 J
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 U	12 UJ	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	5.4 J	14 U	3.5 J	14 U	2.5 J	3.9 J
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 U	11 UJ	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	1.5 J	13 U	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	18 U	18 U	18 U	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 UJ	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	7.6 J	13 U	8.2 J	5.3 J	1.9 J	5.7 J
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	2.9 J	11 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	3.9 J	11 U	1.3 J	11 U	1.2 J	2.1 J
HP-40	HP040-5MA26-074	O	74-76	µg/L	1.2 J	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					8	0	3	1	4	4
Minimum Detected				µg/L	1.2 J		1.3 J	5.3 J	1.2 J	2.1 J
Maximum Detected				µg/L	21		8.2 J	5.3 J	2.5 J	10 J

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Fluoranthene	Naphthalene	2-Methylnaphthalene	2-Chloro-naphthalene	Phenanthrene	Pyrene
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	73	36	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	2.2 J	12 U	12 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	1.2 J	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	1.5 J	2.8 J	11 U	1.1 J	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	3.7 J	1.7 J	13 U	2.1 J	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U	5.1 J	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	11 J	4.2 J	2.1 J	14 U	13 J	9.4 J
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	1.3 L	13 UL	13 UL	13 UL	1.9 L	1.4 L
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	3.2 J	2.4 J	13 U	13 U	5.1 J	2.9 J
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	5.1 J	18 U	18 U	18 U	4.6 J	2.8 J
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 UJ
HP-21	HP021-5MA31-019	O	19-21	µg/L	26	2.3 J	13 U	13 U	24	18
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	2 J	14 U	14 U	14 U	1.5 J	2.2 J
HP-33	HP033-5MA23-071	O	71-73	µg/L	2.3 J	1.7 J	11 U	11 U	4.1 J	2.2 J
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	2.4 J	1.1 J	11 U	11 U	4.1 J	2.5 J
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					8	9	4	0	12	8
Minimum Detected				µg/L	1.3 L	1.1 J	1.7 J		1.1 J	1.4 L
Maximum Detected				µg/L	26	73	36		24	18

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Benzo[a]-anthracene	Benzo[a]pyrene	Benzo[b]-fluoranthene	Benzo[k]-fluoranthene	Chrysene	Dibenz[a,h]-anthracene
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 UJ	12 UJ	12 UJ	12 U	12 UJ
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	11 UJ	11 UJ	11 UJ	11 U	11 UJ
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 UJ	12 UJ	12 UJ	12 U	12 UJ
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	4 J	3 J	2.6 J	2.7 J	4.2 J	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 UJ	11 UJ	11 UJ	11 U	11 UJ
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	1.3 J	13 U	13 U	13 U	1.4 J	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	2.2 J	18 U	18 U	18 U	2.2 J	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
HP-21	HP021-5MA31-019	O	19-21	µg/L	9.4 J	9.1 J	7.8 J	4.1 J	10 J	2.9 J
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					4	2	2	2	4	1
Minimum Detected				µg/L	1.3 J	3 J	2.6 J	2.7 J	1.4 J	2.9 J
Maximum Detected				µg/L	9.4 J	9.1 J	7.8 J	4.1 J	10 J	2.9 J

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Indeno[1,2,3-cd]pyrene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,2,4-Trichlorobenzene	Hexachloro-benzene
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 UJ	12 U	12 U	12 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 UJ	11 U	11 U	11 U	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 UJ	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 U	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 UJ	11 U	11 U	11 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	18 U	18 U	18 U	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 UJ	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	5.3 J	13 U	13 U	13 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					1	0	0	0	0	0
Minimum Detected				µg/L	5.3 J					
Maximum Detected				µg/L	5.3 J					

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Phenol	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	2-Chlorophenol	2,4-Dichlorophenol
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	7.9 J	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 U	14 U	14 U	14 U	14 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	18 U	18 U	18 U	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	13 U	13 U	2.1 J	13 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	18 U	18 U	18 U	18 U	18 U	18 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					58	58	58	58	58	58
Number of Detections					0	0	1	1	0	0
Minimum Detected				µg/L			2.1 J	7.9 J		
Maximum Detected				µg/L			2.1 J	7.9 J		

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	4-Chloro-3-methylphenol	Pentachloro-phenol	Nitrobenzene	2-Nitrophenol
HP-13	HP013-5MA03-036	B	36-38	µg/L	34 U	14 U	14 U	34 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	35 U	14 U	14 U	35 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	30 U	12 U	12 U	30 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	31 U	13 U	13 U	31 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	29 U	12 U	12 U	29 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	31 U	13 U	13 U	31 U	13 UL	13 U
HP-16	HP016-5MA05-021	B	21-23	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	33 U	13 U	13 U	33 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	30 U	12 U	12 U	30 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	38 U	15 U	15 U	38 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	35 U	14 U	14 U	35 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	32 U	13 U	13 U	32 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	30 U	12 U	12 U	30 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	25 U	10 U	10 U	25 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	29 U	12 U	12 U	29 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	29 U	12 U	12 U	29 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	31 U	12 U	12 U	31 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	35 U	14 U	14 U	35 U	14 UL	14 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	36 U	14 U	14 U	36 U	14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	28 U	11 U	11 U	28 U	11 UL	11 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	27 U	11 U	11 U	27 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	31 U	12 U	12 U	31 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	25 U	10 U	10 U	25 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	25 U	10 U	10 U	25 U	10 UL	10 U
HP-23	HP023-5MA22-020	M	20-22	µg/L	31 U	13 U	13 U	31 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	25 U	10 U	10 U	25 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	27 U	11 U	11 U	27 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	29 U	11 U	11 U	29 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	31 U	13 U	13 U	31 U	13 UL	13 U
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	31 U	13 U	13 U	31 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	42 U	17 U	17 U	42 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	44 U	18 U	18 U	44 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	30 U	12 U	12 U	30 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	26 U	10 U	10 U	26 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	25 U	10 U	10 U	25 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	33 U	13 U	13 U	33 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	26 U	10 U	10 U	26 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	45 U	18 U	18 U	45 U		18 U
HP-28	HP028-5MA19-071	O	71-73	µg/L	40 U	16 U	16 U	40 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	32 U	13 U	13 U	32 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	27 U	11 U	11 U	27 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	35 U	14 U	14 U	35 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	27 U	11 U	11 U	27 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	38 U	15 U	15 U	38 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	31 U	13 U	13 U	31 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	25 U	10 U	10 U	25 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	35 U	14 U	14 U	35 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	35 U	14 U	14 U	35 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	28 U	11 U	11 U	28 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	26 U	10 U	10 U	26 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	26 U	11 U	11 U	26 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	36 U	14 U	14 U	36 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	31 U	13 U	13 U	31 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	26 U	11 U	11 U	26 U	11 U	11 U
Number of Samples					58	58	58	58	57	58
Number of Detections					0	0	0	0	0	0
Minimum Detected				µg/L						
Maximum Detected				µg/L						

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	4-Nitrophenol	2,4-Dinitrophenol	4,6-Dinitro-2-methylphenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Nitroaniline
HP-13	HP013-5MA03-036	B	36-38	µg/L	34 U	34 U	34 U	14 U	14 U	34 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	35 U	35 U	35 U	14 U	14 U	35 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	30 U	30 U	30 U	12 U	12 U	30 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	31 U	31 U	31 U	13 U	13 U	31 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	29 U	29 U	29 U	12 U	12 U	29 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	31 U	31 U	31 U	13 UL	13 UL	31 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	33 U	33 U	33 U	13 U	13 U	33 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	30 U	30 U	30 U	12 U	12 U	30 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	38 U	38 U	38 U	15 U	15 U	38 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	35 U	35 U	35 U	14 U	14 U	35 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	32 U	32 U	32 U	13 U	13 U	32 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	30 U	30 U	30 U	12 U	12 U	30 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	25 U	25 U	25 U	10 U	10 U	25 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	29 U	29 U	29 U	12 U	12 U	29 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	29 U	29 U	29 U	12 U	12 U	29 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	31 U	31 U	31 U	12 U	12 U	31 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	35 U	35 U	35 U	14 UL	14 UL	35 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	36 U	36 U	36 U	14 U	14 U	36 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	28 U	28 U	28 UL	11 UL	11 UL	28 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	27 U	27 U	27 U	11 U	11 U	27 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	31 U	31 U	31 U	12 U	12 U	31 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	25 U	25 U	25 U	10 U	10 U	25 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	25 U	25 U	25 U	10 UL	10 UL	25 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	31 U	31 U	31 U	13 U	13 U	31 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	25 U	25 U	25 U	10 U	10 U	25 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	27 U	27 U	27 U	11 U	11 U	27 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	29 U	29 U	29 U	11 U	11 U	29 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	31 U	31 U	31 U	13 UL	13 UL	31 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	31 U	31 U	31 U	13 U	13 U	31 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	42 U	42 U	42 U	17 U	17 U	42 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	44 U	44 U	44 U	18 U	18 U	44 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	30 U	30 U	30 U	12 U	12 U	30 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	26 U	26 U	26 U	10 U	10 U	26 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	25 U	25 U	25 U	10 U	10 U	25 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	33 U	33 U	33 U	13 U	13 U	33 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	26 U	26 U	26 U	10 U	10 U	26 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	45 U	45 U	45 U	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	40 U	40 U	40 U	16 U	16 U	40 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	32 U	32 U	32 U	13 U	13 U	32 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	27 U	27 U	27 U	11 U	11 U	27 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	35 U	35 U	35 U	14 U	14 U	35 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	27 U	27 U	27 U	11 U	11 U	27 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	38 U	38 U	38 U	15 U	15 U	38 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	31 U	31 U	31 U	13 U	13 U	31 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	25 U	25 U	25 U	10 U	10 U	25 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	35 U	35 U	35 U	14 U	14 U	35 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	35 U	35 U	35 U	14 U	14 U	35 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	28 U	28 U	28 U	11 U	11 U	28 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	26 U	26 U	26 U	10 U	10 U	26 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	26 U	26 U	26 U	11 U	11 U	26 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	36 U	36 U	36 U	14 U	14 U	36 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	31 U	31 U	31 U	13 U	13 U	31 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	26 U	26 U	26 U	11 U	11 U	26 U
Number of Samples					58	58	58	57	57	57
Number of Detections					0	0	0	0	0	0
Minimum Detected				µg/L						
Maximum Detected				µg/L						

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	3-Nitroaniline	4-Nitroaniline	4-Chloroaniline	Hexachloro-butadiene	Hexachloroethane	n-Nitroso-diphenylamine
HP-13	HP013-5MA03-036	B	36-38	µg/L	34 U	34 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	35 U	35 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	30 U	30 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	31 U	31 U	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	29 U	29 U	12 U	12 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	28 UJ	28 UJ	11 UJ	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	31 UL	31 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	28 U	28 U	11 U	11 U	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	33 U	33 U	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	30 U	30 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	38 U	38 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	35 U	35 U	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	32 U	32 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	30 U	30 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	25 U	25 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	29 U	29 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	29 U	29 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	31 U	31 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	35 U	35 UL	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	36 U	36 U	14 U	14 U	14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	28 UL	28 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	27 U	27 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	31 U	31 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	25 U	25 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	25 UL	25 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	31 U	31 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	25 UJ	25 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	27 U	27 U	11 U	11 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	29 U	29 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	31 UL	31 UL	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	31 UJ	31 U	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	42 UJ	42 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	44 U	44 U	18 U	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	30 UJ	30 UJ	12 UJ	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	26 U	26 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	25 U	25 U	10 U	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	33 U	33 U	13 U	13 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	26 U	26 U	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	40 UJ	40 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	32 U	32 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	28 UJ	28 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	28 UJ	28 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	27 U	27 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	35 U	35 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	27 UJ	27 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	38 U	38 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	31 U	31 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	28 UJ	28 U	11 U	11 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	25 U	25 U	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	35 U	35 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	35 U	35 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	28 U	28 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	26 U	26 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	26 U	26 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	36 U	36 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	31 U	31 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	26 U	26 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					0	0	0	0	0	0
Minimum Detected				µg/L						
Maximum Detected				µg/L						

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	N-Nitroso-di-n-propylamine	Isophorone	3,3'-Dichlorobenzidine	bis(2-Chloroethoxy)-methane	Hexachlorocyclo-pentadiene	bis(2-Chloroethyl)-ether
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 U	12 UJ	12 U	12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 UJ	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL	14 UL	14 UL	14 U
HP-19	HP019-5JN01-027	H	27-29	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	18 U	18 U	18 UJ	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 UJ	10 U	10 U	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	13 U	13 U	13 UJ	13 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 UJ	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 UJ	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57	57	57
Number of Detections					0	0	0	0	0	0
Minimum Detected				µg/L						
Maximum Detected				µg/L						

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	bis(2-Chloroisopropyl)-ether	4-Bromophenyl-phenylether	4-Chlorophenyl-phenylether	bis(2-Ethylhexyl)-phthalate	Butylbenzyl-phthalate	Di-n-butylphthalate
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U		14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U		12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U		13 U	1.5 J
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 U	12 U		12 U	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U		11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL		13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	11 U	11 U	11 U		3.6 J	1.4 J
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 U		3.5 J	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U		14 U	11 J
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U		13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U		12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	10 U	10 U	10 U	10 U	10 U	15
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U		7.5 J	1.2 J
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 U		2.8 J	1.9 J
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL		14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	14 U	14 U	14 U		14 U	14 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U		10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	13 U	13 U	13 U		13 U	32
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U		10 U	10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 U		11 U	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL		13 UL	1.5 L
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U		13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U		17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	18 U	18 U	18 U		18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U		12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U		10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U		10 UJ	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	13 U	13 U	13 U		13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U		10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U		16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U		13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U		11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U		11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U		14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U		11 U	
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U		11 U	11 U
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U		10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U		10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	20	57	56
Number of Detections					0	0	0	0	4	8
Minimum Detected				µg/L					2.8 J	1.2 J
Maximum Detected				µg/L					7.5 J	32

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
SEMI-VOLATILE ORGANIC COMPOUNDS

Sample Location	Sample Identifier	Area	Depth (ft)	Units	Diethylphthalate	Dimethylphthalate	Di-n-octylphthalate	Carbazole
HP-13	HP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	14 U	14 U	14 U	14 U
HP-13	HP013-5MA04-071	B	71-73	µg/L	12 U	12 U	12 U	12 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	13 U	13 U	13 U	13 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	12 U	12 U	12 UJ	12 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	11 U	11 U	11 U	11 U
HP-15	HP015-5MA10-071	B	71-73	µg/L	13 UL	13 UL	13 UL	13 UL
HP-16	HP016-5MA05-021	B	21-23	µg/L	2.4 J	11 U	11 UJ	11 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	13 U	13 U	13 U	13 U
HP-31	HP031-5MA01-017	E	17-19	µg/L	12 U	12 U	12 U	12 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	15 U	15 U	15 U	15 U
HP-17	HP017-5MA15-026	F	26-28	µg/L	14 U	14 U	14 U	14 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	13 U	13 U	13 U	13 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	12 U	12 U	12 U	12 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	1.5 J	10 U	10 U	10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	12 U	12 U	12 U	12 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	12 U	12 U	12 UJ	12 U
HP-18	HP018-5JN14-020	H	20-22	µg/L	12 U	12 U	12 U	12 U
HP-18	HP018-5JN15-072	H	72-74	µg/L	14 UL	14 UL	14 UL	14 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	14 U	14 U	14 U	1.6 J
HP-19	HP019-5JN01-071	H	71-73	µg/L	11 UL	11 UL	11 UL	11 UL
HP-20	HP020-5JN05-019	H	19-21	µg/L	11 U	11 U	11 U	11 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	12 U	12 U	12 U	12 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	10 U	10 U	10 U	10 U
HP-32	HP032-5MA19-071	H	71-73	µg/L	10 UL	10 UL	10 UL	10 UL
HP-23	HP023-5MA22-020	M	20-22	µg/L	5.8 J	13 U	13 U	13 U
HP-23	HP023-5MA22-072	M	72-74	µg/L	10 U	10 U	10 U	10 UJ
HP-24	HP024-5MA12-009	M	9-11	µg/L	11 U	11 U	11 UJ	11 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	11 U	11 U	11 U	11 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	13 UL	13 UL	13 UL	13 UL
HP-25-D	DP025-5MA18-016	M	16-18	µg/L	13 U	13 U	13 U	13 U
HP-25	HP025-5MA19-068	M	68-70	µg/L	17 U	17 U	17 U	17 U
HP-38	HP038-5MA26-053	M	53-55	µg/L	2.4 J	18 U	18 U	18 U
HP-39	HP039-5MA10-011	M	11-13	µg/L	12 U	12 U	12 U	12 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 U	10 U
HP-39-D	DP039-5MA11-076	M	76-78	µg/L	10 U	10 U	10 UJ	10 U
HP-21	HP021-5MA31-019	O	19-21	µg/L	13 U	13 U	13 U	13 U
HP-21	HP021-5MA31-071	O	71-73	µg/L	10 U	10 U	10 U	10 U
HP-28	HP028-5MA17-009	O	9-11	µg/L	R	R	R	R
HP-28	HP028-5MA19-071	O	71-73	µg/L	16 U	16 U	16 U	16 U
HP-29	HP029-5MA18-076	O	76-78	µg/L	13 U	13 U	13 U	13 U
HP-29	HP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U
HP-29-D	DP029-5MA17-008	O	8-10	µg/L	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-009	O	9-11	µg/L	11 U	11 U	11 U	11 U
HP-30	HP030-5MA16-071	O	71-73	µg/L	14 U	14 U	14 U	14 U
HP-33	HP033-5MA23-071	O	71-73	µg/L	11 U	11 U	11 U	2.8 J
HP-34	HP034-5MA01-011	O	11-13	µg/L	15 U	15 U	15 U	15 U
HP-34	HP034-5MA01-072	O	72-74	µg/L	13 U	13 U	13 U	13 U
HP-40	HP040-5MA25-021	O	21-23	µg/L	11 U	11 U	11 U	11 UJ
HP-40	HP040-5MA26-074	O	74-76	µg/L	10 U	10 U	10 U	10 U
HP-41	HP041-5JN02-015	O	15-17	µg/L	3.7 J	14 U	14 U	14 U
HP-41	HP041-5JN02-076	O	76-78	µg/L	14 U	14 U	14 U	14 U
HP-26	HP026-5MA03-015	N	15-17	µg/L	11 U	11 U	11 U	11 U
HP-26	HP026-5MA04-071	N	71-73	µg/L	10 U	10 U	10 U	10 U
HP-27	HP027-5MA03-012	N	12-14	µg/L	11 U	11 U	11 U	11 U
HP-27	HP027-5MA03-071	N	71-73	µg/L	14 U	14 U	14 U	14 U
HP-37	HP037-5AP27-020	N	20-22	µg/L	13 U	13 U	13 U	13 U
HP-37	HP037-5AP28-081	N	81-83	µg/L	11 U	11 U	11 U	11 U
Number of Samples					57	57	57	57
Number of Detections					5	0	0	2
Minimum Detected				µg/L	1.5 J			1.6 J
Maximum Detected				µg/L	5.8 J			2.8 J

