

APPENDIX C
SOIL BORING LOGS

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 66-5	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bracket auger bowl / spur		8. HOLE LOCATION See sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/21/98		11. DATE COMPLETED 4/21/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC NA		OTHER (SPECIFY) Exp.	
		METALS 2 cyanide		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		BACKFILLED NA		23. SIGNATURE OF INSPECTOR Paul Alkema	
		MONITORING WELL NA		OTHER (SPECIFY) benite	
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 66-5

HOLE NUMBER 66-5

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

SHEET 1 of 1

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO 66-5

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER 66-4	
1 COMPANY NAME SAIC				2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4 LOCATION Winklepeck Burning Grounds			
5 NAME OF DRILLER NA				6 MANUFACTURERS DESIGNATION OF DRILL NA			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8 HOLE LOCATION see page 3			
				9 SURFACE ELEVATION NA			
				10. DATE STARTED 4/21/98		11. DATE COMPLETED 4/21/98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED X		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Cyanide		OTHER (SPECIFY) Exp.	
		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY % NA	
				background		23. SIGNATURE OF INSPECTOR Paul G. Kerner	
LOCATION SKETCH/COMMENTS See page #3 of Logbook #6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 66-4	

[illegible]

HOLE NO

66-4

[illegible]

SHEET 1071

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Akema

FILEV
{A}

DEPTH
(ft)

DESCRIPTION OF MATERIALS

(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

Silty CLAY with traces
of sand (CL). Wet,
black (5Y 2.5/2)

NA

NA

WB0722

14.

C-8

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

0 4b-3

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 66-2	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/ Spoon			8. HOLE LOCATION See page 3				
			9. SURFACE ELEVATION NA				
			10. DATE STARTED 4/21/98		11. DATE COMPLETED 4/21/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Cyanide Exp.		OTHER (SPECIFY) Field Exp. NA	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL benzene		21. TOTAL CORE RECOVERY % NA	
23. SIGNATURE OF INSPECTOR		Paul J. Kenna					
LOCATION SKETCH/COMMENTS See page #3 of logbook #6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 66-2	

NUMBER 66-2

INSPECTION

OF Paul Atkins

DIARY

10.11

[illegible]

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 66-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl / spoon		8. HOLE LOCATION see page 3	
				9. SURFACE ELEVATION NA	
				10. DATE STARTED 4/21/98	
				11. DATE COMPLETED 4/21/98	
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		OTHER (SPECIFY) Exp.	
		METALS Exp.		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE		BACKFILLED NA		OTHER (SPECIFY) SVOC	
		MONITORING WELL NA		21. TOTAL CORE RECOVERY % NA	
		benzene		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page #3 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 66-1

[illegible]

SHEET 1 of 1

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Gilkema

SHEET

1 of 1

ELEV
(A)

DEPT 11
(B)

DESCRIPTION OF MATERIALS

(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

CLAY with some medium sand (CL). Moist, modelled, yellowish brown (10YR 5/6)

NA

NA

WB0720

144.

C-12

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

66-

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 67-1		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation						4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA						6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon			8. HOLE LOCATION see sketch					
						9. SURFACE ELEVATION NA		
						10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98
12. OVERBURDEN THICKNESS NA						15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA						16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 FT.						17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY %
				Granite		Exp.		NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Bentonite		NA
						23. SIGNATURE OF INSPECTOR Paul Alkema		
LOCATION SKETCH/COMMENTS								
SCALE: 1" = 30'								
*WB655071 used as reference point								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 67-1		

2.

67-1

INSPECTOR

Paul Alker

SHEET

1011

HOLE NO

67-1

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER 67-2	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl / spoon		8. HOLE LOCATION See page 23		9. SURFACE ELEVATION NA	
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES				19. TOTAL NUMBER OF CORE BOXES NA		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED NA		UNDISTURBED NA		21. TOTAL CORE RECOVERY % NA	
		VOC NA		METALS Exp. & Cyanide		OTHER (SPECIFY) Field Exp. NA	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page #23 of logbook #6				SCALE:			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 67-2	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 67-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Ground		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
3" hand bucket/luger bowl/spoon		See page 23		NA	
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 4/22/98		
13. DEPTH DRILLED INTO ROCK NA			11. DATE COMPLETED 4/22/98		
14. TOTAL DEPTH OF HOLE 1 ft.			15. DEPTH GROUNDWATER ENCOUNTERED NA		
			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
		VOC NA		METALS 2 Cyanide Exp.	
		OTHER (SPECIFY) Field Exp.		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA	
		OTHER (SPECIFY) hantoute		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page #23 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 67-3

HTRW DRILLING LOG

HOLE NUMBER

67-3

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Ackema

SHEET

1 of

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	144	Sandy CLAY with some ^{PA} traces of subrounded gravel rock (CL), poorly sorted gravel, moist, yellowish brown (10YR 5/6)			WB0727	

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

67-3

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 67-4	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Ground			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl / spoon		8. HOLE LOCATION PA See NA page 23		9. SURFACE ELEVATION NA	
10. DATE STARTED 4/22/98				11. DATE COMPLETED 4/22/98			
12. OVERBURDEN THICKNESS NA				13. DEPTH DRILLED INTO ROCK NA			
14. TOTAL DEPTH OF HOLE 1 ft.				15. DEPTH GROUNDWATER ENCOUNTERED NA			
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Exp.		OTHER (SPECIFY) Field Exp. NA	
21. TOTAL CORE RECOVERY % NA		BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR <i>Paul Alkemes</i>		24. SIGNATURE OF DRILLER <i>Paul Alkemes</i>		25. SIGNATURE OF WITNESS <i>Paul Alkemes</i>	
LOCATION SKETCH/COMMENTS See page #23 of logbook #6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 67-4	

24

67-4

INSPECTOR

Paul Adkins

1af)

HOLE NO.

67-4

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 67-5	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
3" hand bucket auger bowl/spoon		See page 23		NA	
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
VOC NA		METALS Exp.		OTHER (SPECIFY) Field Exp.	
BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		24. SCALE	
barbuto		Paul A. Kelman		See page #23 of logbook #6	
LOCATION SKETCH/COMMENTS SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 67-5

[illegible]

HOLE NO. 67-5

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER 68-1	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION see sketch		9. SURFACE ELEVATION NA	
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES				19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED ☒		UNDISTURBED NA		21. TOTAL CORE RECOVERY % NA	
		VOC		METALS		OTHER (SPECIFY)	
		NA		Granite		Exp.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
						23. SIGNATURE OF INSPECTOR <i>Paul A. Keenan</i>	
LOCATION SKETCH/COMMENTS							
SCALE: 1" = 30'							
*WB68S-073 - used as reference point.							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 68-1	

HOLE NUMBER 68-1

INSPECTOR

Paul Alken

SHEET 1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1A	Sandy ORGANIC SILT with some clay, with some gravel (OL/OH), sand and gravel are poorly sorted, gravel is subrounded to subangular, moist, black (10YR 2/1)	NA	WB0730	WB0730	

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

68-1

8
1

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 68-2	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3' hand bucket auger barrel/spoon		8 HOLE LOCATION See page 43			
		9 SURFACE ELEVATION NA			
		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Exp. # Granite	
		OTHER (SPECIFY) NA		OTHER (SPECIFY) Field Exp. NA	
22. DISPOSITION OF HOLE		BACKFILLED NA		21. TOTAL CORE RECOVERY NA	
		MONITORING WELL NA		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page # 43 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 68-2

HOLE NUMBER 68-2

INSPECTOR Paul Alkerman

SHEET 10 of 11

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO. 68-2

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER 68-3	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger band / spoon				8. HOLE LOCATION see page 43			
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Asbestos		OTHER (SPECIFY) Exp.	
		BACKFILLED NA		MONITORING WELL Asbestos		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY % NA	
						23. SIGNATURE OF INSPECTOR Paul Alkewer	
LOCATION SKETCH/COMMENTS See page # 43 of logbook # 6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 68-3	

HOLE NUMBER 68-3

INSPECTOR

SHEET 1 of 1

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO 68-3

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 62-1		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl / spoon		8. HOLE LOCATION See sketch				
				9. SURFACE ELEVATION NA				
				10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98		
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES		
				NA		NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY %
		NA		EGamich		Exp.		NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR
						ben tonite		<i>[Signature]</i>
LOCATION SKETCH/COMMENTS								
SCALE: 1" = 30'								
* WB Gss-062 - used as reference point								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. 62-1	

[illegible]

SHEET 1651

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Alperin

SHEET

10. f

ELEV
(A)

DEPTH
(B)

DESCRIPTION OF MATERIALS

FIELD SCREENING RESULTS

GEOTECH SAMPLE
OR CORE BOX NO.

ANALYTICAL
SAMPLE NO.REMARKS
(a)

1ft

ORGANIC SILT with clay, some sand, traces of gravel, sand and gravel are poorly sorted, gravel is subangular to sub-rounded, moist, black to grey (SY 2.5/1)

2A

NO

WB0717

C-30

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

62-

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 62-2	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" Hand bucket auger bowl/spoon		8. HOLE LOCATION See page 55			
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 6 Cyanide		OTHER (SPECIFY) Exp.	
		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY % NA	
						23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page #55 of logbook #6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 62-2	

HTRW DRILLING LOG				DISTRICT <u>Louisville Corps</u>		HOLE NUMBER 62-3	
1 COMPANY NAME SAIC				2 DRILL SUBCONTRACTOR NA		SHEET <u>1</u> OF <u>1</u>	
3 PROJECT <u>Phase II RI at Winklepeck Burning Ground and Background Investigation</u>				4 LOCATION <u>Winklepeck Burning Grounds</u>			
5 NAME OF DRILLER NA				6 MANUFACTURERS DESIGNATION OF DRILL NA			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		<u>3" hand bucket auger</u> <u>bowli spoon</u>		8 HOLE LOCATION <u>See page 55</u>		9 SURFACE ELEVATION NA	
12 OVERBURDEN THICKNESS NA				10. DATE STARTED <u>4/22/98</u>		11. DATE COMPLETED <u>4/22/98</u>	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA	
14. TOTAL DEPTH OF HOLE <u>1 ft.</u>				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS <u>Exp.</u>		OTHER (SPECIFY) <u>Freb Exp.</u>	
22. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA		21. TOTAL CORE RECOVERY NA	
				OTHER (SPECIFY) <u>benzene</u>		23. SIGNATURE OF INSPECTOR <u>Paul Alkema</u>	
LOCATION SKETCH/COMMENTS <u>See page # 55 of logbook # 6</u> SCALE:							
PROJECT <u>Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP</u>						HOLE NO. 62-3	

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ER 62-3

INSPECTOR

Paul Atkins

SHEFT

1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1	Sandy CLAY with some gravel (CL), gravel is subangular, sand is poorly sorted, moist, dark yellowish brown (104K 3/4)	NA	NA	WB0719	

C-34

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 61-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR WA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon		8. HOLE LOCATION See sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 2 Grande	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE		BACKFILLED MONITORING WELL		21. TOTAL CORE RECOVERY % NA	
		OTHER (SPECIFY) bentonite		23. SIGNATURE OF INSPECTOR Paul Alkerman	
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 30'					
* WBGSS-059 used as reference point Patket Road E, West					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 61-1

HOLE NUMBER	62-61-2
SHEET	1 of 1

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Alkenon

SHEET

1 of 1

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

61-7-

HOLE NUMBER
61-3

INSPECTOR Paul Alpers

SHEET 101

HOLE NO 61-3

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 61-4	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR WA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER WA			6. MANUFACTURERS DESIGNATION OF DRILL WA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION See page 67			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 1 Genide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL NA	
		OTHER (SPECIFY) backfill		23. SIGNATURE OF INSPECTOR Paul Alkane	
LOCATION SKETCH/COMMENTS See page #67 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 61-4

8

61-4

Paul Alber

1 of 1

HOLE NO

61-4

62

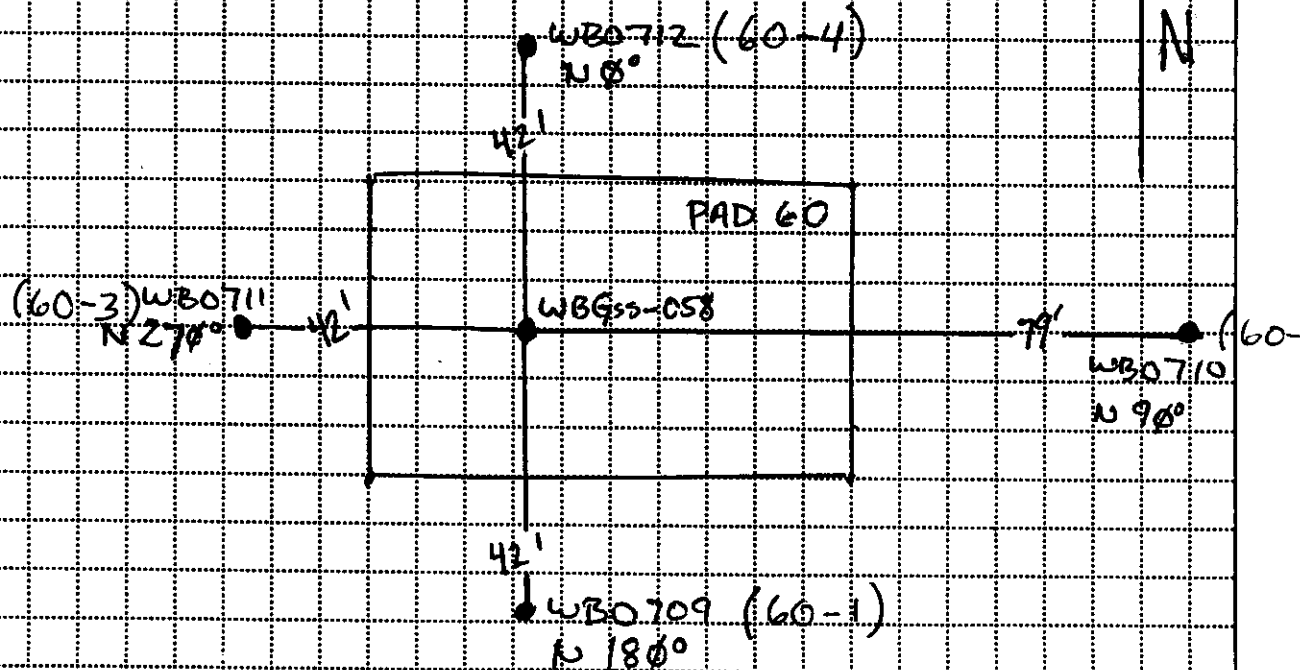
HTRW DRILLING LOG		DISTRICT <u>Louisville Corps</u>		HOLE NUMBER 60-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation		4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA		6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hard bucket auger 60w/1 spoon		8. HOLE LOCATION See sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC NA		OTHER (SPECIFY) Field Exp	
		METALS Exp.		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		BACKFILLED Bentonite		23. SIGNATURE OF INSPECTOR Paul Alkew	

LOCATION SKETCH/COMMENTS

SCALE: 1" = 30'

*WBGss-058 used as reference point

Pallet Road E, West



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.