U = Undetected at quantitation limit presented
J = Estimated concentration
L = Estimated concentration biased low
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth	Units	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium
HP-01	HP001-5MA04-027	B	27-29	µg/L							
HP-03	HP003-5MA10-074	B	74-76	µg/L							
HP-05	HP005-5AP27-022	B	22-24	µg/L							
HP-05	HP005-5AP28-072	B	72-74	µg/L							
HP-07	HP007-5MA10-065	B	65-67	µg/L							
HP-13	HP013-5MA03-036	B	36-38	µg/L	337,000	R	163 L	2,730	40.2 L	9.6	96,600 J
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	522,000	24.1 L	199 L	2,870	44.6 L	10.4	98,100 J
HP-13	HP013-5MA04-071	B	71-73	µg/L		20 U	10 U			4 U	
HP-14	HP014-5MA05-021	B	21-23	µg/L		20 U	13.8	1,910		4 U	88,100
HP-14	HP014-5MA08-070	B	70-72	µg/L		20 U	10 U			4 U	
HP-15	HP015-5MA09-029	B	29-31	µg/L		R	R	1,720 L		4 UL	104,000 J
HP-15	HP015-5MA10-071	B	71-73	µg/L		R	R	1,170 L		4 UL	79,900 J
HP-16	HP016-5MA05-021	B	21-23	µg/L		20 U	17.3	2,660	13.9	4 U	206,000
HP-16	HP016-5MA08-077	B	77-79	µg/L		20 U	10 U			4 U	86,600
HP-04	HP004-5MA11-021	C	21-23	µg/L							
HP-04	HP004-5MA12-071	C	71-73	µg/L							
HP-08	HP008-5MA11-022	C	22-24	µg/L							
HP-08	HP008-5MA12-073	C	73-75	µg/L							
HP-10	HP010-5MA16-023	C	23-25	µg/L							
HP-10	HP010-5MA16-077	C	77-79	µg/L							
HP-31	HP031-5MA01-017	E	17-19	µg/L	169,000	20 U	46.4	1,370	14	4 U	64,800
HP-31	HP031-5MA02-080	E	80-82	µg/L	434,000	20 UL	132 L	6,720	105 L	29.3	203,000 J
HP-02	HP002-5JN13-016	F	16-18	µg/L							
HP-17	HP017-5MA15-026	F	26-28	µg/L	165,000	20 U	57.1	1,480	13.4	4 U	127,000
HP-17	HP017-5MA16-076	F	76-78	µg/L	128,000	20 U	42.1	1,830	24.5	4 U	69,600
HP-35	HP035-5AP28-011	F	11-13	µg/L		20 U	10 U			4 U	
HP-35	HP035-5MA01-070	F	70-72	µg/L	53,000	20 U	29.3			4 U	107,000
HP-36	HP036-5MA08-021	F	21-23	µg/L		20 U	10 U			4 U	113,000
HP-36	HP036-5MA08-070	F	70-72	µg/L		20 U	10 U		2 U	4 U	
HP-09	HP009-5MA15-021	G	21-23	µg/L							
HP-09	HP009-5MA15-071	G	71-73	µg/L							
HP-11	HP011-5MA16-018	G	18-20	µg/L							
HP-11	HP011-5MA17-068	G	68-70	µg/L							
HP-18	HP018-5JN14-020	H	20-22	µg/L	66,300	R	133	3,580		4 U	133,000 J
HP-18	HP018-5JN15-072	H	72-74	µg/L	80,200	R	40.8	1,660	23.7	4 U	80,200
HP-19	HP019-5JN01-027	H	27-29	µg/L	479,000	20 UL	293	4,100	39.4	4	265,000
HP-19	HP019-5JN01-071	H	71-73	µg/L	122,000	20 UL	48.4	1,290		4 U	71,200
HP-20	HP020-5JN05-019	H	19-21	µg/L	125,000	20 UL	97.1	1,470	16	4 U	119,000
HP-20	HP020-5JN06-072	H	72-74	µg/L	75,400	20 U	30.2	1,570	24.3	4 U	98,200
HP-22	HP022-5MA22-072	H	72-74	µg/L		R	11.7 L	2,280	25.6 L	4 UL	106,000
HP-32	HP032-5MA19-011	H	11-13	µg/L	68,100 J	R	76 L	1,490 L		4 UL	171,000
HP-32	HP032-5MA19-071	H	71-73	µg/L		R	10.3 L	1,420	17.6 L	4 UL	177,000
HP-12	HP012-5MA23-022	M	22-24	µg/L							
HP-12	HP012-5MA24-071	M	71-73	µg/L							
HP-23	HP023-5MA22-020	M	20-22	µg/L			59.8 L	3,420	67.8 L	4 UL	144,000
HP-23	HP023-5MA22-072	M	72-74	µg/L	352,000	20 U	93.5	6,020	85.8	8.6	198,000
HP-25	DP025-5MA18-016	M	16-18	µg/L	147,000 J	R	149 L	1,550 L	16.3 L	4 UL	621,000
HP-29	DP029-5MA17-008	M	8-10	µg/L	86,700	20 U	150	1,200	13.1	6.9	
HP-39	DP039-5MA11-076	M	76-78	µg/L	246,000	20 U	104	3,330	44	12.2	97,200
HP-24	HP024-5MA12-009	M	9-11	µg/L		20 U	17.4			5.6	
HP-24	HP024-5MA15-071	M	71-73	µg/L	191,000	20 U	207	3,800	28.2	43.2	98,100
HP-25	HP025-5MA18-016	M	16-18	µg/L	119,000 J	R	114 L	1,180 L	12.9 L	4 UL	433,000
HP-25	HP025-5MA19-068	M	68-70	µg/L	336,000 J	R	212 L	5,480 L	95.3 L	22.3 L	321,000
HP-39	HP039-5MA10-011	M	11-13	µg/L	105,000	20 U	66.1	1,000		5	135,000
HP-39	HP039-5MA11-076	M	76-78	µg/L	321,000	20 U	132	4,260	55.7	15.8	125,000
HP-21	HP021-5MA31-019	N	19-21	µg/L	270,000 J	R	250 L	3,730 L	19.5 L	20.7 L	3,490,000
HP-21	HP021-5MA31-071	N	71-73	µg/L	60,700 J	R	25.2 L	1,130 L		4 UL	172,000
HP-28	HP028-5MA17-009	N	9-11	µg/L	252,000	20 U	437		39.1	52.5	255,000
HP-28	HP028-5MA19-071	N	71-73	µg/L	276,000 J	R	152 L	4,740 L	49.8 L	8.3 L	167,000
HP-29	HP029-5MA17-008	N	8-10	µg/L	47,300	20 U	85.9		8.2	5.3	
HP-29	HP029-5MA18-076	N	76-78	µg/L	82,400 J	R	55.5 L	1,990 L	12.9 L	4 UL	87,100
HP-30	HP030-5MA16-009	N	9-11	µg/L		20 U	54.8			4 U	
HP-30	HP030-5MA16-071	N	71-73	µg/L	116,000	20 U	74.4	2,860	20.1	4 U	148,000
HP-33	HP033-5MA23-019	N	19=21	µg/L	273,000	20 U	219	3,320	33.9	4 U	107,000
HP-33	HP033-5MA23-071	N	71-73	µg/L	205,000	20 U	93.4	3,200	34.3	12	159,000
HP-34	HP034-5MA01-011	N	11-13	µg/L	95,300	20 U	85.5	1,220		12.3	227,000
HP-34	HP034-5MA01-072	N	72-74	µg/L	149,000	20 U	64.3	2,590	31.3	12.1	112,000
HP-40	HP040-5MA25-021	N	21-23	µg/L	282,000	20 U	190	4,270	30.9	14.1	314,000
HP-40	HP040-5MA26-074	N	74-76	µg/L	320,000 J	R	146 L	4,930 L	67.1 L	13.7 L	256,000
HP-41	HP041-5JN02-015	N	15-17	µg/L	179,000	20 UL	187	2,790	15.6	14.8	170,000
HP-41	HP041-5JN02-076	N	76-78	µg/L		20 UL	13.3	2,070	51.6	4 U	82,200
HP-26	HP026-5MA03-015	O	15-17	µg/L	475,000	35.6 L	1,510 L	4,730	59.1 L	44.5	196,000 J
HP-26	HP026-5MA04-071	O	71-73	µg/L	89,400	20 U	53.7	1,860	22	9.6	124,000
HP-27	HP027-5MA03-012	O	12-14	µg/L	154,000	R	145 L	2,230	23.9 L	16.1	217,000 J
HP-27	HP027-5MA03-071	O	71-73	µg/L	171,000	R	155 L	2,730	32.3 L	13.1	130,000 J
HP-37	HP037-5AP27-020	O	20-22	µg/L	54,000	20 UL	29.1	1,120		4 U	106,000
HP-37	HP037-5AP28-081	O	81-83	µg/L		20 U	10.5			4 U	
Number of Samples					42	40	57	47	40	59	50
Number of Detections					42	2	51	47	39	25	49
Minimum Detected				µg/L	47,300	24.1 L	11	1,000	8.2	4	64,800
Maximum Detected				µg/L	522,000	35.6 L	1,510 L	6,720	105 L	52.5	3,490,000

U = Undetected at quantitation limit presented
J = Estimated concentration
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation
L = Estimated concentration biased low

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth	Units	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
HP-01	HP001-5MA04-027	B	27-29	µg/L					10 U		
HP-03	HP003-5MA10-074	B	74-76	µg/L					946 L		
HP-05	HP005-5AP27-022	B	22-24	µg/L					442		
HP-05	HP005-5AP28-072	B	72-74	µg/L					429		
HP-07	HP007-5MA10-065	B	65-67	µg/L					10 UL		
HP-13	HP013-5MA03-036	B	36-38	µg/L	1,770	212	1,400	664,000	668 L	81,400	
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	2,140	213	1,410	758,000	694 L	86,100	6,890
HP-13	HP013-5MA04-071	B	71-73	µg/L		13.7			10 U		
HP-14	HP014-5MA05-021	B	21-23	µg/L		81.8	345			65,900	
HP-14	HP014-5MA08-070	B	70-72	µg/L		16.5			10 U		
HP-15	HP015-5MA09-029	B	29-31	µg/L		37.8 L	455			47,000	4,260 J
HP-15	HP015-5MA10-071	B	71-73	µg/L		12.2 L				35,200	
HP-16	HP016-5MA05-021	B	21-23	µg/L		75.4				36,800	
HP-16	HP016-5MA08-077	B	77-79	µg/L		21.5	25 U		10 U	28,700	
HP-04	HP004-5MA11-021	C	21-23	µg/L					813		
HP-04	HP004-5MA12-071	C	71-73	µg/L					419		
HP-08	HP008-5MA11-022	C	22-24	µg/L					572		
HP-08	HP008-5MA12-073	C	73-75	µg/L					469		
HP-10	HP010-5MA16-023	C	23-25	µg/L					433 K		
HP-10	HP010-5MA16-077	C	77-79	µg/L					304 K		
HP-31	HP031-5MA01-017	E	17-19	µg/L	576	145		275,000		50,100	1,810
HP-31	HP031-5MA02-080	E	80-82	µg/L	1,370	1,650	3,440	1,670,000	989 L	167,000	15,300
HP-02	HP002-5JN13-016	F	16-18	µg/L					781		
HP-17	HP017-5MA15-026	F	26-28	µg/L	444	115	451	374,000		63,200	
HP-17	HP017-5MA16-076	F	76-78	µg/L	430	227	721	593,000		54,300	
HP-35	HP035-5AP28-011	F	11-13	µg/L	265	22.5					
HP-35	HP035-5MA01-070	F	70-72	µg/L	972	80.2	787	239,000		22,200	
HP-36	HP036-5MA08-021	F	21-23	µg/L		61.2				39,200	
HP-36	HP036-5MA08-070	F	70-72	µg/L		11 U					
HP-09	HP009-5MA15-021	G	21-23	µg/L					410		
HP-09	HP009-5MA15-071	G	71-73	µg/L					312		
HP-11	HP011-5MA16-018	G	18-20	µg/L					152 K		
HP-11	HP011-5MA17-068	G	68-70	µg/L					298		
HP-18	HP018-5JN14-020	H	20-22	µg/L		189	1,760	348,000	5,210	62,500	
HP-18	HP018-5JN15-072	H	72-74	µg/L	1,070	135	891	272,000	334	53,800	
HP-19	HP019-5JN01-027	H	27-29	µg/L	985	430	1,100	1,040,000	2,600	93,100	
HP-19	HP019-5JN01-071	H	71-73	µg/L	367	150			291	30,800	
HP-20	HP020-5JN05-019	H	19-21	µg/L	378	203		359,000		51,400	8,290
HP-20	HP020-5JN06-072	H	72-74	µg/L	895	191	685	344,000		55,300	
HP-22	HP022-5MA22-072	H	72-74	µg/L		195 L		235,000		56,500	
HP-32	HP032-5MA19-011	H	11-13	µg/L		88.9 L	373		610	34,900	
HP-32	HP032-5MA19-071	H	71-73	µg/L		114 L	342 L			45,400	
HP-12	HP012-5MA23-022	M	22-24	µg/L					894		
HP-12	HP012-5MA24-071	M	71-73	µg/L					48.6		
HP-23	HP023-5MA22-020	M	20-22	µg/L		893 L	20 UL	450,000		22,400	
HP-23	HP023-5MA22-072	M	72-74	µg/L	1,400	883	2,320	1,150,000	1,520	120,000	52,700
HP-25	DP025-5MA18-016	M	16-18	µg/L	620	184 L	610	420,000 J	4,860	63,500	
HP-29	DP029-5MA17-008	M	8-10	µg/L	585	145	1,840		1,140	64,800	
HP-39	DP039-5MA11-076	M	76-78	µg/L	1,080	457	968	715,000	437	69,400	16,300
HP-24	HP024-5MA12-009	M	9-11	µg/L		34.1	986		708		
HP-24	HP024-5MA15-071	M	71-73	µg/L	1,350	280	4,380	489,000	4,680	44,800	9,650
HP-25	HP025-5MA18-016	M	16-18	µg/L	492	133 L	463	335,000 J	3,550	48,600	3,970
HP-25	HP025-5MA19-068	M	68-70	µg/L	1,300	1120 L	3,250	1,250,000 J	3,770	111,000	12,900
HP-39	HP039-5MA10-011	M	11-13	µg/L		95.1		766,000 K	309		
HP-39	HP039-5MA11-076	M	76-78	µg/L	1,460	575	1,240	932,000	557	88,700	21,000
HP-21	HP021-5MA31-019	N	19-21	µg/L	844 J	223 L	3,470	875,000 J	28,300 J	189,000 J	9,740 J
HP-21	HP021-5MA31-071	N	71-73	µg/L	793 J	61.4 L				45,200 J	
HP-28	HP028-5MA17-009	N	9-11	µg/L	1,330	494	49,300	1,050,000	26,100	65,900	48,000
HP-28	HP028-5MA19-071	N	71-73	µg/L	2,070	472 L	2,890	1,350,000 J	2,100	74,700	23,300
HP-29	HP029-5MA17-008	N	8-10	µg/L		94.8	1,070		600	42,900	
HP-29	HP029-5MA18-076	N	76-78	µg/L	263	159 L	532	259,000 J	329	48,200	8,360
HP-30	HP030-5MA16-009	N	9-11	µg/L		78.6	11,600		933		
HP-30	HP030-5MA16-071	N	71-73	µg/L	376	187	1,000	384,000	487	64,300	14,100
HP-33	HP033-5MA23-019	N	19-21	µg/L	637	383	649	617,000	436	72,500	
HP-33	HP033-5MA23-071	N	71-73	µg/L	2,560	422	18,500	779,000	6,090	97,500	9,840
HP-34	HP034-5MA01-011	N	11-13	µg/L	680	32.4	1,780	282,000	940	26,600	3,720
HP-34	HP034-5MA01-072	N	72-74	µg/L	1,800	194	1,030	485,000	479	85,600	
HP-40	HP040-5MA25-021	N	21-23	µg/L	1,010	348	2,550	641,000	3,790	70,800	16,000
HP-40	HP040-5MA26-074	N	74-76	µg/L	1,250 J	592 L	1,560	988,000 J	1,490 J	81,900 J	16,800 J
HP-41	HP041-5JN02-015	N	15-17	µg/L	933	168	6,170	489,000	8,760	28,100	
HP-41	HP041-5JN02-076	N	76-78	µg/L		43.5	428	249,000		22,700	
HP-26	HP026-5MA03-015	O	15-17	µg/L	1,090	430	9,830	1,770,000	4,680 L	67,300	9,500
HP-26	HP026-5MA04-071	O	71-73	µg/L	648	111	618	430,000	552	39,000	16,600
HP-27	HP027-5MA03-012	O	12-14	µg/L	671	327	2,230	747,000	3,760 L	50,800	10,900
HP-27	HP027-5MA03-071	O	71-73	µg/L	1,280	382	1,160	638,000	1,090 L	51,400	9,230
HP-37	HP037-5AP27-020	O	20-22	µg/L	624	86.8				50,200	
HP-37	HP037-5AP28-081	O	81-83	µg/L	132	29.6					
Number of Samples					40	59	44	39	57	51	24
Number of Detections					40	58	42	39	52	51	24
Minimum Detected				µg/L	132	12 L	324 L	235,000	152 K	22,200	1,810
Maximum Detected				µg/L	2,560	1,650	49,300	1,770,000	28,300 J	189,000 J	52,700

U = Undetected at quantitation limit presented
J = Estimated concentration
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation
L = Estimated concentration biased low

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth	Units	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium
HP-01	HP001-5MA04-027	B	27-29	µg/L							
HP-03	HP003-5MA10-074	B	74-76	µg/L							
HP-05	HP005-5AP27-022	B	22-24	µg/L							
HP-05	HP005-5AP28-072	B	72-74	µg/L							
HP-07	HP007-5MA10-065	B	65-67	µg/L							
HP-13	HP013-5MA03-036	B	36-38	µg/L	0.2 UJ	659 L	40,400	117 L	80 UL	308,000	100 UL
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	0.79 J	734 L	47,500	158 L	80 UL	325,000	100 UL
HP-13	HP013-5MA04-071	B	71-73	µg/L	0.2 UJ			5 U	8 U		10 U
HP-14	HP014-5MA05-021	B	21-23	µg/L	0.78 J			5 U	8 U	347,000	10 U
HP-14	HP014-5MA08-070	B	70-72	µg/L	0.2 U			5 U	8 U		10 U
HP-15	HP015-5MA09-029	B	29-31	µg/L	0.2 U		13,300	R	R	411,000	R
HP-15	HP015-5MA10-071	B	71-73	µg/L	0.2 U		12,500	R	R		R
HP-16	HP016-5MA05-021	B	21-23	µg/L	1.6 J	198	18,200	5 U	8 U		10 U
HP-16	HP016-5MA08-077	B	77-79	µg/L	0.2 U		12,300	5 U	8 U		10 U
HP-04	HP004-5MA11-021	C	21-23	µg/L							
HP-04	HP004-5MA12-071	C	71-73	µg/L							
HP-08	HP008-5MA11-022	C	22-24	µg/L							
HP-08	HP008-5MA12-073	C	73-75	µg/L							
HP-10	HP010-5MA16-023	C	23-25	µg/L							
HP-10	HP010-5MA16-077	C	77-79	µg/L							
HP-31	HP031-5MA01-017	E	17-19	µg/L	0.75	373	13,300	5 U	8 U		10 U
HP-31	HP031-5MA02-080	E	80-82	µg/L	6.2 J	1710 L	72,200	R	80 UL		100 UL
HP-02	HP002-5JN13-016	F	16-18	µg/L							
HP-17	HP017-5MA15-026	F	26-28	µg/L		216	20,100	5 U	8 U		10 U
HP-17	HP017-5MA16-076	F	76-78	µg/L	0.83	342	25,300	50 U	8 U		100 U
HP-35	HP035-5AP28-011	F	11-13	µg/L	0.2 U		8,550	5 U	8 U	156,000	5 U
HP-35	HP035-5MA01-070	F	70-72	µg/L	0.21	230	17,000	5 U	8 U		10 U
HP-36	HP036-5MA08-021	F	21-23	µg/L	2.3 J		9,450	5 U	8 U	165,000	10 U
HP-36	HP036-5MA08-070	F	70-72	µg/L	0.2 U			5 U	8 U		10 U
HP-09	HP009-5MA15-021	G	21-23	µg/L							
HP-09	HP009-5MA15-071	G	71-73	µg/L							
HP-11	HP011-5MA16-018	G	18-20	µg/L							
HP-11	HP011-5MA17-068	G	68-70	µg/L							
HP-18	HP018-5JN14-020	H	20-22	µg/L	4.5	312	56,000 K	5 UL	8 U		100 UL
HP-18	HP018-5JN15-072	H	72-74	µg/L	0.68	402	23,900	5 UL	8 U		20 UL
HP-19	HP019-5JN01-027	H	27-29	µg/L	25.6	547	54,400	50 U	8 U		20 U
HP-19	HP019-5JN01-071	H	71-73	µg/L	1.4	215	20,500	5 U	8 U		20 U
HP-20	HP020-5JN05-019	H	19-21	µg/L	0.97		18,000	5 U	8 U		20 U
HP-20	HP020-5JN06-072	H	72-74	µg/L	0.2 U	369	26,700	5 U	8 U		20 U
HP-22	HP022-5MA22-072	H	72-74	µg/L	1.1 L	258 L	11,000	R	R		R
HP-32	HP032-5MA19-011	H	11-13	µg/L	5.1 K		26,900 L	7.2 L	8 UL	121,000	R
HP-32	HP032-5MA19-071	H	71-73	µg/L	2.1 L	181 L	13,500	R	R		R
HP-12	HP012-5MA23-022	M	22-24	µg/L							
HP-12	HP012-5MA24-071	M	71-73	µg/L							
HP-23	HP023-5MA22-020	M	20-22	µg/L	6.9 L	510 L	23,600	R	R		R
HP-23	HP023-5MA22-072	M	72-74	µg/L	4.2	1,090	46,500	5 U	8 U		20 U
HP-25	DP025-5MA18-016	M	16-18	µg/L	10.5 K	328 L	31,300 L	5 UL	8 UL	84,000	R
HP-29	DP029-5MA17-008	M	8-10	µg/L	7.8	466	9,750	5 U	29		10 U
HP-39	DP039-5MA11-076	M	76-78	µg/L	0.98	710	27,000	5 U	8 U		10 U
HP-24	HP024-5MA12-009	M	9-11	µg/L	1.6			5 U	22.2		10 U
HP-24	HP024-5MA15-071	M	71-73	µg/L	22	741	19,900	5 U	71.3		100 U
HP-25	HP025-5MA18-016	M	16-18	µg/L	24.8 K	259 L	25,800 L	5 UL	8 UL	82,700	R
HP-25	HP025-5MA19-068	M	68-70	µg/L	19.4 K	1,390 L	38,500 L	5 UL	80 UL		R
HP-39	HP039-5MA10-011	M	11-13	µg/L	1 L		19,400	5 U	8 U		100 U
HP-39	HP039-5MA11-076	M	76-78	µg/L	1.1	918	35,700	5 U	80 U		100 U
HP-21	HP021-5MA31-019	N	19-21	µg/L	143	419 L	55,200 J	R	8 L		10 L
HP-21	HP021-5MA31-071	N	71-73	µg/L	0.42	368 L	15,400 J	R	8 UL		10 UL
HP-28	HP028-5MA17-009	N	9-11	µg/L	3.7	2,810	28,000	50 U	27.1		100 U
HP-28	HP028-5MA19-071	N	71-73	µg/L	11 K	1,030 L	29,300 L	5 UL	80 UL		R
HP-29	HP029-5MA17-008	N	8-10	µg/L	6.8	259		5 U	14.8		10 U
HP-29	HP029-5MA18-076	N	76-78	µg/L	9 K	235 L	16,500 L	5 UL	8 UL	18,300	R
HP-30	HP030-5MA16-009	N	9-11	µg/L	1.3			5 U	8 U		10 U
HP-30	HP030-5MA16-071	N	71-73	µg/L	29.7	270	21,600	5 U	8 U	76,200	100 U
HP-33	HP033-5MA23-019	N	19-=21	µg/L	2	486	23,000	5 U	8 U	130,000	10 U
HP-33	HP033-5MA23-071	N	71-73	µg/L	2.3	1,580	32,400	5 U	8 U		10 U
HP-34	HP034-5MA01-011	N	11-13	µg/L	1.8	574	38,300	5 U	8 U	281,000	10 U
HP-34	HP034-5MA01-072	N	72-74	µg/L	1	768	27,300	42.9	8 U		10 U
HP-40	HP040-5MA25-021	N	21-23	µg/L	18.1	682	46,200	5 U	8 U		100 U
HP-40	HP040-5MA26-074	N	74-76	µg/L	9.4	954 L	32,400 J	36.8 L	8 UL		100 UL
HP-41	HP041-5JN02-015	N	15-17	µg/L	21 6	517	26,200	7.1	8 U		20 U
HP-41	HP041-5JN02-076	N	76-78	µg/L	3.5		13,600	5 U	8 U		20 U
HP-26	HP026-5MA03-015	O	15-17	µg/L	5 1 J	1,630 L	58,000	35 L	80 UL	106,000	100 UL
HP-26	HP026-5MA04-071	O	71-73	µg/L	4 5 J	324	23,100	5 U	8 U	194,000 J	10 U
HP-27	HP027-5MA03-012	O	12-14	µg/L	7.2 J	2,290 L	33,500	R	80 UL	111,000	100 UL
HP-27	HP027-5MA03-071	O	71-73	µg/L	4 1 J	751 L	26,300	R	80 U		100 UL
HP-37	HP037-5AP27-020	O	20-22	µg/L	0 2 U	234	9,400	5 U	8 U	87,600	5 U
HP-37	HP037-5AP28-081	O	81-83	µg/L	0 2 U		7,930	5 U	8 U		5 U
Number of Samples					58	43	52	49	54	17	48
Number of Detections					47	43	52	7	6	17	1
Minimum Detected				µg/L	0 21	181 L	7,930	7.1	8 L	18,300	10 L
Maximum Detected				µg/L	143	2,810	72,200	158 L	71.3	411,000	10 L

U = Undetected at quantitation limit presented
J = Estimated concentration
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation
L = Estimated concentration biased low

SUMMARY OF GROUNDWATER ANALYSIS
HYDROPUNCH COLLECTION
INORGANIC CONSTITUENTS
SOUTHEAST FEDERAL CENTER

Sample Location	Sample Identifier	Area	Depth	Units	Vanadium	Zinc
HP-01	HP001-5MA04-027	B	27-29	µg/L		
HP-03	HP003-5MA10-074	B	74-76	µg/L		
HP-05	HP005-5AP27-022	B	22-24	µg/L		
HP-05	HP005-5AP28-072	B	72-74	µg/L		
HP-07	HP007-5MA10-065	B	65-67	µg/L		
HP-13	HP013-5MA03-036	B	36-38	µg/L	3,240	1,800 L
HP-13-D	DP013-5MA03-036	B	36-38	µg/L	3,590	1,820
HP-13	HP013-5MA04-071	B	71-73	µg/L	17.2	
HP-14	HP014-5MA05-021	B	21-23	µg/L	68.1	
HP-14	HP014-5MA08-070	B	70-72	µg/L	21.8	
HP-15	HP015-5MA09-029	B	29-31	µg/L	16 U	
HP-15	HP015-5MA10-071	B	71-73	µg/L	25.6	
HP-16	HP016-5MA05-021	B	21-23	µg/L	131	
HP-16	HP016-5MA08-077	B	77-79	µg/L	35.6	
HP-04	HP004-5MA11-021	C	21-23	µg/L		
HP-04	HP004-5MA12-071	C	71-73	µg/L		
HP-08	HP008-5MA11-022	C	22-24	µg/L		
HP-08	HP008-5MA12-073	C	73-75	µg/L		
HP-10	HP010-5MA16-023	C	23-25	µg/L		
HP-10	HP010-5MA16-077	C	77-79	µg/L		
HP-31	HP031-5MA01-017	E	17-19	µg/L	410	
HP-31	HP031-5MA02-080	E	80-82	µg/L	2,290	3,380 L
HP-02	HP002-5JN13-016	F	16-18	µg/L		
HP-17	HP017-5MA15-026	F	26-28	µg/L	447	
HP-17	HP017-5MA16-076	F	76-78	µg/L	597	
HP-35	HP035-5AP28-011	F	11-13	µg/L	97.7	
HP-35	HP035-5MA01-070	F	70-72	µg/L	322	
HP-36	HP036-5MA08-021	F	21-23	µg/L	35.3	
HP-36	HP036-5MA08-070	F	70-72	µg/L	16 U	
HP-09	HP009-5MA15-021	G	21-23	µg/L		
HP-09	HP009-5MA15-071	G	71-73	µg/L		
HP-11	HP011-5MA16-018	G	18-20	µg/L		
HP-11	HP011-5MA17-068	G	68-70	µg/L		
HP-18	HP018-5JN14-020	H	20-22	µg/L	256	2,640
HP-18	HP018-5JN15-072	H	72-74	µg/L	578	
HP-19	HP019-5JN01-027	H	27-29	µg/L	1,360	2,480
HP-19	HP019-5JN01-071	H	71-73	µg/L	303	
HP-20	HP020-5JN05-019	H	19-21	µg/L	427	
HP-20	HP020-5JN06-072	H	72-74	µg/L	402	
HP-22	HP022-5MA22-072	H	72-74	µg/L	360	
HP-32	HP032-5MA19-011	H	11-13	µg/L	284 L	
HP-32	HP032-5MA19-071	H	71-73	µg/L	98.7	
HP-12	HP012-5MA23-022	M	22-24	µg/L		
HP-12	HP012-5MA24-071	M	71-73	µg/L		
HP-23	HP023-5MA22-020	M	20-22	µg/L	1,180	
HP-23	HP023-5MA22-072	M	72-74	µg/L	1,630	2,850
HP-25	DP025-5MA18-016	M	16-18	µg/L	759 L	1,560
HP-29	DP029-5MA17-008	M	8-10	µg/L	311	4,760
HP-39	DP039-5MA11-076	M	76-78	µg/L	879	2,020
HP-24	HP024-5MA12-009	M	9-11	µg/L	70.8	2,090
HP-24	HP024-5MA15-071	M	71-73	µg/L	564	9,090
HP-25	HP025-5MA18-016	M	16-18	µg/L	426 L	1,200
HP-25	HP025-5MA19-068	M	68-70	µg/L	2,270 L	4,280
HP-39	HP039-5MA10-011	M	11-13	µg/L	262	
HP-39	HP039-5MA11-076	M	76-78	µg/L	1,110	2,630
HP-21	HP021-5MA31-019	N	19-21	µg/L	1,040 J	12,100 J
HP-21	HP021-5MA31-071	N	71-73	µg/L	217 J	381 J
HP-28	HP028-5MA17-009	N	9-11	µg/L	1,080	37,600
HP-28	HP028-5MA19-071	N	71-73	µg/L	1,180 L	3,500
HP-29	HP029-5MA17-008	N	8-10	µg/L	166	3,130
HP-29	HP029-5MA18-076	N	76-78	µg/L	222 L	792
HP-30	HP030-5MA16-009	N	9-11	µg/L	130	6,640
HP-30	HP030-5MA16-071	N	71-73	µg/L	325	1,470
HP-33	HP033-5MA23-019	N	19-=21	µg/L	907	1,480
HP-33	HP033-5MA23-071	N	71-73	µg/L	716	7,460
HP-34	HP034-5MA01-011	N	11-13	µg/L	138	3,580
HP-34	HP034-5MA01-072	N	72-74	µg/L	516	1,190
HP-40	HP040-5MA25-021	N	21-23	µg/L	1,060	4,500
HP-40	HP040-5MA26-074	N	74-76	µg/L	1,750 L	3,220 J
HP-41	HP041-5JN02-015	N	15-17	µg/L	485	6,800
HP-41	HP041-5JN02-076	N	76-78	µg/L	626	
HP-26	HP026-5MA03-015	O	15-17	µg/L	1,370	14,800 L
HP-26	HP026-5MA04-071	O	71-73	µg/L	151	2,290
HP-27	HP027-5MA03-012	O	12-14	µg/L	569	4,210 L
HP-27	HP027-5MA03-071	O	71-73	µg/L	616	2,590 L
HP-37	HP037-5AP27-020	O	20-22	µg/L	114	
HP-37	HP037-5AP28-081	O	81-83	µg/L	127	
Number of Samples					59	33
Number of Detections					57	33
Minimum Detected				µg/L	17.2	381 J
Maximum Detected				µg/L	3,590	37,600