60-1

92

SHEET 1041

HOLE NO 40-1

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 60-2	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon			8. HOLE LOCATION See page 83				
			9. SURFACE ELEVATION NA				
			10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Cyanide		OTHER (SPECIFY) Exp.	
		BACKFILLED NA		MONITORING WELL Exp.		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE				OTHER (SPECIFY) NA		21. TOTAL CORE RECOVERY % NA	
				23. SIGNATURE OF INSPECTOR Paul Alken			
LOCATION SKETCH/COMMENTS See page #83 of logbook #6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 60-2	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 60-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon		8. HOLE LOCATION see page 83			
		9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA		10. DATE STARTED 4/22/98			
13. DEPTH DRILLED INTO ROCK NA		11. DATE COMPLETED 4/22/98			
14. TOTAL DEPTH OF HOLE 1 ft.		15. DEPTH GROUNDWATER ENCOUNTERED NA			
		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		OTHER (SPECIFY) Exp.	
		METALS 6 Granules		OTHER (SPECIFY) Field Log	
22. DISPOSITION OF HOLE		BACKFILLED NA		21. TOTAL CORE RECOVERY % NA	
		MONITORING WELL NA		23. SIGNATURE OF INSPECTOR Paul Altman	
LOCATION SKETCH/COMMENTS See page 83 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 60-3

2

60-3

INSPECTOR

1671

HOLE NO

60-3

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 60-4	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon		8. HOLE LOCATION see page 83			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC NA	METALS Exp.	OTHER (SPECIFY) Field Exp.	OTHER (SPECIFY) NA	21. TOTAL CORE RECOVERY NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) Bentonite	23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS See page #83 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 60-4

HOLE NUMBER

NUMBER
60-4

INSPECTOR

Paul Alkema

SHEET

Left

[illegible]

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 59-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8. HOLE LOCATION See sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC NA	METALS 1 Canide	OTHER (SPECIFY) Exp.	OTHER (SPECIFY) Field Exp.
22. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL	OTHER (SPECIFY) benzene	23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 30'					
* WBGS-055 used as reference point Pallet Road E, West					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 59-1

WELL NUMBER 59-1

INSPECTOR

SHEET 1 of 1

ELEV
(A)

DEPTH
(B)

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

CLAY with some sand
(CL), moist, reddish
brown (5YR 5/6)

27

NA

6-30706

141

C-52

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO 59-1

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 59-3	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8 HOLE LOCATION		9 SURFACE ELEVATION	
3" hand bucket auger bowl/spoon		see page 99		NA	
12 OVERBURDEN THICKNESS NA		10. DATE STARTED 4/22/98		11. DATE COMPLETED 4/22/98	
13. DEPTH DRILLED INTO ROCK NA		15. DEPTH GROUNDWATER ENCOUNTERED NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA	
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
		VOC NA		METALS Exp.	
		OTHER (SPECIFY) Field Exp.		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				23. SIGNATURE OF INSPECTOR Paul Belkman	
LOCATION SKETCH/COMMENTS See page #99 of logbook #6 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. 59-3	

HOLE NUMBER 59-3

INSPECTOR

SHEET

ELEV
 (A)

DEPT 10
(B)

DESCRIPTION OF MATERIALS

(C)

**FIELD SCREENING
RESULTS
(12)**

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(7)

Silty CLAY with some sand (CL), traces of gravel, sand is poorly sorted, gravel is angular to subangular, moist, very dark grayish brown (2.5Y 3/2)

NA

NA

W 132708

C-54

PROJECT **Phase II RI at Winklepeck Burning Ground and Background Investigation**

HOLE NO.

59-3

103

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 59-2		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation						4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA						6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			3" Hand bucket auger bowl/spoon			8. HOLE LOCATION see page 99		
						9. SURFACE ELEVATION NA		
						10. DATE STARTED 4/22/98		
						11. DATE COMPLETED 4/22/98		
12. OVERBURDEN THICKNESS N/A						15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK N/A						16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.						17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 1 Cyanide		OTHER (SPECIFY) Exp.		21. TOTAL CORE RECOVERY NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp.		
						23. SIGNATURE OF INSPECTOR Paul Alkner		
LOCATION SKETCH/COMMENTS See page #99 of logbook #6 SCALE:								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 59-2		

104

59-2

INSPECTOR

Paul Atkins

SHEET 1 of 1

14.

HOLE NO. 59-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 37-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket & auger bowl/spoon		8. HOLE LOCATION see sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		13. DEPTH DRILLED INTO ROCK NA			
14. TOTAL DEPTH OF HOLE 1 ft.		15. DEPTH GROUNDWATER ENCOUNTERED NA			
		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
		VOC X		METALS Cyanide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL Bentonite		23. SIGNATURE OF INSPECTOR Paul Albemarle	
LOCATION SKETCH/COMMENTS SCALE: 1" = 30"					
* WBGSS-032 used as reference point Pallet Road C, East					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 37-1

HTRW DRILLING LOG		HOLE NUMBER 37-1
PROJECT Phase II RI at WBG and Background Investigation	INSPECTOR Paul A. Kenna	SHEET 10 of 1

SHEET 10 of 1

INSPECTOR Paul H. Kemo

SHEET 10 of 1

[illegible]

HOLE NO. 37-1

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 37-2	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger saw/ spoon		8 HOLE LOCATION See page III			
		9 SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED ☒		UNDISTURBED ☒	
		NA		NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC ☒		OTHER (SPECIFY) NA	
		NA		Field Exp	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR Paul Alpkema	
		MONITORING WELL			
		OTHER (SPECIFY) benzene			
LOCATION SKETCH/COMMENTS See sketch page III SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 37-2

HOLE NUMBER 37-2

ER 37-2

INSPECTOR

SHEET

[illegible]

HOLE NO.

37-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 38-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION see sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 1 Cyanide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE		BACKFILLED NA		21. TOTAL CORE RECOVERY NA	
		MONITORING WELL		23. SIGNATURE OF INSPECTOR Paul Alberia	

LOCATION SKETCH/COMMENTS SCALE: 1" = 30'

* WBG 55-035 used as reference point

Dallie + Road C, East

PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP		HOLE NO. 38-1
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HOLE NUMBER 38-1

INSPECTOR Paul Alkemo

SHEET 1041

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO. 38-1

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 38-2	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION See page 119			
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS + Cyanide		OTHER (SPECIFY) Exp.	
		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) bentonite	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY % NA	
				23. SIGNATURE OF INSPECTOR Paul Albano			
LOCATION SKETCH/COMMENTS see sketch page 119							
SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 382	

HOLE NUMBER 38-2

INSPECTOR Paul Atkins

SHEET 1 of 1

HOLE NO 38-2

121

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 38-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon		8. HOLE LOCATION see page 119			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		OTHER (SPECIFY) Exp.	
		METALS 1 Cyanide		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE		BACKFILLED NA		21. TOTAL CORE RECOVERY % NA	
		MONITORING WELL		21. SIGNATURE OF INSPECTOR Paul A. [Signature]	
LOCATION SKETCH/COMMENTS see sketch page 119 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 38-3

28

ER 38-3

INSPECTOR

Paul Albers

SHEET 10 of 1

HOLE NO.

38-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 6-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 6-1 SHEETS OF	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION see sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 2 Cyanide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp	
21. TOTAL CORE RECOVERY NA		22. DISPOSITION OF HOLE BACKFILLED		23. SIGNATURE OF INSPECTOR Paul Alkema	
		MONITORING WELL		OTHER (SPECIFY) bentonite	
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
*WBGS-006 used as reference point.					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 6-1

HOLE NUMBER

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Altman

SHEET

1 of 1

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

6-1

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 6-2	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION			
3" hand bucket auger bowl/spoon		see page 131			
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1-ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
		VOC NA	METALS Exp.	OTHER (SPECIFY) Field Exp	OTHER (SPECIFY) SUOC
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR			
BACKFILLED		Paul Alkema			
LOCATION SKETCH/COMMENTS see sketch page 131 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 6-2

234

6-2

INSPECTOR

Paul Akema

SHEET

10 of 1

HOLE NO

6-2

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 6-3	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL WA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8. HOLE LOCATION See page 131				
			9. SURFACE ELEVATION NA				
			10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		☒ DISTURBED		☐ UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
		NA		Granide Exp.		Field Exp. NA	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
				barbwire		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS see sketch page 131, log book 6 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 6-3	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 5-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION See sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA	METALS 1 Canister	OTHER (SPECIFY) Exp.	OTHER (SPECIFY) Fixed Exp. NA
		BACKFILLED	MONITORING WELL	OTHER (SPECIFY) handmade	21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR Paul Alkerman			
LOCATION SKETCH/COMMENTS SCALE: 1"=30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 5-1

HOLE NUMBER 5-1

INSPECTOR

SHEET

ELEV
(A)

DEPT:
(B)

DESCRIPTION OF MATERIALS

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

Silty CLAY with some sand (cl), moist, strong brown (7.5YR 4/6)	A
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2A