U = Undetected at quantitation limit presented
J = Estimated concentration
K = Estimated concentration biased high
R = Data rejected due to QA/QC violation
L = Estimated concentration biased low

APPENDIX D:

USEPA
SOIL SCREENING LEVELS

APPENDIX D
TABLE D-1
CALCULATED SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
SUMMARY TABLE
SOUTHEAST FEDERAL CENTER

Chemical	$SSL_{(ingestion)}$ (mg/kg)	$SSL_{(inhalation)}$ (mg/kg)
Arsenic	**382**	64,552
Barium	**143,080**	NC
Cadmium	**1,022**	277,575
Copper	**143,080**	NC
Iron	**1,022,000** *	NC
Mercury	**613**	297,402
Nickel	**40,880**	NC
Selenium	**10,220**	NC
Benzo(a)pyrene	**78**	NC
Bis(2-chloroisopropyl)ether	8,176	**704**
3,3'-Dichlorobenzidine	**1,272**	NC
Nitrobenzene	**1,022**	NC
Phenanthrene	**81,760**	NC
Trichloroethene	52,029	**552**

APPENDIX D
TABLE D-2
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for ingestion of non-carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{THQ \times BW \times AT}{1/RfD_o \times EF \times ED \times IR}$$

Where:

SSL =	Soil Screening Level (mg/kg)
THQ =	Target Hazard Quotient (= 1) (default)
BW =	Body weight (kg) (default)
AT =	Averaging time (dy) (default)
RfD_o =	Oral Reference Dose (mg/kg-dy)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
IR =	Soil ingestion rate kg/dy) (default)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, and U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	THQ (unitless)	BW (kg)	AT (yr)	RfD_o (mg/kg-dy)	EF (dy/yr)	ED (yr)	IR (kg/dy)	SSL (mg/kg)
Nitrobenzene	1	70	9125	5.00E-04	250	25	5.00E-05	1,022
Phenanthrene	1	70	9125	0.04	250	25	5.00E-05	81,760
Barium	1	70	9125	0.07	250	25	5.00E-05	143,080
Cadmium	1	70	9125	0.0005	250	25	5.00E-05	1,022
Copper [10]	1	70	9125	0.07	250	25	5.00E-05	143,080
Iron [11]	1	70	9125	0.5	250	25	5.00E-05	1,022,000
Mercury	1	70	9125	0.0003	250	25	5.00E-05	613
Nickel	1	70	9125	0.02	250	25	5.00E-05	40,880
Selenium	1	70	9125	5.00E-03	250	25	5.00E-05	10,220

[1] RfD values obtained from IRIS.
[2] Based on lower of RDA range for copper of 1 mg/dy for children of age 4-10, divided by 15 kg. (NRC, 1989)
[3] U.S. EPA's provisional RfD of 0.5 mg/kg-dy (U.S. EPA ECAO, undated)

APPENDIX D
TABLE D-3
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
IN COMMERCIAL/INDUSTRIAL SOILS
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for Ingestion of carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{TR \times AT \times BW}{SF_o \times EF \times ED \times IF}$$

where:

SSL =	Soil screening level (mg/kg)
TR =	Target risk ($1x10^{-6}$)
AT =	Averaging time (dy)
BW =	Adult body weight (kg)
SF_o =	Oral cancer slope factor $(mg/kg\text{-}dy)^{-1}$
EF =	Exposure frequency (dy/yr)
ED =	Exposure duration (yr)
IR =	Ingestion rate (kg/dy)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, and U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	TR (unitless)	AT (dy)	BW (kg)	SF_o $(mg/kg\text{-}dy)^{-1}$	EF (dy/yr)	ED (yr)	IR (kg/dy)	SSL (mg/kg)
Arsenic [1]	1.00E-04	25,550	70	1.5	250	25	5.00E-05	382
Benzo(a)pyrene	1.00E-04	25,550	70	7.3	250	25	5.00E-05	78
Bis(2-chloroisopropyl)ether [2]	1.00E-04	25,550	70	7.00E-02	250	25	5.00E-05	8,176
3,3'-Dichlorobenzidine [1]	1.00E-04	25,550	70	4.50E-01	250	25	5.00E-05	1,272
Trichloroethene [3]	1.00E-04	25,550	70	1.10E-02	250	25	5.00E-05	52,029

[1] Oral slope factor from IRIS (accessed 10/16/95)
[2] Oral slope factor from HEAST 1993.
[3] Oral slope fatcor from U.S. EPA (ECAO (provisional value, undated).

APPENDIX D
TABLE D-4
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of non-carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{THQ \times AT}{EF \times ED \times [(1/RfC) \times (1/VF + 1/PEF)]}$$

where:

SSL = Soil Screening Level (mg/kg)
THQ = Target hazard quotient (unitless) (default)
AT = Averaging time (dy) (default)
EF = Exposure frequency (dy/yr) (default)
ED = Exposure duration (yr) (default)
RfC = Inhalation reference concentration (mg/m^3)
VF = Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF = Particulate emission factor (m^3/kg) (default)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, an U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical [1]	THQ (unitless)	AT (dy)	EF (dy/yr)	ED (yr)	RfC (mg/m^3)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Nitrobenzene	1	9125	250	25	NA	0	6.79E+08	NC
Phenanthrene	1	9125	250	25	NA	0	6.79E+08	NC
Barium	1	9125	250	25	NA	0	6.79E+08	NC
Copper	1	9125	250	25	NA	0	6.79E+08	NC
Iron	1	9125	250	25	NA	0	6.79E+08	NC
Mercury [1]	1	9125	250	25	3.00E-04	0	6.79E+08	297,402
Nickel [2]	1	9125	250	25	NA	0	6.79E+08	NC
Selenium	1	9125	250	25	NA	0	6.79E+08	NC

Volatilization factor for metals was assumed to be zero
[1] RfC for mercury from IRIS (accessed 10/16/95).
[2] Inhalation toxicity values available for nickel (subsulfide and refinery dust) are not reflective of site conditions, and were not used.

APPENDIX D
TABLE D-5
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{TR \times AT}{URF \times CF \times EF \times ED \times (1/VF + 1/PEF)}$$

where:

SSL = Soil Screening Level (mg/kg)
TR = Target risk (unitless) (default)
AT = Averaging time (dy) (default)
URF = Unit Risk Factor ($[\mu g/m^3]^{-1}$)
CF = Unit conversion factor (µg/mg) (default)
EF = Exposure frequency (dy/yr) (default)
ED = Exposure duration (yr) (default)
VF = Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF = Particulate emission factor (m^3/kg) (default)

Default parameters are from U.S. EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, and U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	TR (unitless)	AT (dy)	URF $(\mu g/m^3)^{-1}$	CF (µg/mg)	EF (dy/yr)	ED (yr)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Arsenic [1]	1.00E-04	25550	4.30E-03	1000	250	25	0	6.79E+08	64,552
Cadmium	1.00E-04	25550	1.00E-03	1000	250	25	0	6.79E+08	277,575
Benzo(a)pyrene			NA						
Bis(2-chloroisopropyl)ether [2]	1.00E-04	25550	1.00E-05	1000	250	25	1.72E+04	6.79E+08	704
3,3'-Dichlorobenzidine			NA						
Trichlororethene [3]	1.00E-04	25550	1.70E-06	1000	250	25	2.30E+03	6.79E+08	552

[1] Unit risk value for IRIS (accessed 10/16).
[2] Unit risk value from HEAST 1993 (EPA OHEA ECAO-CIN-909, March 1993).
[3] Unit risk value from U.S. EPA ECAO (provisional value, undated).

APPENDIX D
TABLE D-6
CALCULATION OF VOLATILIZATION FACTOR
SOUTHEAST FEDERAL CENTER

Calculation of Volatilization Factor (VF)

$$VF = (Q/C) \times \frac{(3.14 \times a \times T)^{(1/2)}}{(2 \times D_{ei} \times Theta_a \times K_{as})} \times 10^{-4}\ m^2/cm^2$$

where:

Q/C =	Inverse of mean concentration at the center of a 30-acre-square source ($[g/m^2\text{-}s]/[kg/m^3]$)
a =	Calculated (see below)
T =	Exposure interval (s)
D_{ei} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$)
$Theta_a$ =	Soil-filled soil porosity (L/L)
K_{as} =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g)

and where:

Koc =	Organic carbon partition coefficient (cm^3/g)
foc =	fraction of organic carbon in soil (g/g)
n =	Total soil porosity (unitless)
D_i =	Diffusivity in air (cm^2/s)

$$a = \frac{D_{ei} \times Theta_a}{Theta_a + (p_s)(1-Theta_a)/K_{as}}$$

where:

D_{ei} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$) (cm^2/s)
$Theta_a$ =	Soil-filled soil porosity (L/L)
p_s =	Soil particle density (g/cm^3)
K_{as} =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g)

Calculation of D_{ei}

Chemical	Di (cm^2/s)	$Theta_a$ (L/L)	n (unitless)	D_{ei} (cm^2/s)
Bis(2-chloroisopropyl)ether [1]	6.02E-02	0.28	0.43	4.70E-03
3,3'-Dichlorobenzidine	1.94E-02	0.28	0.43	1.51E-03
Trichloroethene	7.90E-02	0.28	0.43	6.16E-03

Diffusivity coefficients from U.S. EPA, EPA/450/1-89/002a, August 1990.

Calculation of K_{as}

Chemical	H (atm-m^3/mole)	Koc (cm^3/g)	foc (g/g)	CF	K_{as} (cm^3/g)
Bis(2-chloroisopropyl)ether [1]	1.10E-04	61	0.006	41	0.012
3,3'-Dichlorobenzidine	8.30E-07	1,553	0.006	41	0.0000037
Trichloroethene	9.10E-03	126	0.006	41	0.494

Calculation of a

Chemical	D_{ei} (cm^2/s)	$Theta_a$ (L/L)	p_s (kg/L)	K_{as}	a
Bis(2-chloroisopropyl)ether [1]	4.70E-03	0.28	2.65	0.012	8.48E-06
3,3'-Dichlorobenzidine	1.51E-03	0.28	2.65	0.0000037	8.11E-10
Trichloroethene	6.16E-03	0.28	2.65	0.494	4.16E-04

Calculation of VF

Chemical	Q/C (g/m^2-s)/(kg/m^3)	Pi (unitless)	a	T (s)	D_{ei} (cm^2/s)	$Theta_a$ (unitless)	K_{as} (cm^3/g)	CF (m^2/cm^2)	VF (m^3/kg)
Bis(2-chloroisopropyl)ether [1]	35.1	3.14	8.48E-06	9.50E+08	4.70E-03	0.28	0.012	1.00E-04	17,225
3,3'-Dichlorobenzidine	35.1	3.14	8.11E-10	9.50E+08	1.51E-03	0.28	0.000	1.00E-04	1,764,068
Trichloroethene	35.1	3.14	4.16E-04	9.50E+08	6.16E-03	0.28	0.494	1.00E-04	2,296

APPENDIX E:

CALCULATION OF HEALTH-BASED RESIDENTIAL ACTION LEVELS

APPENDIX E
TABLE E-1
CALCULATED RESIDENTIAL SOIL SCREENING LEVELS (SSLs)
SUMMARY TABLE
SOUTHEAST FEDERAL CENTER

Chemical	$SSL_{(ingestion)}$ (mg/kg)		$SSL_{(inhalation)}$ (mg/kg)	$SSL_{(leaching)}$ (mg/kg)
Acenaphthylene	3,129		NC	**7.7**
Benzoic Acid	312,857		NC	NC
Benzo(g,h,i)perylene	**3,129**		NC	4,672
2-Butanone	46,929		2,526	**6.8**
Dibenzofuran	313		NC	NC
Hexane	4,693		254	**7.0**
Methylanthracene	3,129		NC	NC
2-Methylnaphthalene	3,129		NC	**25.3**
4-Nitrophenol	NC		NC	NC
Phenanthrene	3,129		NC	**67.6**
Aluminum	**78,214**		NC	NC
Calcium	**4,145,357**	*	NC	NC
Chromium, trivalent	**78,214**		NC	NC
Cobalt	**4,693**		NC	NC
Copper	**5,475**		NC	NC
Iron	**54,750**		NC	NC
Magnesium	**453,643**		NC	NC
Manganese	**10,950**		35,405	NC
Potassium	**3,050,357**	*	NC	NC
Sodium	**10,950**		NC	NC
Bis(2-chloroisopropyl)ether	9.15		4.19	**0.00039**

NC = Not calculated, for reasons below:
$SSL_{(inhalation)}$ values not calculated for numerous chemicals due to lack of U.S. EPA toxicity values for the inhalation exposure pathway.
$SSL_{(leaching)}$ values not calculated for metals due to complexity of modeling; U.S. EPA applies the MINTEQ model to derive such values.
No SSL values were calculated for 4-nitrophenol due to lack of U.S. EPA toxicity values.
Values denoted with an asterisk (" * ") are greater than one million parts per million, indicating that unacceptable health risks cannot be incurred with exposure to pure chemical.

APPENDIX E
TABLE E-2
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for ingestion of non-carcinogenic chemicals in residential soils

$$SSL = \frac{THQ \times BW \times AT \times CF_1}{1/RfD_o \times CF_2 \times EF \times ED \times IR}$$

Where:

SSL =	Soil Screening Level (mg/kg)
THQ =	Target Hazard Quotient (= 1) (default)
BW =	Body weight (kg) (default)
AT =	Averaging time (yr) (default)
CF_1 =	Conversion factor (365 dy/yr) (default)
RfD_o =	Oral Reference Dose (mg/kg-dy)
CF_2 =	Conversion factor (1E-6 kg/mg) (default)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
IR =	Soil ingestion rate (mg/dy) (default)

Default values from U.S EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

Chemical	THQ (unitless)	BW (kg)	AT (yr)	CF_1 (dy/yr)	RfD_o (mg/kg-dy)	CF_2 (kg/mg	EF (dy/yr)	ED (yr)	IR (mg/dy)	SSL (mg/kg)
Acenaphthylene [1]	1	15	6	365	0.04	1.00E-06	350	6	200	3,129
Benzoic Acid [2]	1	15	6	365	4	1.00E-06	350	6	200	312,857
Benzo(g,h,i)perylene [1]	1	15	6	365	0.04	1.00E-06	350	6	200	3,129
2-Butanone [3]	1	15	6	365	0.6	1.00E-06	350	6	200	46,929
Dibenzofuran [4]	1	15	6	365	0.004	1.00E-06	350	6	200	313
Hexane [5]	1	15	6	365	0.06	1.00E-06	350	6	200	4,693
Methylanthracene [1]	1	15	6	365	0.04	1.00E-06	350	6	200	3,129
2-Methylnaphthalene [1]	1	15	6	365	0.04	1.00E-06	350	6	200	3,129
4-Nitrophenol [16]										NC
Phenanthrene [1]	1	15	6	365	0.04	1.00E-06	350	6	200	3,129
Aluminum [6]	1	15	6	365	1.0	1.00E-06	350	6	200	78,214
Calcium [7]	1	15	6	365	53	1.00E-06	350	6	200	4,145,357
Chromium, trivalent [8]	1	15	6	365	1.0	1.00E-06	350	6	200	78,214
Cobalt [9]	1	15	6	365	0.06	1.00E-06	350	6	200	4,693
Copper [10]	1	15	6	365	0.07	1.00E-06	350	6	200	5,475
Iron [11]	1	15	6	365	0.7	1.00E-06	350	6	200	54,750
Magnesium [12]	1	15	6	365	5.8	1.00E-06	350	6	200	453,643
Manganese [13]	1	15	6	365	0.14	1.00E-06	350	6	200	10,950
Potassium [14]	1	15	6	365	39	1.00E-06	350	6	200	3,050,357
Sodium [15]	1	15	6	365	0.14	1.00E-06	350	6	200	10,950

NC = Not calculated due to lack of toxicity value.
[1] This chemical does not have a RfD. A surrogate toxicity value of 0.04 mg/kg-dy was applied, based on the toxicity of naphthalene.
[2] RfD for benzoic acid from HEAST 1991
[3] RfD for 2-butanone from IRIS.
[4] Provisional RfD for dibenzofuran from U.S. EPA ECAO Risk Assessment Issue Paper (undated).
[5] RfD for hexane from HEAST 1993.
[6]. U.S. EPA's provisional Reference Dose for aluminum of 1 mg/kg-dy (U.S. EPA ECAO, undated)
[7] Based on the recommended dietary allowance (RDA) for calcium of 800 mg/day for children of age 1-10, divided by a body weight of 15 kg (age 1-3) (NRC, 1989)
[8] U.S. EPA's verified RfD for trivalent chromium (IRIS, 8/95).
[9] U.S. EPA's recommendation for assessing oral exposure to cobalt (0.06 mg/kg-dy), based on upper range of average intake for children (U.S. EPA, ECAO, undated)
[10] Based on lower of RDA range for copper of 1 mg/dy for children of age 4-10, divided by 15 kg. (NRC, 1989)
[11] Based on the recommended dietary allowance (RDA) of 10 mg/day for children of age 6 months to 10 years'divided by a body weight of 15 kg (age 1-3) (NRC, 1989).
[12] U.S. EPA's provisional RfD for magnesium of 5.8 mg/kg-dy (U.S. EPA ECAO, undated)
[13] U.S. EPA's verified RfD for manganese in food (IRIS, 8/95).
[14] Based on the recommended child minimum daily intake of 1 mEq (39 mg) of potassium per kg body weight (15 kg used) (Nelson, 1992).
[15] Based on an average child sodium intake of 2 gm/day, divided by 15 kg (Nelson, 1992).
[16] No toxicity values could be located.
NC = Not calculated

APPENDIX E
TABLE E-3
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for Ingestion of carcinogenic chemicals in soil

$$SSL = \frac{TR \times AT \times CF_1}{SF_o \times CF_2 \times EF \times IF}$$

where:

TR =	Target risk (1×10^{-6}) (default)
AT =	Averaging time (yr) (default)
CF_1 =	Unit conversion factor (365 dy/yr) (default)
SF_o =	Oral cancer slope factor $(mg/kg\text{-}dy)^{-1}$
CF_2 =	Unit conversion factor (10^{-6} kg/mg) (default)
EF =	Exposure frequency (dy/yr) (default)
IF =	Intake factor (age-adjusted) (mg-yr/kg-d) (default)

Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

Chemical	TR (unitless)	AT (yr)	CF_1 (dy/yr)	SF_o $(mg/kg\text{-}dy)^{-1}$	CF_2 (kg/mg)	EF (dy/yr)	IF (mg-yr/kg-dy)	SSL (mg/kg)
Bis(2-chloroisopropyl)ether [1]	1.00E-06	70	365	7.00E-02	1.00E-06	350	114	9.15

[1] Oral slope factor from HEAST 1993.

APPENDIX E
TABLE E-4
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of non-carcinogenic chemicals in residential soils

$$SSL = \frac{THQ \times AT \times CF_1}{EF \times ED \times [\,(1/RfC) \times (1/VF + 1/PEF)\,]}$$

where:

THQ =	Target hazard quotient (unitless) (default)
AT =	Averaging time (yr) (default)
CF_1 =	Unit conversion factor (dy/yr) (default)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
RfC =	Inhalation reference concentration (mg/m^3)
VF =	Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF =	Particulate emission factor (m^3/kg) (default)

Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

Chemical [1]	THQ (unitless)	AT (yr)	CF_1 (dy/yr)	EF (dy/yr)	ED (yr)	RfC (mg/m^3)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Acenaphthylene	1	30	365	350	30	NA		6.79E+08	NC
Benzoic Acid	1	30	365	350	30	NA		6.79E+08	NC
Benzo(g,h,i)perylene	1	30	365	350	30	NA		6.79E+08	NC
2-Butanone [2]	1	30	365	350	30	3.00E-01	8,074	6.79E+08	2,526
Dibenzofuran	1	30	365	350	30	NA		6.79E+08	NC
Hexane [3]	1	30	365	350	30	2.00E-01	1,216	6.79E+08	254
Methylanthracene	1	30	365	350	30	NA		6.79E+08	NC
2-Methylnaphthalene	1	30	365	350	30	NA		6.79E+08	NC
4-Nitrophenol	1	30	365	350	30	NA		6.79E+08	NC
Phenanthrene	1	30	365	350	30	NA		6.79E+08	NC
Aluminum	1	30	365	350	30	NA		6.79E+08	NC
Calcium	1	30	365	350	30	NA		6.79E+08	NC
Chromium, trivalent	1	30	365	350	30	NA		6.79E+08	NC
Cobalt	1	30	365	350	30	NA		6.79E+08	NC
Copper	1	30	365	350	30	NA		6.79E+08	NC
Iron	1	30	365	350	30	NA		6.79E+08	NC
Magnesium	1	30	365	350	30	NA		6.79E+08	NC
Manganese [3] [4]	1	30	365	350	30	5.00E-05		6.79E+08	35,405
Potassium	1	30	365	350	30	NA		6.79E+08	NC
Sodium	1	30	365	350	30	NA		6.79E+08	NC

[1] Most chemicals do not possess U.S. EPA inhalation toxicity values, so a $SSL_{(inhalation)}$ value was not derived.
[2] RfC obtained from EPA's HEAST (1991).
[3] RfC obtained from EPA's IRIS (accessed 9/22/95)
[4] Volatilization factor for metals was assumed to be zero
NA = Not available
NC = Not calculated

APPENDIX E
TABLE E-5
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of carcinogenic chemicals in residential soils

$$SSL = \frac{TR \times AT \times CF_1}{URF \times CF_2 \times EF \times ED \times (1/VF + 1/PEF)}$$

where:

TR =	Target risk (unitless)
AT =	Averaging time (yr) (default)
CF_1 =	Unit conversion factor (dy/yr) (default)
URF =	Unit Risk Factor ($[\mu g/m^3]^{-1}$)
CF_2 =	Unit conversion factor (µg/mg) (default)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
VF =	Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF =	Particulate emission factor (m^3/kg) (default)

Chemical	TR (unitless)	AT (yr)	CF_1 (dy/yr)	URF $(\mu g/m^3)^{-1}$	CF_2 (µg/mg)	EF (dy/yr)	ED (yr)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Bis(2-chloroisopropyl)ether [1]	1.00E-06	70	365	1.00E-05	1000	350	30	17,225	6.79E+08	4.19

[1] Unit Risk Value from HEAST 1993 (EPA OHEA ECAO-CIN-909, March 1993).
Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

APPENDIX E
TABLE E-6
CALCULATION OF VOLATILIZATION FACTOR
SOUTHEAST FEDERAL CENTER

Calculation of Volatilization Factor (VF)

$$VF = (Q/C) \times \frac{(3.14 \times a \times T)^{(1/2)}}{(2 \times D_{ai} \times Theta_a \times Kas)} \times 10^{-4}\ m^2/cm^2$$

where:

Q/C =	Inverse of mean concentration at the center of a 30-acre-square source ($[g/m^2\text{-}s]/[kg/m^3]$) (default)
a =	Calculated (see below)
T =	Exposure interval (s) (default)
D_{ai} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$)
$Theta_a$ =	Soil-filled soil porosity (L/L) (default)
Kas =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g) (default)

and where:

H =	Henry's Law Constant ($atm\text{-}m^3/mole$)
Koc =	Organic carbon - water partition coefficient (cm^3/g)
foc =	Fraction of organic carbon in soil (g/g) (default)
n =	Total soil porosity (unitless) (default)
D_i =	Diffusivity in air (cm^2/s)

$$a = \frac{D_{ai} \times Theta_a}{Theta_a + (\rho_s)(1-Theta_a)/Kas}$$

where:

D_{ai} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$) (cm^2/s)
$Theta_a$ =	Soil-filled soil porosity (L/L) (default)
ρ_s =	Soil particle density (g/cm^3) (default)
Kas =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g)

Calculation of D_{ai}

Chemical	Di (cm^2/s)	$Theta_a$ (L/L)	n (unitless)	D_{ai} (cm^2/s)
2-Butanone	8.08E-02	0.28	0.43	6.30E-03
Hexane	2.00E-01	0.28	0.43	1.56E-02
Bis(2-chloroisopropyl)ether	6.02E-02	0.28	0.43	4.70E-03

Calculation of K_{as}

Chemical	H ($atm\text{-}m^3/mole$)	Koc (cm^3/g)	foc (g/g)	CF	Kas (cm^3/g)
2-Butanone	2.74E-05	4.5	0.006	41	0.042
Hexane	1.22E-01	1,230	0.006	41	0.678
Bis(2-chloroisopropyl)ether	1.10E-04	61	0.006	41	0.012

Calculation of a

Chemical	D_{ai} (cm^2/s)	$Theta_a$ (L/L)	ρ_s (kg/L)	Kas	a
2-Butanone	6.30E-03	0.28	2.65	0.042	3.82E-05
Hexane	1.56E-02	0.28	2.65	0.678	1.41E-03
Bis(2-chloroisopropyl)ether	4.70E-03	0.28	2.65	0.012	8.48E-06

Calculation of VF

Chemical	Q/C ($g/m^2\text{-}s)/(kg/m^3$)	Pi (unitless)	a	T (s)	D_{ai} (cm^2/s)	$Theta_a$ (unitless)	Kas (cm^3/g)	CF (m^2/cm^2)	VF (m^3/kg)
2-Butanone	35.1	3.14	3.82E-05	9.50E+08	6.30E-03	0.28	0.042	1.00E-04	8,074
Hexane	35.1	3.14	1.41E-03	9.50E+08	1.56E-02	0.28	0.678	1.00E-04	1,216
Bis(2-chloroisopropyl)ether	35.1	3.14	8.48E-06	9.50E+08	4.70E-03	0.28	0.012	1.00E-04	17,225

Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

APPENDIX E
TABLE E-7
CALCULATION OF LEACHING POTENTIAL SOIL SCREENING LEVEL (SSLs)
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Soil screening level partitioning equation for migration to groundwater (organic chemicals only)

$$SSL = Cw\left(Kd + \frac{(Theta_w + Theta_a H')}{\rho_b}\right)$$

where:

Cw = Target soil leachate concentration (mg/L)
Kd = Soil-water partition coefficient (L/kg)
$Theta_w$ = Water-filled soil porosity (L/L) (default)
$Theta_a$ = Air-filled soil porosity (L/L) (default)
H' = Henry's Law Constant (unitless)
ρ_b = Dry soil bulk density (kg/L) (default)

and

Kd = Koc x foc

where

Koc = Organic carbon - water partition coefficient (L/kg)
foc = Fraction of organic carbon in soil (g/g) Default)
Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

Chemical	Cw (mg/L)	Koc (L/kg)	foc (g/g)	$Theta_w$ (L/L)	$Theta_a$ (L/L)	H' (unitless)	ρ_b (kg/L)	SSL (mg/kg)
Acenaphthylene	1.46	2.50E+03	0.002	0.3	0.13	6.17E-02	1.5	7.7
Benzoic Acid	146	NA	0.002	0.3	0.13	7.58E-07	1.5	NC
Benzo(g,h,i)perylene	1.46	1.60E+06	0.002	0.3	0.13	2.26E-06	1.5	4,672
2-Butanone	21.9	4.50E+00	0.002	0.3	0.13	1.14E-03	1.5	6.8
Dibenzofuran	0.146	NA	0.002	0.3	0.13	NA	1.5	NC
Hexane	2.19	1.23E+03	0.002	0.3	0.13	5.08E+00	1.5	7.0
Methylanthracene	1.46	6.50E+04	0.002	0.3	0.13	NA	1.5	NC
2-Methylnaphthalene	1.46	8.50E+03	0.002	0.3	0.13	2.42E-03	1.5	25.3
4-Nitrophenol	NA	4.50E+01	0.002	0.3	0.13	2.64E-01	1.5	NC
Phenanthrene	1.46	2.30E+04	0.002	0.3	0.13	3.35E-01	1.5	67.6

Cw = (RfD x BW x AT)/(IR x EF x ED)

where:

RfD = Non-carcinogenic Reference Dose (mg/kg-dy)
BW = Adult body weight (kg) (default)
AT = Averaging time (dy) (default)
IR = Water ingestion rate (L/dy) (default)
EF = Exposure frequency (dy/yr) (default)
ED = Exposure duration (yr) (default)

Default exposure factors from U.S. EPA (1991) "Standard Default Exposure Factors":. OSWER Directive 928

Chemical	RfD (mg/kg-dy)	BW (kg)	AT (dy)	IR (L/dy)	EF (dy/yr)	ED (yr)	CW (mg/L)
Acenaphthylene	0.04	70	10950	2	350	30	1.46
Benzoic Acid	4	70	10950	2	350	30	146
Benzo(g,h,i)perylene	0.04	70	10950	2	350	30	1.46
2-Butanone	0.6	70	10950	2	350	30	21.9
Dibenzofuran	0.004	70	10950	2	350	30	0.146
Hexane	0.06	70	10950	2	350	30	2.19
Methylanthracene	0.04	70	10950	2	350	30	1.46
2-Methylnaphthalene	0.04	70	10950	2	350	30	1.46
4-Nitrophenol	NA						NC
Phenanthrene	0.04	70	10950	2	350	30	1.46

NA = Not available
NC = Not calculated due to lack of toxicity value.

APPENDIX E
TABLE E-8
CALCULATION OF LEACHING POTENTIAL SOIL SCREENING LEVELS (SSLS)
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Soil screening level partitioning equation for migration to groundwater (organic chemicals only)

$$SSL = Cw \left(Kd + \frac{(Theta_w + Theta_a H')}{p_b}\right)$$

where:

Cw =	Target soil leachate concentration (mg/L)
Kd =	Soil-water partition coefficient (L/kg)
$Theta_w$ =	Water-filled soil porosity (L/L) (default value)
$Theta_a$ =	Air-filled soil porosity (L/L) (default value)
H' =	Henry's Law Constant (unitless)
p_b =	Dry soil bulk density (kg/L) (default value)

and

Kd =	Koc x foc

where:

Koc =	Organic carbon - water partition coefficient (L/kg)
foc =	Fraction of organic carbon in soil (g/g) (default value)

Default values from U.S. EPA (1994). Soil Screening Guidance. EPA/540/R-94-101. December.

Chemical	Cw (mg/L)	Koc (L/kg)	foc (g/g)	$Theta_w$ (L/L)	$Theta_a$ (L/L)	H' (unitless)	p_b (kg/L)	SSL (mg/kg)
Bis(2-chloroisopropyl)ether	0.0012	61	0.002	0.3	0.13	4.58E-03	1.5	0.00039
Bis(2-chloroisopropyl)ether	0.122	61	0.002	0.3	0.13	4.58E-03	1.5	0.03922

Cw = (TR x BW x AT)/(IR x EF x ED x SF)

where:

TR =	Target risk (unitless)
BW =	Adult body weight (kg) (default)
AT=	Averaging time (dy) (default)
IR =	Water ingestion rate (L/dy) (default)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
SF =	Oral cancer slope factor

Default exposure factors from U.S. EPA (1991) "Standard Default Exposure Factors":. OSWER Directive 9285.6-03, March.