NA

W 3065C

144

C-74

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

51

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 5-2									
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1									
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds											
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA											
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 3											
				9. SURFACE ELEVATION NA											
				10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98									
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA											
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA											
14. TOTAL DEPTH OF HOLE 1 ft				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA											
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA									
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 1 Cyanide		OTHER (SPECIFY) Exp.									
		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp.									
22. DISPOSITION OF HOLE						23. SIGNATURE OF INSPECTOR Paul P. [Signature]									
21. TOTAL CORE RECOVERY NA															
LOCATION SKETCH/COMMENTS See sketch page 3, logbook 7 SCALE:															
								PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 5-2	

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

5-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 5-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		9. SURFACE ELEVATION	
3" hand bucket auger saw/spoon		see page 3		NA	
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 4/23/98		
13. DEPTH DRILLED INTO ROCK NA			11. DATE COMPLETED 4/23/98		
14. TOTAL DEPTH OF HOLE 1 ft.			15. DEPTH GROUNDWATER ENCOUNTERED NA		
16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
VOC NA		METALS cyanide		OTHER (SPECIFY) Exp.	
BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		24. SIGNATURE OF DRILLER	
		kwonit		Paul Alkema	
LOCATION SKETCH/COMMENTS see sketch page 3, logbook 7 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 5-3

HOLE NUMBER 5-3

INSPECTOR

Paul Almeida

SHEET

104

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

5-3

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 58-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8. HOLE LOCATION See sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98
12. OVERBURDEN THICKNESS NA			13. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS ECyande	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL NA		21. TOTAL CORE RECOVERY % NA	
		OTHER (SPECIFY) bartonite		23. SIGNATURE OF INSPECTOR Paul Alperin	
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
X WBGS-054 used as reference point. Pallet Road E, West					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 58-1

[illegible]

SHEET 10 of 1

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Atkins

SHEET

ELEV
(A)

DEPTH:
(B)

DESCRIPTION OF MATERIALS
(C)

**FIELD SCREENING
RESULTS**
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(C)

CLAY with silt and
traces of sand (CL),
dark yellowish brown
(10YR 4/4).

WA

NA

WB0703

144.

C-80

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO 58-1

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 58-2	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 15			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1ft -		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC NA	METALS 6 Cyanide	OTHER (SPECIFY) EXP.	OTHER (SPECIFY) Field Exp.	OTHER (SPECIFY) NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR	
			benjamin	Paul Alkewer	
LOCATION SKETCH/COMMENTS see sketch page 15, logbook 7 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. 58-2	

HOLE NUMBER	58-2
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INSPECTOR

Paul Alkema

SHEET

1011

ELEV.
(A)

DEPTH
(B)

DESCRIPTION OF MATERIALS

**FIELD SCREENING
RESULTS**
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(B)

Silty CLAY (CL), moist,
dark yellowish brown
(10 YR 4/4).

NA

WA

W B0704

14

C-82

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO	
---------	--

58-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 58-3	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8 HOLE LOCATION		9 SURFACE ELEVATION	
3" hand bucket auger bowl/spoon		see page 15		NA	
12 OVERBURDEN THICKNESS NA		10 DATE STARTED 4/23/98		11 DATE COMPLETED 4/23/98	
13 DEPTH DRILLED INTO ROCK NA		15 DEPTH GROUNDWATER ENCOUNTERED NA		16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA	
14 TOTAL DEPTH OF HOLE 1 ft.		17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18 GEOTECHNICAL SAMPLES	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC NA	METALS Cyanide	OTHER (SPECIFY) Exp.	OTHER (SPECIFY) Field Exp.	OTHER (SPECIFY) NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) benzoinite	21. TOTAL CORE RECOVERY % NA	
LOCATION SKETCH/COMMENTS see sketch page 15, logbook 7			23. SIGNATURE OF INSPECTOR Paul Alkenc		
SCALE: SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. 58-3	

HOLE NUMBER 58-3

INSPECTOR

SHEET

1071

ELEV.
(A)

DEPT 11
(B)

DESCRIPTION OF MATERIALS

FIELD SCREENING RESULTS

GEOTECH SAMPLE
OR CORE BOX NO.

ANALYTICAL
SAMPLE NO.

REMARKS (C)

CLAY with traces
of silt (CL), moist,
olive brown (2.5Y 4/4)

WA

NA

WB0705

14.

C-84

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

58-3

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 40-1	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl / spoon		8 HOLE LOCATION see sketch			
		9 SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Cyanide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE		BACKFILLED NA		OTHER (SPECIFY) SVOC	
		MONITORING WELL		21. TOTAL CORE RECOVERY % NA	
		bentonite		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS			SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 40-1

2.

40-1

INSPECTOR

SHEET 1571

MARKS 4
(G)

DEPT
(B)

DESCRIPTION OF MATERIALS

(C)

FIELD SCREENING RESULTS

GEOTECH SAMPLE
OR CORE BOX NO

ANALYTICAL
SAMPLE NO.

REMARK
(G)

LA

८७

WB0700

14

C-86

HOLE NO.
40-1

40-

21

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 40-2	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 27			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		☒ DISTURBED		☐ UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC NA		METALS Cyanide	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR Paul Albema	
LOCATION SKETCH/COMMENTS see sketch page 27, log book 7 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 40-2

[illegible]

40-2

1071

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

Paul Hiken

FILED
(A)

DEPT
(B)

DESCRIPTION OF MATERIALS

(C)

FIELD SCREENING RESULTS

GEOTECH SAMPLE
OR CORE BOX NO.ANALYTICAL
SAMPLE NO.REMARKS
(G)

Silty CLAY (CL), moist,
yellowish brown
(10YR 5/6),

NA

W B076

WB-701

14-

C-88

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

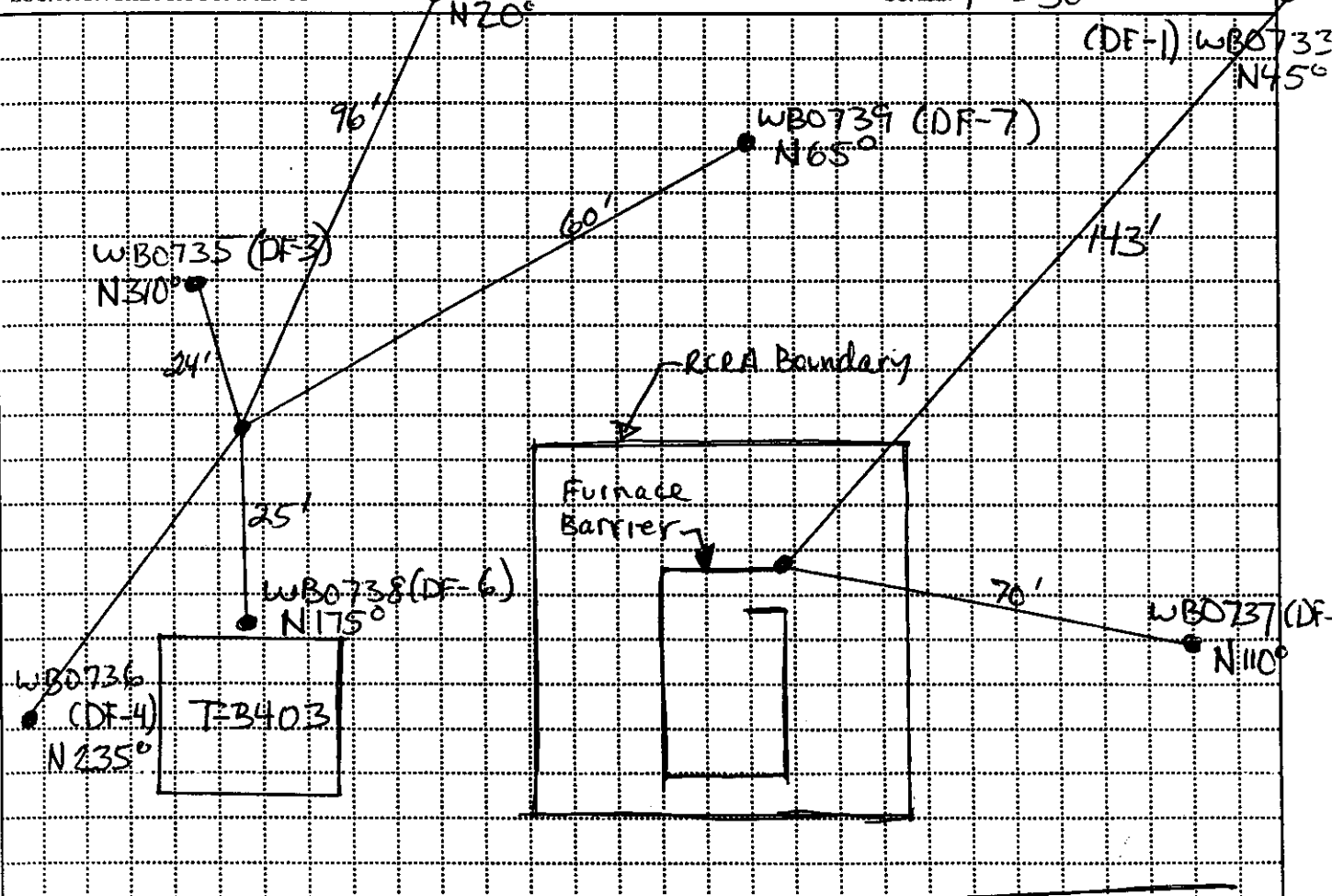
40-2

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 40-3	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 27		9. SURFACE ELEVATION NA	
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/25/98	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA	
14. TOTAL DEPTH OF HOLE 141				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Organics		OTHER (SPECIFY) Exp.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		21. TOTAL CORE RECOVERY % NA	
				23. SIGNATURE OF INSPECTOR Paul Alkeme			
LOCATION SKETCH/COMMENTS see sketch page 27, log book 7 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 40-3	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER DF-1	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8 HOLE LOCATION see sketch		
			9 SURFACE ELEVATION NA		
			10. DATE STARTED 4/23/98		
			11. DATE COMPLETED 4/23/98		
12 OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13 DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18 GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20 SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC NA		OTHER (SPECIFY) Field Exp	
		METALS F Cyanide		OTHER (SPECIFY) NA	
		OTHER (SPECIFY) Exp.		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE		BACKFILLED NA		23. SIGNATURE OF INSPECTOR Paul Alkema	
		MONITORING WELL bentonite			

LOCATION SKETCH/COMMENTS

SCALE: 1" = 30'



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.

DF-1

ENG FORM 5056-R, AUG 94

Pallet Road D, West

(Proponent: CECW-EG)

WELL NUMBER	DF-1
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INSPECTOR

SHEET

ELEV.
(A)

DEPTH (B)

DESCRIPTION OF MATERIALS

FIELD SCREENING
RESULTS
(1)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

144

Silty CLAY with traces
of sand (CL), moist
dark yellowish brown
(10YR 4/4)

NA

W A

W B0733

C-92

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

DF-1

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER DF-2	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 39			
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Gyaxide		OTHER (SPECIFY) Exp.	
		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY NA	
				23. SIGNATURE OF INSPECTOR Tentonite		Paul Alkerman	
LOCATION SKETCH/COMMENTS see sketch page 39, log book 7 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. DF-2	

WHEEL NUMBER	DF-2
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INSPECTOR

SECRET

DEPT
(B)

DESCRIPTION OF MATERIALS

(C)

**FIELD SCREENING
RESULTS**
(U)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)REMARKS
(G)

Silty CLAY with trace amounts of sand and trace amounts of metal fragments (CL), moist, dark yellowish brown (10YR 3/4)

NA

NA

W 60734

14

C-94

HOLE NO

DF-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER DF-3	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon		8 HOLE LOCATION See page 39			
		9 SURFACE ELEVATION NA			
		10. DATE STARTED 4/23/98		11. DATE COMPLETED 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14 TOTAL DEPTH OF HOLE 1 ft		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED ☒		UNDISTURBED ☒	
		NA		NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA	METALS Exp.	OTHER (SPECIFY) Field Exp	OTHER (SPECIFY) NA
		BACKFILLED	MONITORING WELL	21. TOTAL CORE RECOVERY % NA	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR Paul Altkemper			
LOCATION SKETCH/COMMENTS see sketch page 39, logbook 7 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. DF-3

5

DF-3

INSPECTOR

Paul Alkner

SHEET

1571

HOLE NO

DF-3

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER DF4	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Ground		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8 HOLE LOCATION see page 39		
			9 SURFACE ELEVATION NA		
			10. DATE STARTED 4/23/98		
			11. DATE COMPLETED 4/23/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		OTHER (SPECIFY) Exp.	
		METALS E. Canide		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE		BACKFILLED NA		21. TOTAL CORE RECOVERY NA	
		MONITORING WELL beiswarte		23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS see sketch page 39, log book 7 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. DF-4

[illegible]

SHEET 101

HOLE NO DF-4

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER DF-5		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR WA			SHEET 1 OF 1 SHEETS		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Winklepeck Burning Grounds				
5. NAME OF DRILLER WA				6. MANUFACTURERS DESIGNATION OF DRILL WA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" hand bucket auger bowl/spoon		8. HOLE LOCATION see page 39		9. SURFACE ELEVATION WA		
12. OVERBURDEN THICKNESS WA				15. DEPTH GROUNDWATER ENCOUNTERED WA				
13. DEPTH DRILLED INTO ROCK WA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED WA				
14. TOTAL DEPTH OF HOLE 1 ft.				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) WA				
18. GEOTECHNICAL SAMPLES		DISTURBED WA		UNDISTURBED WA		19. TOTAL NUMBER OF CORE BOXES WA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC WA		METALS Granite		OTHER (SPECIFY) Exp.		21. TOTAL CORE RECOVERY WA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR Paul D. Alkema		
LOCATION SKETCH/COMMENTS See sketch on page 39, logbook-7 SCALE:								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. DF-5	

HTRW DRILLING LOG	HOLE NUMBER DF-5
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HOLE NUMBER DF-5

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

SHEET

141

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

DF-5

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR		DF-6	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation		4. LOCATION		SHEET 1 OF 1	
5. NAME OF DRILLER		6. MANUFACTURERS DESIGNATION OF DRILL		1	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION		2	
12. OVERBURDEN THICKNESS		10. DATE STARTED		11. DATE COMPLETED	
13. DEPTH DRILLED INTO ROCK		15. DEPTH GROUNDWATER ENCOUNTERED		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED	
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		19. TOTAL NUMBER OF CORE BOXES	
18. GEOTECHNICAL SAMPLES		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR		24. SCALE	
LOCATION SKETCH/COMMENTS					

HTRW DRILLING LOG

HOLE NUMBER DF-6

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR Paul A. Kemo

SHEET 101

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	8" 1ft	Sandy CLAY with silt (CL), moist, olive brown (2.5 Y 4/4) slag	NA	NA	WB0738	refused at 10" at all 3 holes on slag

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

DF-6

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER DF-7		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds					
5. NAME OF DRILLER WA			6. MANUFACTURERS DESIGNATION OF DRILL NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand bucket auger bowl/spoon			8. HOLE LOCATION see page 39					
			9. SURFACE ELEVATION WA					
			10. DATE STARTED 4/23/98			11. DATE COMPLETED 4/23/98		
12. OVERBURDEN THICKNESS WA			15. DEPTH GROUNDWATER ENCOUNTERED NA					
13. DEPTH DRILLED INTO ROCK WA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED WA					
14. TOTAL DEPTH OF HOLE 1 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) WA					
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS 4 Cranido		OTHER (SPECIFY) Exp.		21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) Bentonite		23. SIGNATURE OF INSPECTOR Paul Alkema
LOCATION SKETCH/COMMENTS see sketch page 39, logbook 7 SCALE:								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. DF-7	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 58-4	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION 5^{m.c.} 120198 WBG			
3" HANDBUCKET AUGER		9. SURFACE ELEVATION NA			
SS Baux / SPOON		10. DATE STARTED 26 APR 98		11. DATE COMPLETED 26 APR 98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1.0		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA%	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR	
		MONITORING WELL		Benjamin H	
		OTHER (SPECIFY)			
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. 58-4	

9

58-4

INSPECTOR

1 of 1

A vertical ruler with a scale from 0 to 10 centimeters. The ruler is marked with millimeters and labeled with centimeters. The scale starts at 0 at the bottom and goes up to 10 at the top.