Chemical	TR	BW (kg)	AT (dy)	IR (L/dy)	EF (dy/yr)	ED (yr)	SF $(mg/kg\text{-}dy)^{-1}$	CW (mg/L)
Bis(2-chloroisopropyl)ether	1.00E-06	70	25550	2	350	30	7.00E-02	0.0012
Bis(2-chloroisopropyl)ether	1.00E-04	70	25550	2	350	30	7.00E-02	0.122

APPENDIX E
TABLE E-9
CHEMICAL AND PHYSICAL PROPERTIES
SUMMARY TABLE
SOUTHEAST FEDERAL CENTER

Chemical	Water Solubility (S) (mg/L)		Organic carbon - Water partition coefficient (Koc) (L/kg or cm^3/g) (for organics)		Soil-Water Partition Factor (Kd) (L/kg or cm^3/g) (for inorganics)	Henry's Law Constant (H) (atm-m^3/mole)		Henry's Law Constant (Kh) [7] (unitless)	Diffusion Coefficient in Air (cm^2/s)
Acenaphthylene	3.93E+00	[1]	2.50E+03	[1]		1.48E-03	[1]	6.17E-02	NA
Benzoic Acid	2.90E+03	[5]	NA			1.82E-08	[3]	7.58E-07	NA
Benzo(g,h,i)perylene	7.00E-04	[1]	1.60E+06	[1]		5.43E-08	[1]	2.26E-06	NA
2-Butanone	2.68E+05	[1]	4.5	[1]		2.74E-05	[1]	1.14E-03	8.08E-02
Dibenzofuran	NA		NA			NA		NA	NA
Hexane	1.00E+01	[2]	1.23E+03	[2]		1.22E-01	[3]	5.08E+00	2.00E-01
Methylanthracene	2.61E-01	[6]	6.50E+04	[4]		NA		NA	NA
2-Methylnaphthalene	2.54E+01	[6]	8.50E+03	[4]		5.80E-05	[3]	2.42E-03	NA
4-Nitrophenol	1.60E+04	[2]	4.50E+01	[2]		6.34E-03	[3]	2.64E-01	NA
Phenanthrene	1.00E+00	[1]	2.30E+04	[4]		8.05E-03	[3]	3.35E-01	NA
Aluminum	NA				NA	NA		NA	NA
Calcium	NA				4.1	NA		NA	NA
Chromium, trivalent	NA				2,208	NA		NA	NA
Cobalt	NA				55	NA		NA	NA
Copper	NA				22	NA		NA	NA
Iron	NA				55	NA		NA	NA
Magnesium	NA				5.5	NA		NA	NA
Manganese	NA				5.5	NA		NA	NA
Potassium	NA				5.5	NA		NA	NA
Sodium	NA				NA	NA		NA	NA
Bis(2-chloroisopropyl)ether	1.70E+03	[1]	61	[1]		1.10E-04	[3]	4.58E-03	6.02E-02

[1] U.S. EPA (1986). Superfund Public Health Evaluation Manual, Exhibit A-1. EPA/540/1-86/060.
[2] U.S. EPA (1989). Determining Soil Response Action Levels Based on Potential Contaminant Migration to Groundwater: A Compendium of Examples. EPA/540/2-89/057, October
[3] U.S. EPA (1989). Hazardous Waste Treatment, Storage, and Disposal (TSD) Facilities - Air Emission Models (EPA-450/3-87/026, November (review draft)
[4] Dragun (1988). The Soil Chemistry of Hazardous Materials. Hazardous Materials Control Research Institute, Silver Spring, Maryland.
[5]. Verscheuren (1983). Handbook of Environmental Data on Organic Chemicals. Van Nostrand Reinhold, New York.
[6] Mackay et al. (1992). Illustrated Handbook of Physical-Chemical Properties and Environmental Fate for Organic Chemicals (Vol II). Lewis Publishers, Chelsea, Michigan.
[7] Kh calculated as (H in atm-m^3)/mole / 0.024.
[8] U.S. EPA (1990). Air/Superfund National Technical Guidance Study Series, Volume II: Estimation of Baseline Air Emissions at Superfund Sites.
NA = Not available

APPENDIX F:

CALCULATION OF COMMERCIAL/INDUSTRIAL ACTION LEVELS

APPENDIX F
TABLE F-1
CALCULATED SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
SUMMARY TABLE
SOUTHEAST FEDERAL CENTER

Chemical	$SSL_{(ingestion)}$ (mg/kg)	$SSL_{(inhalation)}$ (mg/kg)
Arsenic	**382**	64,552
Barium	**143,080**	NC
Cadmium	**1,022**	277,575
Copper	**143,080**	NC
Iron	**1,022,000** *	NC
Mercury	**613**	297,402
Nickel	**40,880**	NC
Selenium	**10,220**	NC
Benzo(a)pyrene	**78**	NC
Bis(2-chloroisopropyl)ether	8,176	**704**
3,3'-Dichlorobenzidine	**1,272**	NC
Phenanthrene	**81,760**	NC
Trichloroethene	52,029	**552**

APPENDIX F
TABLE F-2
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for ingestion of non-carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{THQ \times BW \times AT}{1/RfD_o \times EF \times ED \times IR}$$

Where:

SSL =	Soil Screening Level (mg/kg)
THQ =	Target Hazard Quotient (= 1) (default)
BW =	Body weight (kg) (default)
AT =	Averaging time (dy) (default)
RfD_o =	Oral Reference Dose (mg/kg-dy)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
IR =	Soil ingestion rate kg/dy) (default)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, and U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	THQ (unitless)	BW (kg)	AT (yr)	RfD_o (mg/kg-dy)	EF (dy/yr)	ED (yr)	IR (kg/dy)	SSL (mg/kg)
Phenanthrene	1	70	9125	0.04	250	25	5.00E-05	81,760
Barium	1	70	9125	0.07	250	25	5.00E-05	143,080
Cadmium	1	70	9125	0.0005	250	25	5.00E-05	1,022
Copper [10]	1	70	9125	0.07	250	25	5.00E-05	143,080
Iron [11]	1	70	9125	0.5	250	25	5.00E-05	1,022,000
Mercury	1	70	9125	0.0003	250	25	5.00E-05	613
Nickel	1	70	9125	0.02	250	25	5.00E-05	40,880
Selenium	1	70	9125	5.00E-03	250	25	5.00E-05	10,220

[1] RfD values obtained from IRIS.
[2] Based on lower of RDA range for copper of 1 mg/dy for children of age 4-10, divided by 15 kg. (NRC, 1989)
[3] U.S. EPA's provisional RfD of 0.5 mg/kg-dy (U.S. EPA ECAO, undated)

APPENDIX F
TABLE F-3
CALCULATION OF INGESTION SOIL SCREENING LEVELS (SSLs)
IN COMMERCIAL/INDUSTRIAL SOILS
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for Ingestion of carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{TR \times AT \times BW}{SF_o \times EF \times ED \times IF}$$

where:

SSL =	Soil screening level (mg/kg)
TR =	Target risk ($1x10^{-6}$)
AT =	Averaging time (dy)
BW =	Adult body weight (kg)
SF_o =	Oral cancer slope factor $(mg/kg\text{-}dy)^{-1}$
EF =	Exposure frequency (dy/yr)
ED =	Exposure duration (yr)
IR =	Ingestion rate (kg/dy)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	TR (unitless)	AT (dy)	BW (kg)	SF_o $(mg/kg\text{-}dy)^{-1}$	EF (dy/yr)	ED (yr)	IR (kg/dy)	SSL (mg/kg)
Arsenic [1]	1.00E-04	25,550	70	1.5	250	25	5.00E-05	382
Benzo(a)pyrene	1.00E-04	25,550	70	7.3	250	25	5.00E-05	78
Bis(2-chloroisopropyl)ether [2]	1.00E-04	25,550	70	7.00E-02	250	25	5.00E-05	8,176
3,3'-Dichlorobenzidine [1]	1.00E-04	25,550	70	4.50E-01	250	25	5.00E-05	1,272
Trichloroethene [3]	1.00E-04	25,550	70	1.10E-02	250	25	5.00E-05	52,029

[1] Oral slope factor from IRIS (accessed 10/16/95)
[2] Oral slope factor from HEAST 1993.
[3] Oral slope fatcor from U.S. EPA (ECAO (provisional value, undated).

APPENDIX F
TABLE F-4
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of non-carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{THQ \times AT}{EF \times ED \times [(1/RfC) \times (1/VF + 1/PEF)]}$$

where:

SSL =	Soil Screening Level (mg/kg)
THQ =	Target hazard quotient (unitless) (default)
AT =	Averaging time (dy) (default)
EF =	Exposure frequency (dy/yr) (default)
ED =	Exposure duration (yr) (default)
RfC =	Inhalation reference concentration (mg/m^3)
VF =	Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF =	Particulate emission factor (m^3/kg) (default)

Default parameters are from U.S> EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors

Chemical [1]	THQ (unitless)	AT (dy)	EF (dy/yr)	ED (yr)	RfC (mg/m^3)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Phenanthrene	1	9125	250	25	NA	0	6.79E+08	NC
Barium	1	9125	250	25	NA	0	6.79E+08	NC
Copper	1	9125	250	25	NA	0	6.79E+08	NC
Iron	1	9125	250	25	NA	0	6.79E+08	NC
Mercury [1]	1	9125	250	25	3.00E-04	0	6.79E+08	297,402
Nickel [2]	1	9125	250	25	NA	0	6.79E+08	NC
Selenium	1	9125	250	25	NA	0	6.79E+08	NC

Volatilization factor for metals was assumed to be zero
[1] RfC for mercury from IRIS (accessed 10/16/95).
[2] Inhalation toxicity values available for nickel (subsulfide and refinery dust) are not reflective of site conditions, and were not used.

APPENDIX F
TABLE F-5
CALCULATION OF INHALATION SOIL SCREENING LEVELS (SSLs)
FOR COMMERCIAL/INDUSTRIAL LAND USE
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Screening level equation for inhalation of carcinogenic chemicals in commercial/industrial soils

$$SSL = \frac{TR \times AT}{URF \times CF \times EF \times ED \times (1/VF + 1/PEF)}$$

where:

SSL = Soil Screening Level (mg/kg)
TR = Target risk (unitless) (default)
AT = Averaging time (dy) (default)
URF = Unit Risk Factor ($[\mu g/m^3]^{-1}$)
CF = Unit conversion factor (µg/mg) (default)
EF = Exposure frequency (dy/yr) (default)
ED = Exposure duration (yr) (default)
VF = Soil-to-air volatilization factor (m^3/kg) (calculated value)
PEF = Particulate emission factor (m^3/kg) (default)

Default parameters are from U.S. EPA (1994), Soil Screening Guidance (EPA/540/R-94/101) , December, and U.S. EPA (1991), OSWER Directive 9285.6-03, March, default exposrue factors of occupational receptors.

Chemical	TR (unitless)	AT (dy)	URF $(\mu g/m^3)^{-1}$	CF (µg/mg)	EF (dy/yr)	ED (yr)	VF (m^3/kg)	PEF (m^3/kg)	SSL (mg/kg)
Arsenic [1]	1.00E-04	25550	4.30E-03	1000	250	25	0	6.79E+08	64,552
Cadmium	1.00E-04	25550	1.00E-03	1000	250	25	0	6.79E+08	277,575
Benzo(a)pyrene			NA						
Bis(2-chloroisopropyl)ether [2]	1.00E-04	25550	1.00E-05	1000	250	25	1.72E+04	6.79E+08	704
3,3'-Dichlorobenzidine			NA						
Trichlororethene [3]	1.00E-04	25550	1.70E-06	1000	250	25	2.30E+03	6.79E+08	552

[1] Unit risk value for IRIS (accessed 10/16).
[2] Unit risk value from HEAST 1993 (EPA OHEA ECAO-CIN-909, March 1993).
[3] Unit risk value from U.S. EPA ECAO (provisional value, undated).

APPENDIX F
TABLE F-6
CALCULATION OF VOLATILIZATION FACTOR
SOUTHEAST FEDERAL CENTER

Calculation of Volatilization Factor (VF)

$$VF = (Q/C) \times \frac{(3.14 \times a \times T)^{(1/2)}}{(2 \times D_{ei} \times Theta_a \times K_{as})} \times 10^{-4}\ m^2/cm^2$$

where:

Q/C =	Inverse of mean concentration at the center of a 30-acre-square source ($[g/m^2\text{-}s]/[kg/m^3]$)
a =	Calculated (see below)
T =	Exposure interval (s)
D_{ei} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$)
$Theta_a$ =	Soil-filled soil porosity (L/L)
K_{as} =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g)

and where:

Koc =	Organic carbon partition coefficient (cm^3/g)
foc =	fraction of organic carbon in soil (g/g)
n =	Total soil porosity (unitless)
D_i =	Diffusivity in air (cm^2/s)

$$a = \frac{D_{ei} \times Theta_a}{Theta_a + (\rho_s)(1-Theta_a)/K_{as}}$$

where

D_{ei} =	Effective diffusivity (= $D_i(Theta_a^{3.33}/n^2)$) (cm^2/s)
$Theta_a$ =	Soil-filled soil porosity (L/L)
ρ_s =	Soil particle density (g/cm^3)
K_{as} =	Soil/air partition coefficient (= [H/ (Koc x foc)) x 41]) (cm^3/g)

Calculation of D_{ei}

Chemical	Di (cm^2/s)	$Theta_a$ (L/L)	n (unitless)	D_{ei} (cm^2/s)
Bis(2-chloroisopropyl)ether [1]	6.02E-02	0.28	0.43	4.70E-03
3 3'-Dichlorobenzidine	1.94E-02	0.28	0.43	1.51E-03
Trichloroethene	7.90E-02	0.28	0.43	6.16E-03

Diffusivity coefficients from U S EPA, EPA/450/1-89/002a, August 1990

Calculation of K_{as}

Chemical	H (atm-m^3/mole)	Koc (cm^3/g)	foc (g/g)	CF	K_{as} (cm^3/g)
Bis(2-chloroisopropyl)ether [1]	1.10E-04	61	0.006	41	0.012
3,3'-Dichlorobenzidine	8.30E-07	1,553	0.006	41	0.0000037
Trichloroethene	9.10E-03	126	0.006	41	0.494

Calculation of a

Chemical	D_{ei} (cm^2/s)	$Theta_a$ (L/L)	ρ_s (kg/L)	K_{as}	a
Bis(2-chloroisopropyl)ether [1]	4.70E-03	0.28	2.65	0.012	8.48E-06
3,3'-Dichlorobenzidine	1.51E-03	0.28	2.65	0.0000037	8.11E-10
Trichloroethene	6.16E-03	0.28	2.65	0.494	4.16E-04

Calculation of VF

Chemical	Q/C (g/m^2-s)/(kg/m^3)	Pi (unitless)	a	T (s)	D_{ei} (cm^2/s)	$Theta_a$ (unitless)	K_{as} (cm^3/g)	CF (m^2/cm^2)	VF ('m^3/kg)
Bis(2-chloroisopropyl)ether [1]	35.1	3.14	8.48E-06	9.50E+08	4.70E-03	0.28	0.012	1.00E-04	17,225
3,3'-Dichlorobenzidine	35.1	3.14	8.11E-10	9.50E+08	1.51E-03	0.28	0.000	1.00E-04	1,764,068
Trichloroethene	35.1	3.14	4.16E-04	9.50E+08	6.16E-03	0.28	0.494	1.00E-04	2,296

APPENDIX G:

CALCULATION
OF
GROUNDWATER ACTION LEVELS

APPENDIX G
TABLE G-1
CALCULATION OF RISK-BASED GROUNDWATER CONCENTRATIONS
NON-CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Cw= (RfD x BW x AT)/(IR x EF x ED)

where:

Cw = Acceptable risk-based concentration in water (mg/L)
RfD = Non-carcinogenic Reference Dose (mg/kg-dy)
BW = Adult body weight (kg)
AT = Averaging time (dy)
IR = Water ingestion rate (L/dy)
EF = Exposure frequency (dy/yr)
ED = Exposure frequency (yr)

Chemical	RfD (mg/kg-dy)	BW (kg)	AT (dy)	IR (L/dy)	EF (dy/yr)	ED (yr)	CW (mg/L)	CW µg/L)
Acenaphthene	0.06	70	10950	2	350	30	2.2	2,190
Acetone	0.1	70	10950	2	350	30	3.7	3,650
Butylbenzylphthalate	0.2	70	10950	2	350	30	7.3	7,300
Carbon disulfide	0.1	70	10950	2	350	30	3.7	3,650
4-Methyl-2-pentanone	0.05	70	10950	2	350	30	1.8	1,825
Di-n-butyl phthalate	0.1	70	10950	2	350	30	3.7	3,650
Di-n-octylphthalate	0.02	70	10950	2	350	30	0.73	730
2-Methylnaphthalene [1]	0.04	70	10950	2	350	30	1.5	1,460
Naphthalene	0.04	70	10950	2	350	30	1.5	1,460
Aluminum [2]	1	70	10950	2	350	30	36.5	36,500
Calcium [3]	53	70	10950	2	350	30	1,934.5	1,934,500
Cobalt [4]	0.06	70	10950	2	350	30	2.2	2,190
Iron [5]	0.5	70	10950	2	350	30	18.3	18,250
Magnesium [6]	5.8	70	10950	2	350	30	211.7	211,700
Manganese [7]	0.14	70	10950	2	350	30	5.1	5,110
Potassium [8]	39	70	10950	2	350	30	1,423.5	1,423,500
Sodium [9]	0.14	70	10950	2	350	30	5.1	5,110
Vanadium	0.009	70	10950	2	350	30	0.3	329
Zinc	0.300	70	10950	2	350	30	11.0	10,950

APPENDIX G
TABLE G-2
CALCULATION OF RISK-BASED GROUNDWATER CONCENTRATIONS
CARCINOGENIC CHEMICALS
SOUTHEAST FEDERAL CENTER

Cw = (TR x BWx AT)/(IR x EF x ED x SF)

where:

Cw =	Acceptable risk-based water concentration (mg/L)
TR =	Target risk (unitless)
BW =	Adult body weight (kg)
AT =	Averaging time (dy)
IR =	Water ingestion rate (L/dy)
EF =	Exposure frequency (dy/yr)
ED =	Exposure duration (yr)
SF =	Oral cancer slope factor (mg/kg-dy^{-1})

Chemical	TRL	BW (kg)	AT (dy)	IR (L/dy)	EF (dy/yr)	ED (yr)	SF (mg/kg-dy)$^{-1}$	Cw (mg/L)
n-Nitrosodiphenylamine	1.00E-06	70	25550	2	350	30	4.90E-03	0.017

APPENDIX H:

RESULTS
OF
GEOTECHNICAL SOILS TESTING

APPENDIX H

LABORATORY TESTING ASSIGNMENT AND DATA SUMMARY

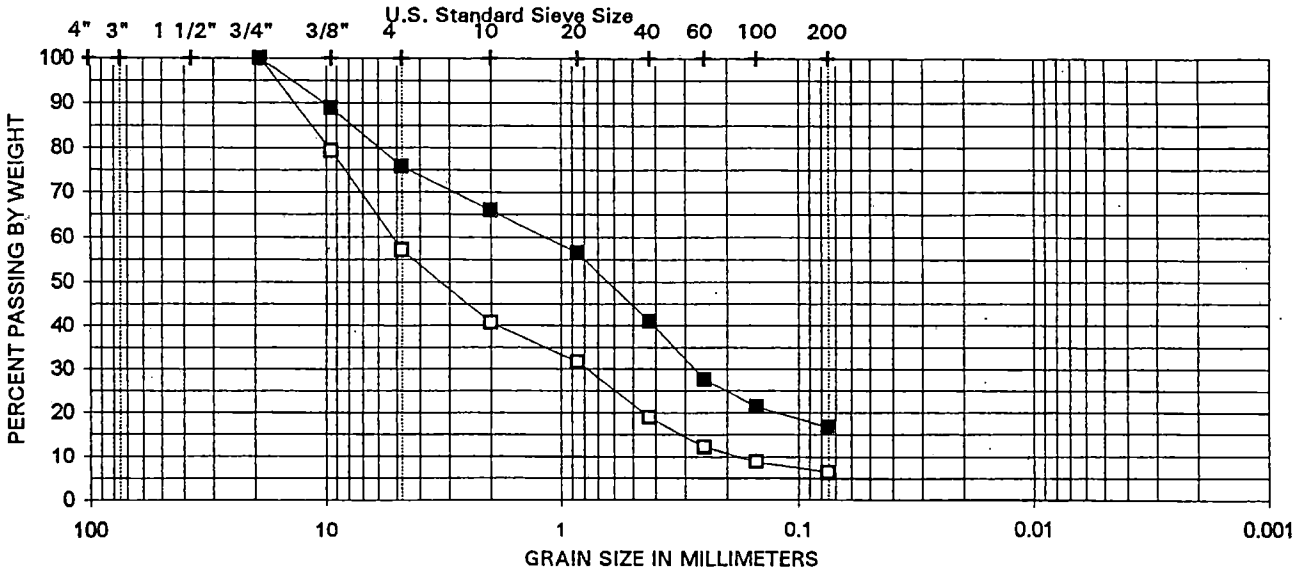
BORING NO.	SAMPLE NO.	DEPTH (ft)	IDENTIFICATION TESTS						REMARKS
			WATER CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PLAS. IND.	USCS SYMB. (1)	SIEVE MINUS NO. 200 (%)	
HP-2	S-10	48-50	24.7	34	21	13	CL	60.0	
HP-2	S-3	13-15					SM	14.2	
HP-3B	S-2	8-10					SM	37.1	
HP-3B	S-7	43-45	26.6	74	19	55	CH		
HP-4	S-11	53-55	22.5	55	23	32	CH		
HP-4	S-13A	63-64	18.4				CL	60.5	
HP-4	S-13B	64-65	24.1				SM	40.0	
HP-5	S-2	18-20	19.5	26	19	7	CL-ML		
HP-9	S-8	38-40	24.8	60	22	38	CH		
HP-20	S-3	13-15	23.2	34	18	16	CL		
HP-21	S-2	8-10	18.6	34	15	19	CL	51.1	
HP-21	S-9	45-47	57.8	79	44	35	MH	90.6	
HP-24	S-31	78-80	19.5				SM	15.7	
HP-28	S-26	57-59	6.9				GP	2.8	
HP-28	S-29	65-67	21.4	55	26	29	CH		
HP-30	S-22	50-52	21.2				SM	16.3	
HP-31	S-10	22-24	26.2	37	21	16	CL		
HP-31	S-23	48-50					SP-SM	11.7	
HP-36	S-8	40-42	9.4				SP-SM	6.3	
MW-10	S-23	44-46	20.9	64	26	38	CH		
MW-10	S-29	56-58					SC-SM	40.3	
MW-20	S-10	22-24	61.7	94	48	46	MH		
MW-20	S-27	56-58					SP	4.2	
SB-2	S-6	13-15	20.3	30	17	13	CL		
SB-4	S-5	10-12	23.7	32	16	16	CL		
SB-5	S-4	8-10	15.3	26	14	12	CL	47.7	
SB-78							SM	20.3	
SB-8	S-1	1-3	19.6	38	20	18	CL		
SB-33		0-2.5					SM	16.7	

Note: (1) Plasticity of fines for USCS symbol based on visual observation unless Atterberg limits reported.

Prepared by: EK Reviewed by: _____ Date: 7/18/95

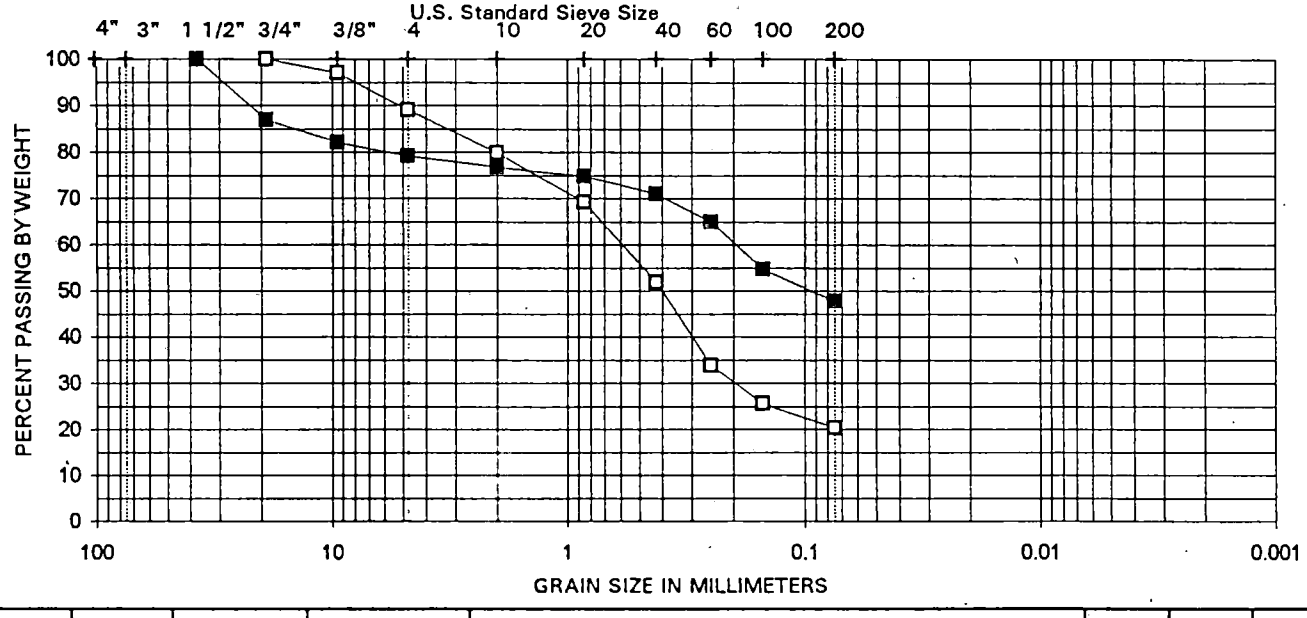
PARTICLE-SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-36	S-8	40-42	□	SP-SM, tan gravelly c-f SAND, trace silt, mica noted.	9.4	—	—
SB-33	—	0-2.5	■	SM, grayish brown c-f SAND, some f. gravel, silt, mica noted	—	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

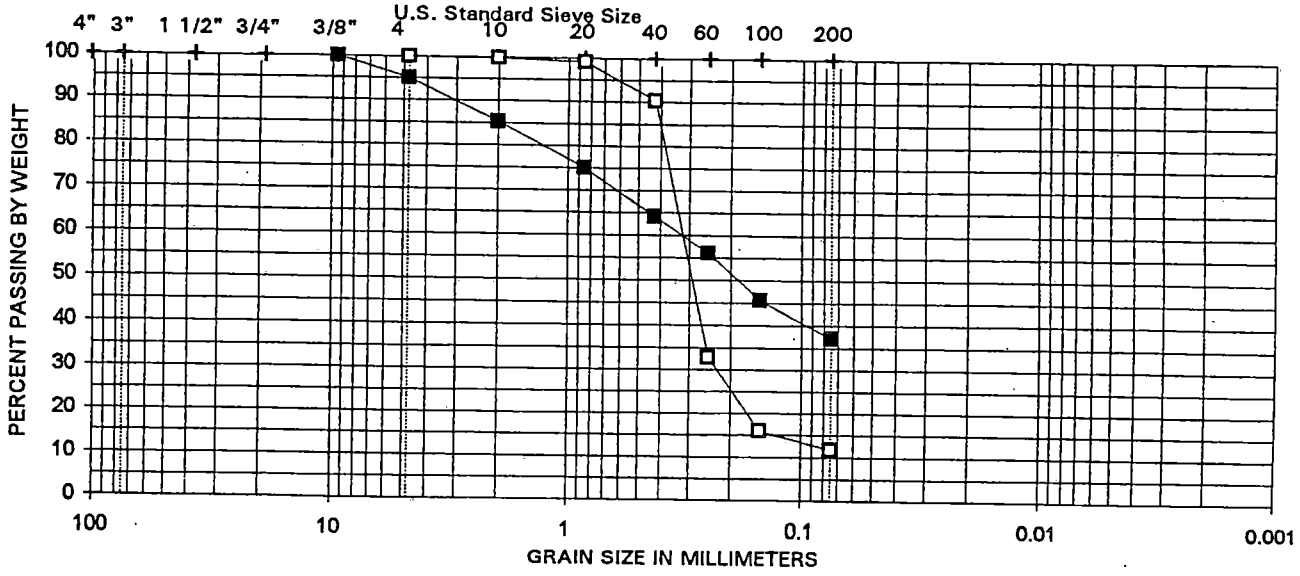


BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
SB-78	—	—	□	SM, grayish brown c-f SAND, some silt, trace f. gravel,	—	—	—
				mica noted.			
SB-5	S-4	8-10	■	SC tan - gray clayey c-f SAND, trace f. gravel, micaceous.	15.3	26	14

File: SIEV1D.XLS Project No.. R9401L Plotted by EK Reviewed by: _____ Date: 7/18/95

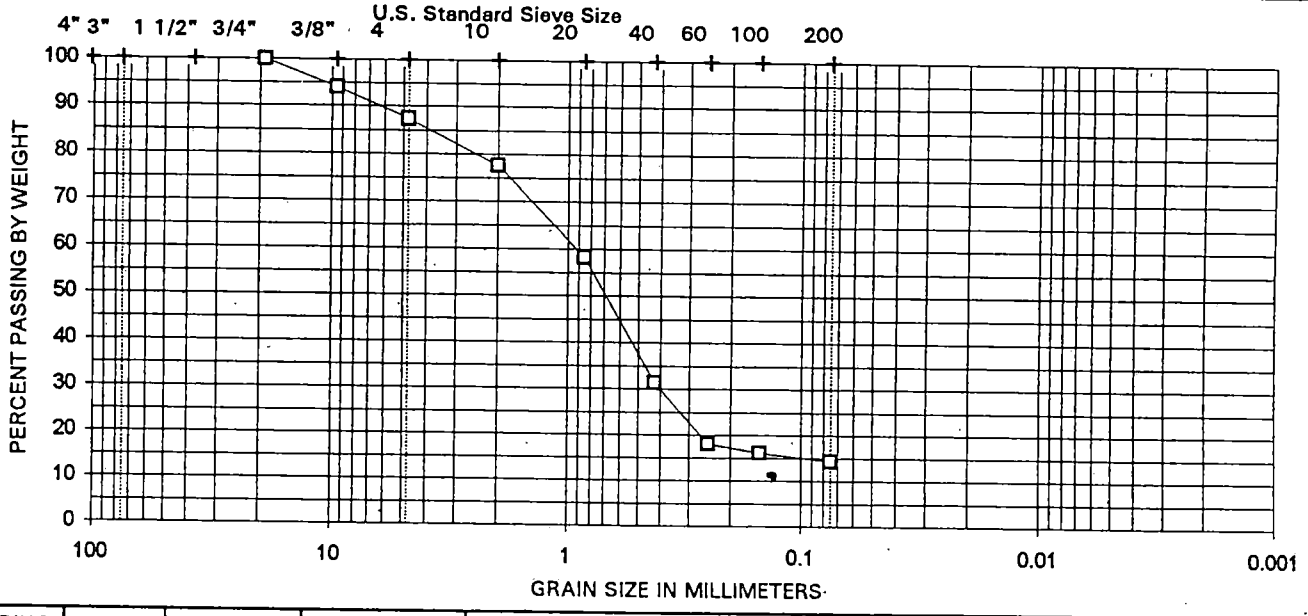
PARTICLE-SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-31	S-23	48-50	□	SP-SM, gray f. SAND, trace m. sand and silt; mica noted.	—	—	—
HP-3B	S-2	8-10	■	SM, brown silty c-f SAND, trace f. gravel; mica noted.	—	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