HOLE NO.

58-4

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 58-5	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" HAND BUCKET AUGER			8. HOLE LOCATION SEE SKETCH P. 67		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 26 APR 98		11. DATE COMPLETED 26 APR 98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1.0			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS 4/10/98	OTHER (SPECIFY) EXP.
				FIELD EXP	OTHER (SPECIFY) NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	OTHER (SPECIFY) Bentonite
				23. SIGNATURE OF INSPECTOR Mato C. Chougar	
LOCATION SKETCH/COMMENTS			SCALE: NA		
SEE SKETCH ON PAGE 67 LOGBOOK #2 HOLE # 58-4					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 58-5

HOLE NUMBER 605

605

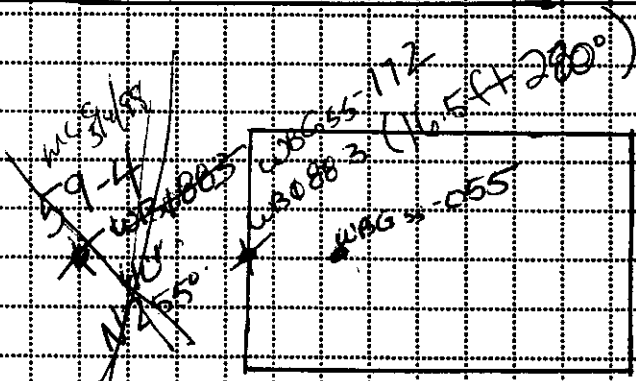
PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

SHEET

10f

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1.0	CLAY with some sand and traces of gravel Olive Brown 2.54 H3 Moist	NA	NA	WB0002	Glass in sample
	Bottom of Boring 1.0 ft.					

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 59-24		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG					
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" HAND BULLET AUGER 55 Bowl / Spoon			8. HOLE LOCATION WBG					
			9. SURFACE ELEVATION NA					
			10. DATE STARTED 26 APR 98			11. DATE COMPLETED 26 APR 98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA					
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA					
14. TOTAL DEPTH OF HOLE 1-0 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA					
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY % NA
				ECN		EXP.		
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		
				Britanite		23. SIGNATURE OF INSPECTOR Mark C Clough		
LOCATION SKETCH/COMMENTS								
SCALE: 1" = 30'								
PALLET ROAD, WEST  *PAD 59 59-5 WBG 0884 25' 180°								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. 59-24	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 59-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger 55 Boat Spoon			8. HOLE LOCATION See Sketch p. 75		
			9. SURFACE ELEVATION NA		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1.0 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
				OTHER (SPECIFY) EXP.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				Bentonite	
				23. SIGNATURE OF INSPECTOR M. C. Clough	
LOCATION SKETCH/COMMENTS					
SCALE:					
See Sketch Page 75 Logbook 2 Hole 59-3					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 59-3

HOLE NUMBER 59-5

59-5

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

SHEET 1 of 1

1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		CLAY with some sand and traces of gravel (G) Olive Brown 2.5 & 4/4.	NA	NA	WB 10004 2	
	1.0	Bottom of Boring 1.0 ft.				

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

59-5

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 60-5	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger 55 Bowl/Spoon			8. HOLE LOCATION See Sketch		
			9. SURFACE ELEVATION NA		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1.0			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR Mac Clough	
		MONITORING WELL			
		Bentonite			
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 60-5

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 60-6		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1 SHEETS		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation					4. LOCATION WBG			
5. NAME OF DRILLER NA					6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Hand Bucket Auger SS Bowl / Spoon					8. HOLE LOCATION See sketch p. 83			
					9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA					10. DATE STARTED 26 APR 98			
					11. DATE COMPLETED 26 APR 98			
13. DEPTH DRILLED INTO ROCK NA					15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 1.0 ft					16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES					19. TOTAL NUMBER OF CORE BOXES NA			
		DISTURBED NA		UNDISTURBED NA				
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY
				ECN		EXP.		NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR		
				Bentonite		Mod C Clough		
LOCATION SKETCH/COMMENTS					SCALE:			
See Sketch Page 83 Logbook #2 Hole 60-5								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. 60-6	

HOLE NUMBER	60-6
SHEET	1 of 1

INSPECTOR Mark Clarys

SHEET 10 of 1

ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		Sandy CLAY with some Gravel (CL). Moist Gravel is mostly large ~ 1/2 inch diameter 1.0' Very Dark Green Band OYR 3/2 1.0' Bottom of Boring	NA	NA	WB 0886 a	

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO. 64-6

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 61-5	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger SS Bowl / Spoon			8. HOLE LOCATION See Sketch		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1.0			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
22. DISPOSITION OF HOLE		VOC ECN		OTHER (SPECIFY) EXP.	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Bentonite	
23. SIGNATURE OF INSPECTOR Mark Clough		24. LOCATION SKETCH/COMMENTS		SCALE: 1" = 30'	
PALLET ROAD E, WEST WBG-059 PAD 61 61-6 WBG888 (83' 150")					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. 61-5

2

61-

INSPECTOR

lot 1

A vertical ruler with markings from 0 to 10 centimeters. The markings are in millimeters, with larger numbers every centimeter. The ruler is oriented vertically, with the 0 mark at the bottom and the 10 mark at the top.

111-

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 61-6	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBG			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION See sketch p. 91				
3" Bucket Hand Auger SS Bowl Spoon			9. SURFACE ELEVATION NA				
			10. DATE STARTED 26 APR 98		11. DATE COMPLETED 26 APR 98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1.0 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
				EIN		EXP	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
				Bentonite		21. TOTAL CORE RECOVERY NA%	
23. SIGNATURE OF INSPECTOR Mac C Close							
LOCATION SKETCH/COMMENTS							
SCALE: See Sketch on PAGE 91 Logbook #2 							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. 61-6	

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WB66-168		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Ground					
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand auger bucket 1 inch i spur			8. HOLE LOCATION see sketch					
			9. SURFACE ELEVATION NA					
			10. DATE STARTED 4/26/98			11. DATE COMPLETED 4/29/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA					
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA					
14. TOTAL DEPTH OF HOLE 1 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA					
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS /CN		OTHER (SPECIFY) EXP.		21. TOTAL CORE RECOVERY %
				X		Field EXP		
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR [Signature]		
LOCATION SKETCH/COMMENTS						SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WB66-168		

HOLE NUMBER **WEG-16A**

HOLE NUMBER **WEG-16A**

SHEET 2-4381

SHEET 2-4581

[illegible]

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO **WBGcc-16E**

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER 174 WBGS-160	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger			8. HOLE LOCATION See Sketch p. 67		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 4 MAY 98		11. DATE COMPLETED 4 MAY 98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1.10 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)
		ECN	EXP.	FIELD EXP.	
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY NA %	
			Bentonite	23. SIGNATURE OF INSPECTOR Moret Clough	
LOCATION SKETCH/COMMENTS					
See Sketch Page 67 Logbook #7					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. 174 WBGS-160	

HTRW DRILLING LOG

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

HOLE NUMBER

SHEET

ELEV
(A)

DEPTH
(B)

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)

REMARKS
(G)

CLAY with sand
Moist. olive Brown
Glass Fragments

NA

NA

WB0881

Bottom of boring 1.0 ft

C-124

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

WB0881

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER 171 WBG55-Hot SHEET 1 OF 1	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR NA			
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBCG			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT				8. HOLE LOCATION See Sketch p. 67			
3" Bucket Hand Auger SS Bowl/Spoon				9. SURFACE ELEVATION NA			
				10. DATE STARTED MAY 98		11. DATE COMPLETED 7 MAY 98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1.0 ft				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
				SCD		EXP	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
						23. SIGNATURE OF INSPECTOR	
						M. C. Clough	
LOCATION SKETCH/COMMENTS							
SCALE:							
SEE SKETCH P. 67 Logbook 7							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WBG55-171	

HTRW DRILLING LOG

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

HOLE NUMBER

SHEET

ELEV
(A)

DEPTH
(B)

DESCRIPTION OF MATERIALS
(C)

FIELD SCREENING
RESULTS
(D)

GEOTECH SAMPLE
OR CORE BOX NO.
(E)

ANALYTICAL
SAMPLE NO.
(F)

REMARKS
(G)

CLAY with some
sand. Dark yellow
Brown. Moist.
Glass Fragments

NA

NA

WB0802

Bottom of boring 1-Φ A.