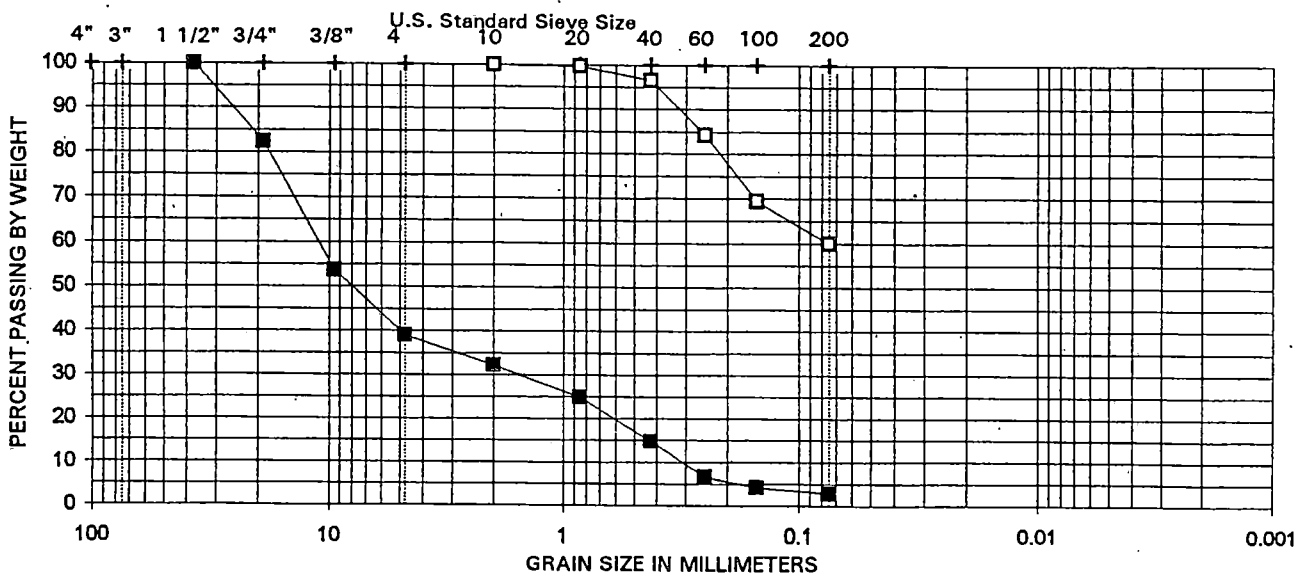


BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-2	S-3	13-15	□	SM, light brown c-f SAND, some f. gravel and silt; mica	—	—	—
				noted.			
—	—	—	■		—	—	—

File: SIEV1A.XLS Project No.: R9401L Plotted by: EK Reviewed by: _____ Date: 7/18/95

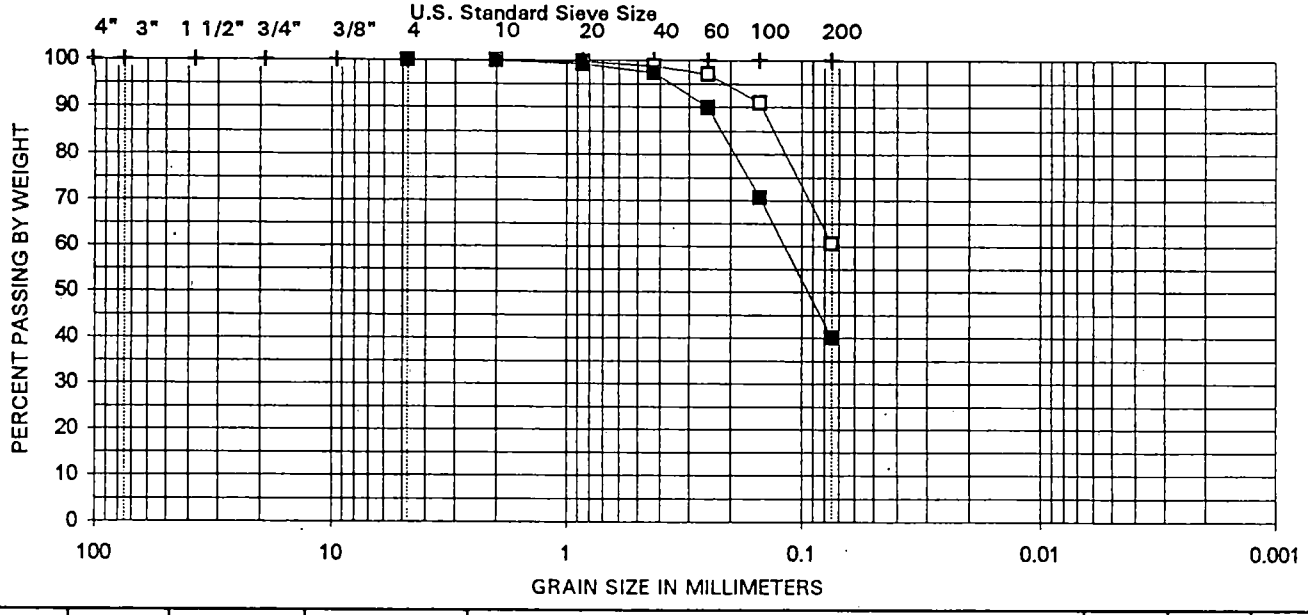
PARTICLE-SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-2	S-10	48-50	□	CL, lt gray m. plastic f. sandy silty CLAY, mica noted.	24.7	34	21
HP-28	S-26	57-59	■	GP, lt gray sandy GRAVEL, trace silt.	6.9	—	—

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

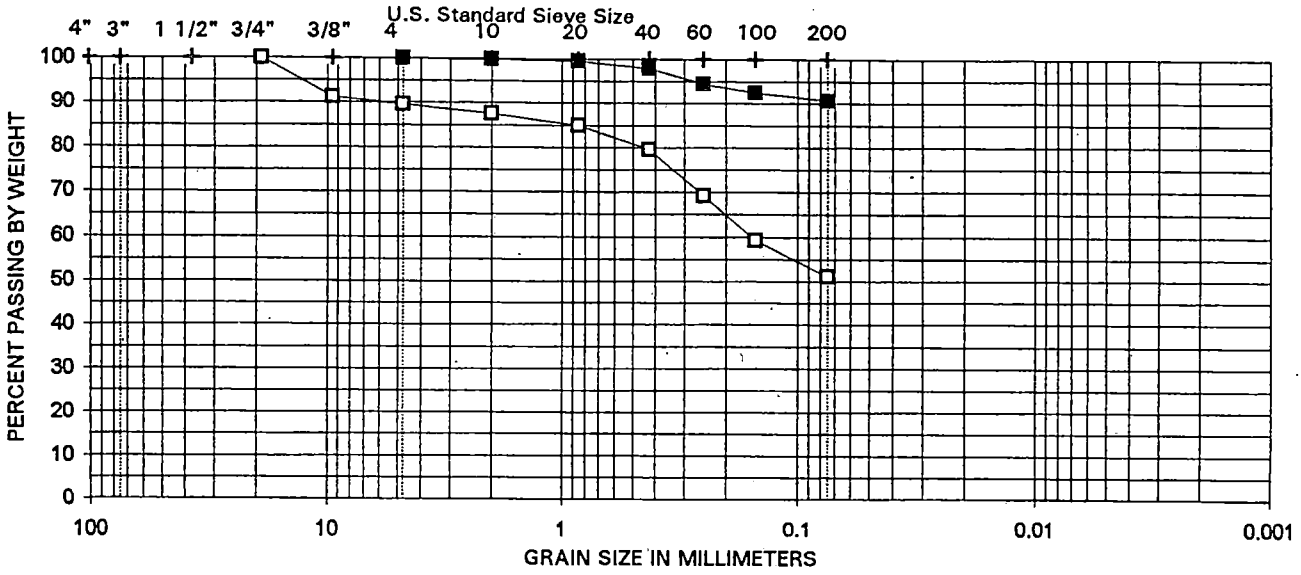


BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-4	S-13A	63-64	□	CL, lt. gray m. plastic f. sandy silty CLAY, mica noted.	18.4	—	—
HP-4	S-13B	64-65	■	SM, tan- gray silty f. SAND, trace m. sand, mica noted.	24.1	—	—

File: SIEV1B.XLS Project No.: R9401L Plotted by: EK Reviewed by: _____ Date: 7/18/95

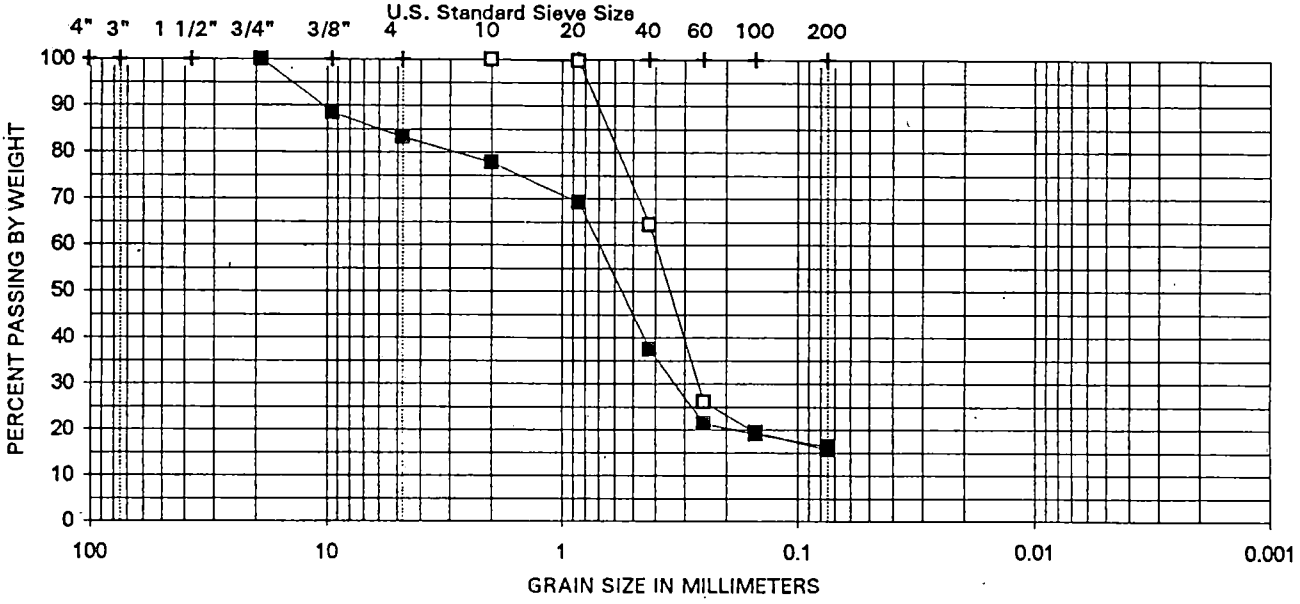
PARTICLE-SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-21	S-2	8-10	□	CL, tan m. plastic sandy silty CLAY, trace f. gravel, mica	18.6	34	15
				noted.			
HP-21	S-9	45-47	■	MH, dk gray plastic clayey SILT, trace m-f sand, mica noted.	57.8	79	44

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

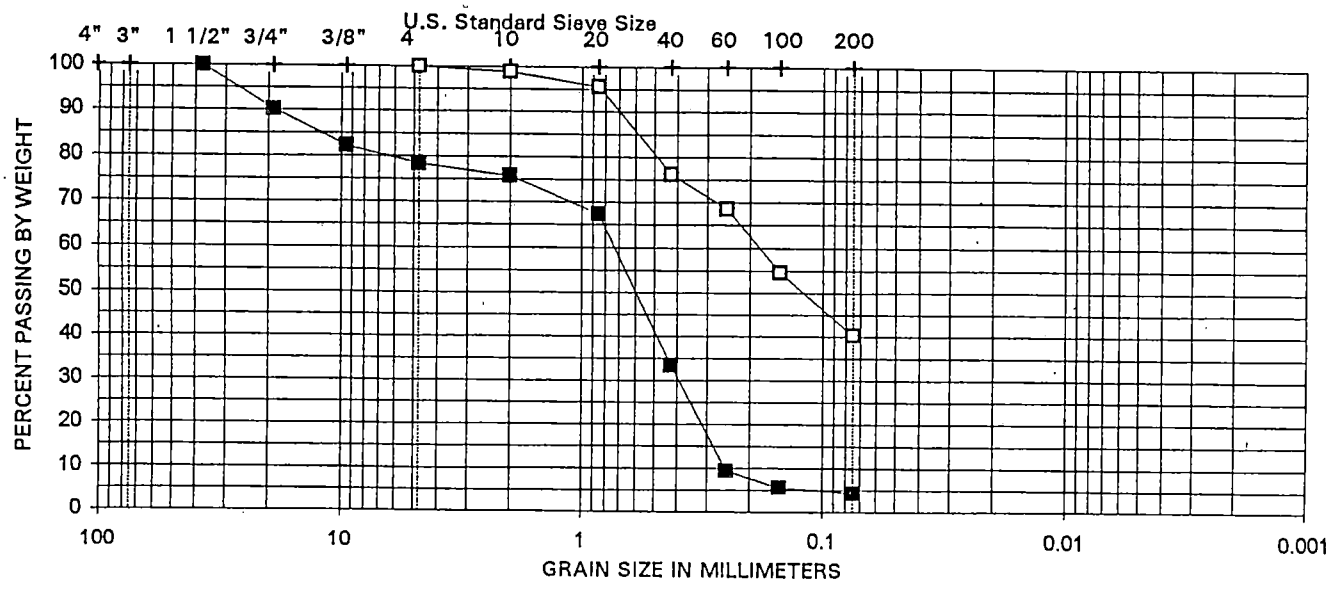


BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
HP-24	S-31	78-80	□	SM, lt. gray m-f SAND, some silt, mica noted.	19.5	—	—
HP-30	S-22	50-52	■	SM, gray c-f SAND, some f. gravel, silt, mica noted.	21.2	—	—

File: SIEV1C.XLS Project No. R9401L Plotted by: EK Reviewed by: _____ Date: 7/18/95

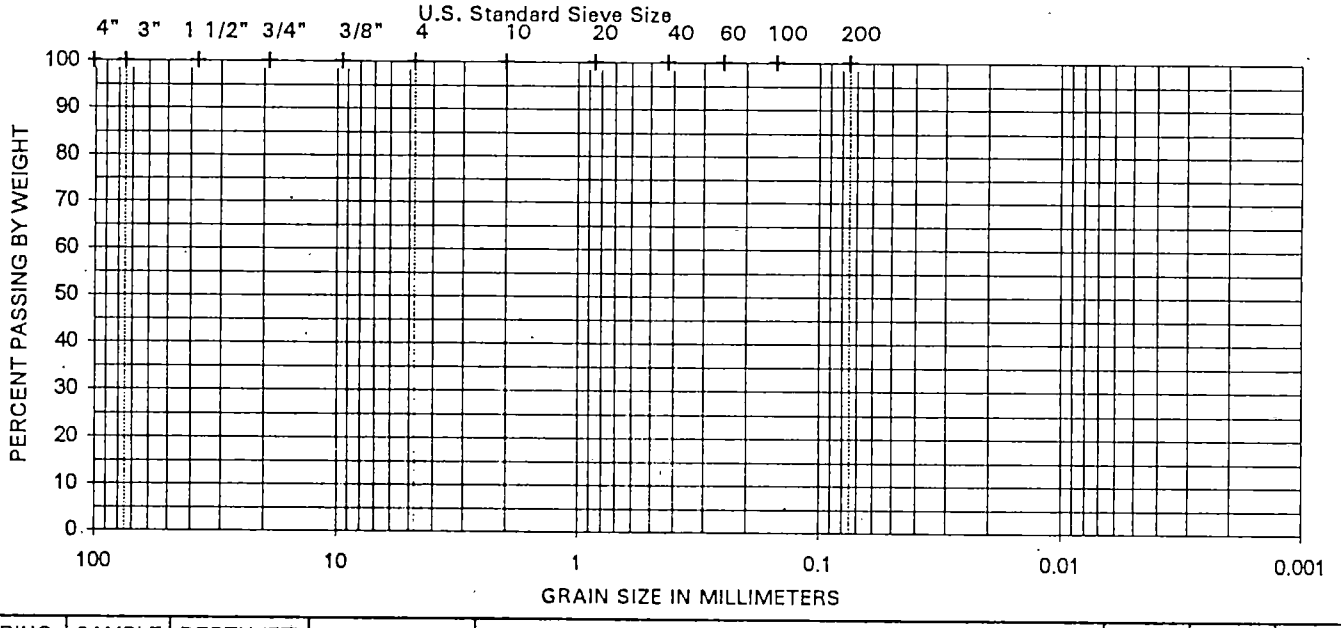
PARTICLE-SIZE DISTRIBUTION

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
MW-10	S-29	56-58	□	SC-SM, lt brown clayey silty m-f SAND, trace c. sand, mica	---	---	---
				noted.			
MW-20	S-27	56-58	■	SP, gray c-f SAND, some c-f gravel, trace silt, mica noted.	---	---	---

COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	



BORING	SAMPLE	DEPTH (FT)	SYMBOL	DESCRIPTION	w (%)	LL	PL
—	—	—	□		—	—	—
—	—	—	■		—	—	—

File: SIEV1E.XLS Project No.: R9401L Plotted by EK Reviewed by: _____ Date: 7/18/95