C-126

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

WBG55-76T 171

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WBG_{SS}-172		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1 SHEETS		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBG				
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger SS Bowl Spoon				8. HOLE LOCATION See sketch p. 75				
				9. SURFACE ELEVATION NA				
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 4 MAY 98				
				11. DATE COMPLETED 4 MAY 98				
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA				
14. TOTAL DEPTH OF HOLE 1.0				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
18. GEOTECHNICAL SAMPLES				DISTURBED NA		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY NA %
				ECN		EXP.		
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR <i>Mark C. Clough</i>
						Bentonite		
LOCATION SKETCH/COMMENTS								SCALE:
See Sketch Page 75								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. WBG_{SS}-172	

[illegible]

HOLE NO

OLE NO
UBG755-172

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WBG55-173	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBG			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION See sketch p. 83					
3" Bucket Hand Auger SS Bowl Spoon		9. SURFACE ELEVATION NA					
		10. DATE STARTED 4 MAY 98			11. DATE COMPLETED 4 MAY 98		
		12. OVERBURDEN THICKNESS NA					
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 1.0 ft.				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES NA		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
				ECN		END	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
				W Bentonite		23. SIGNATURE OF INSPECTOR Paul E. Clough	
LOCATION SKETCH/COMMENTS							
SCALE:							
See Page 83, Logbook 7							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WBG55-173	

HOLE NUMBER
WBGSs-173

SHEET
1 of 1

INSPECTOR

HOLE NUMBER
WBGSs-173

SHEET
1 of 1

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		CLAY with trace sand (CL) Moist. Brown.	NA	NA	WB0885	Nails and Screws present.
	1.0	Bottom of boring 1.0 ft				

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

HOLE NO
WBGSS-173

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WBGSS-174		
1 COMPANY NAME SAIC			2 DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			LOCATION WBG					
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA					
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger 55 Bowl Spoon			8 HOLE LOCATION See Sketch p. 83					
			9 SURFACE ELEVATION NA					
12 OVERBURDEN THICKNESS NA			10. DATE STARTED 4 MAY 98					
			11. DATE COMPLETED 4 MAY 98					
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED NA					
14. TOTAL DEPTH OF HOLE 1.0 ft			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA					
18. GEOTECHNICAL SAMPLES NA			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		OTHER (SPECIFY)	
					3 CN		EXP.	
22. DISPOSITION OF HOLE			BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
							Field NP	
					Reconite		23. SIGNATURE OF INSPECTOR Ma e Clough	
LOCATION SKETCH/COMMENTS See Sketch p. 83 Logbook 7 SCALE:								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. WBGSS-174	

[illegible]

HOLE NO
PBG-174

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG55-175	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION See Sketch			
3" Bucket/Hand Auger SS Bowl/Spoon		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4 MAY 98		11. DATE COMPLETED 4 MAY 98	
		12. OVERBURDEN THICKNESS NA			
13. DEPTH DRILLED INTO ROCK NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 1.0 ft		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		18. GEOTECHNICAL SAMPLES NA			
DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)
		ECN	EXP.	Field EXP	
21. TOTAL CORE RECOVERY	NA				
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR	
			Bentonite	Yancho & Clough	
LOCATION SKETCH/COMMENTS					
SCALE: Not to Scale					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. WBG55-175

21

WBGSS-175

10f)

INSPECTOR

C-134

HOLE NO

WBGSS-175

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WBGss-176		
1 COMPANY NAME SAIC			2 DRILL SUBCONTRACTOR NA			SHEET 6 OF 7		
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation					4 LOCATION WBG			
5 NAME OF DRILLER NA					6. MANUFACTURERS DESIGNATION OF DRILL NA			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger SS Bowl / Spoon					8. HOLE LOCATION See Sketch			
					9 SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA					15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA					16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1.0 ft					17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES NA			DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		21. TOTAL CORE RECOVERY % NA	
					OTHER (SPECIFY) EXP.		OTHER (SPECIFY) FIELD EXP	
22. DISPOSITION OF HOLE			BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR Max Clough	
					OTHER (SPECIFY) Bentonite			
LOCATION SKETCH/COMMENTS SCALE: Not to Scale								
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. WBGss-176	

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HOLE NUMBER
WBGS-176

SHEET 1 of 1

INSPECTOR

HOLE NO

HOLE NO
102600-176

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER	
1 COMPANY NAME SAIC			2 DRILL SUBCONTRACTOR			HOLE NO. WBGss-177	
			NA			SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4 LOCATION WBG			
5 NAME OF DRILLER NA				6 MANUFACTURERS DESIGNATION OF DRILL NA			
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT				8 HOLE LOCATION See Sketch p 127			
3" Bucket Hand Auger SS Bowl/Spoon				9 SURFACE ELEVATION NA			
				10 DATE STARTED 4 MAY 98 11. DATE COMPLETED 4 MAY 98			
12 OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14 TOTAL DEPTH OF HOLE 1.0 ft				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES NA		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
				& CN		EXP.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)	
				Bentonite		23. SIGNATURE OF INSPECTOR M. E. Clough	
LOCATION SKETCH/COMMENTS See Sketch Page 127				SCALE:			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WBGss-177	

34

HOLE NUMBER
L.R.G. 55-177

SHEET 1 of 1

INSPECTOR

Mat Clavin

HOLE NO.

HOLE NO. (1) RG 5-177

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG55-178	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION WBG		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" Bucket Hand Auger SS Bowl / Spoon			8 HOLE LOCATION See Sketch		
12 OVERBURDEN THICKNESS NA			15 DEPTH GROUNDWATER ENCOUNTERED NA		
13 DEPTH DRILLED INTO ROCK NA			16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14 TOTAL DEPTH OF HOLE 1.0 ft			17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18 GEOTECHNICAL SAMPLES NA		DISTURBED		UNDISTURBED	
19 TOTAL NUMBER OF CORE BOXES NA		20 SAMPLES FOR CHEMICAL ANALYSIS		21 TOTAL CORE RECOVERY % NA	
VOC		METALS		OTHER (SPECIFY)	
		ECN		EXP.	
22. DISPOSITION OF HOLE		MONITORING WELL		23. SIGNATURE OF INSPECTOR	
BACKFILLED		Bentonite		Mark C. Clark	

LOCATION SKETCH/COMMENTS SCALE: **Not to Scale**

Pallet Road E. East

WBG55-071

WBG0729 (79' 160°)

WBG55-178

5 ft from WBG55-178 at 180°

PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP		HOLE NO. WBG55-178
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HTRW DRILLING LOG		DISTRICT Louisville Corps				HOLE NUMBER WB655-179	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA				SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WB6			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION see sketch pg 135					
3" bucket hand auger		9. SURFACE ELEVATION NA					
SS bowl / spoon		10. DATE STARTED 5 MAY 98		11. DATE COMPLETED 5 MAY 98			
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1.0 FT				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES NA		DISTURBED		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
				CN		EXP	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR James M. Obay	
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WB655-179	

15

HOLE NUMBER
WB674-179

SHEET 1 of 1

INSPECTOR

Jawan M. Obloy

HOLE NO

WBGS - 179

HTRW DRILLING LOG				DISTRICT Louisville Corps		HOLE NUMBER WB655-187	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Pool 37 WBG			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Brown Pos Aug 6" OD 3" Mand aug 1 1/2" spn				8. HOLE LOCATION SEE sketch on page 2			
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 5/8/98		11. DATE COMPLETED 5/8/98	
12. OVERBURDEN THICKNESS NA				13. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				14. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 4-ft bgs				15. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS CEW X		OTHER (SPECIFY) Exp- Field Exp	
						21. TOTAL CORE RECOVERY % NA	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR Shel D. L.	
LOCATION SKETCH/COMMENTS				SCALE:			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WB655-187	

SURFACE WATER/SEDIMENT LOGS

WBG-sd-156

HTRW DRILLING LOG				DISTRICT		HOLE NUMBER	
1. COMPANY NAME SAIC				USACE LOUISVILLE		KD W28/98	
3. PROJECT RVAAP Phase II RI				2. DRILL SUBCONTRACTOR NA		HOLE NUMBER SED-1	
5. NAME OF DRILLER NA				4. LOCATION WBG		SHEET 1 OF 1	
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS Bowl/Spoon				6. MANUFACTURERS DESIGNATION OF DRILL NA		8. HOLE LOCATION See sketch	
12. OVERBURDEN THICKNESS NA				9. SURFACE ELEVATION NA		10. DATE STARTED 27 APR 98	
13. DEPTH DRILLED INTO ROCK NA				11. DATE COMPLETED 27 APR 98		15. DEPTH GROUNDWATER ENCOUNTERED NA	
14. TOTAL DEPTH OF HOLE NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA	
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		XEN MONITORING WELL		EXP. OTHER (SPECIFY)	
		NA		NA		NA	
						21. TOTAL CORE RECOVERY % NA	
						23. SIGNATURE OF INSPECTOR Mae Clough	
LOCATION SKETCH/COMMENTS: Sediment collected from influent end; surface water from near the outfall.							
SCALE: Not to scale							
PROJECT RVAAP Phase II R.I.				C-148		HOLE NO. WBGsd-156	
ENG FORM 5056-R, AUG 94						KD (Proponent: CECW-EG)	

2

WBGsd-155

HTRW DRILLING LOG		DISTRICT		KID		HOLE NUMBER	
1. COMPANY NAME: SAIC		USACE Louisville		4/28/95		WBGsd-155	
2. DRILL SUBCONTRACTOR: NA						SHEET 2 OF 1	
3. PROJECT: RUAP PHASE II RI		4. LOCATION: WBG					
5. NAME OF DRILLER: NA		6. MANUFACTURERS DESIGNATION OF DRILL: NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT: 55 Bowt / Spoon		8. HOLE LOCATION: See sketch					
		9. SURFACE ELEVATION: NA					
		10. DATE STARTED: 27 APR 98		11. DATE COMPLETED: 27 APR 98			
12. OVERBURDEN THICKNESS: NA		15. DEPTH GROUNDWATER ENCOUNTERED: NA					
13. DEPTH DRILLED INTO ROCK: 0.5 mfc 4/28/98 NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED: NA					
14. TOTAL DEPTH OF HOLE: 0.5 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY): NA					
18. GEOTECHNICAL SAMPLES		DISTURBED: X		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES: NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC: X		METALS: E.C.N.		OTHER (SPECIFY): EXP.	
22. DISPOSITION OF HOLE		BACKFILLED: NA		MONITORING WELL: NA		OTHER (SPECIFY): NA	
		21. TOTAL CORE RECOVERY: NA		23. SIGNATURE OF INSPECTOR: Mac Clark			
LOCATION SKETCH/COMMENTS							
SCALE: Not to Scale							
PALLET ROAD E. EAST PAD 10 PALLET ROAD D. E. Approx 15 ft from Road WBGsd-155							
PROJECT: RUAP PHASE II RI		C-149		KID 4/28/95		HOLE NO. WBGsd-155	
						SED-2	

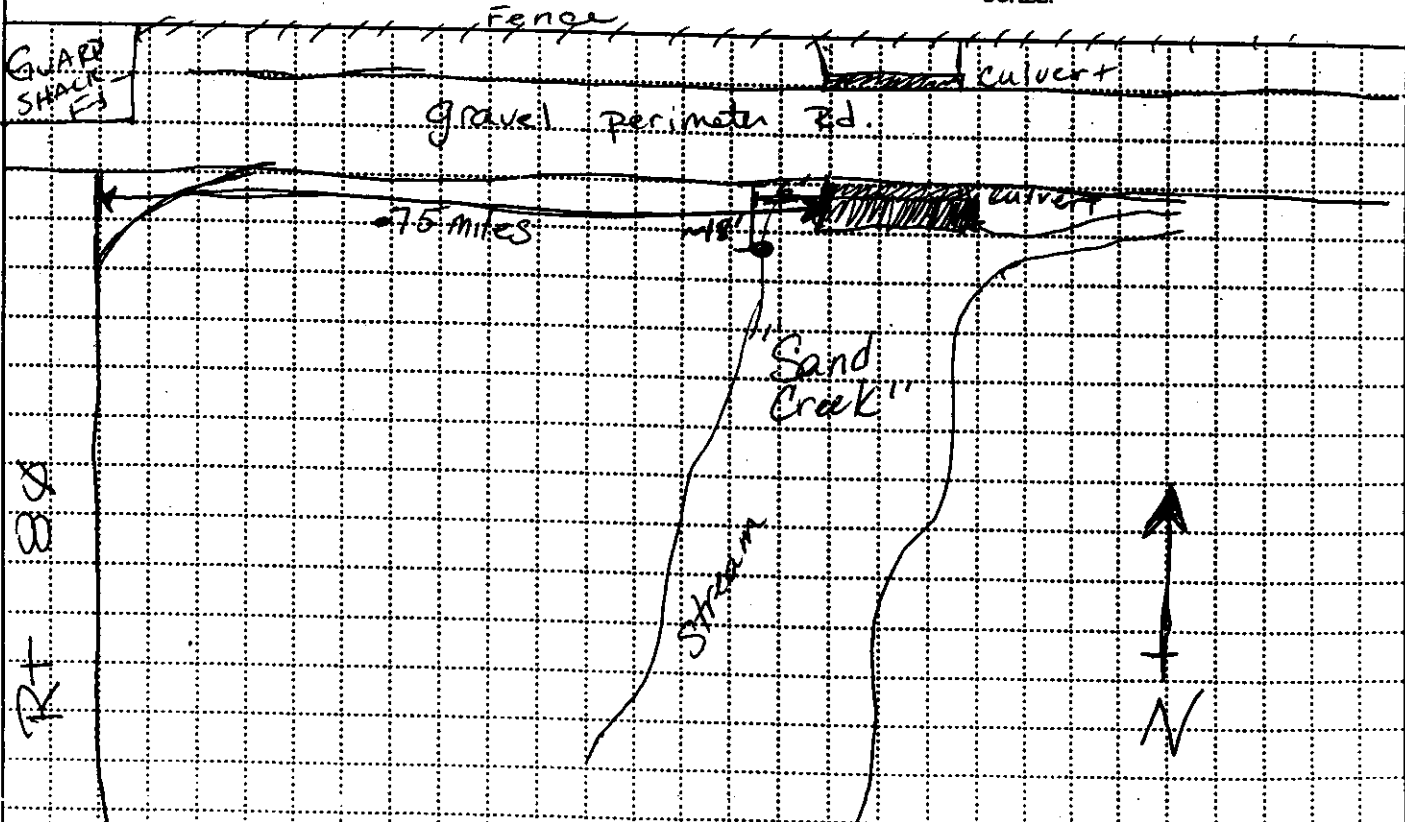
HTRW DRILLING LOG			DISTRICT USACE LOUISVILLE		KD	HOLE NUMBER WB9SD-154 ³⁰
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA		4/28/98 SHEET 3 OF 3	
3. PROJECT RVAAP PHASE II RI			4. LOCATION WBC			
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT SS PWT / SPOON			8. HOLE LOCATION See sketch			
			9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 27 APR 98		11. DATE COMPLETED 27 APR 98	
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 0.5 ft			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES			19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS			DISTURBED ☒		UNDISTURBED	
			VOC		METALS	
			OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE			BACKFILLED		MONITORING WELL	
			NA		NA	
			OTHER (SPECIFY)		OTHER (SPECIFY)	
			NA		NA	
			23. SIGNATURE OF INSPECTOR Mat Clough		21. TOTAL CORE RECOVERY NA	
LOCATION SKETCH/COMMENTS						
SCALE: Not to Scale						
PROJECT RVAAP PHASE II RI			C-150		HOLE NO. WB9SD-154	
ENG FORM 5056-R, AUG 94			KD 4/28/98		SED-3	
(Proponent: CECW-EG)						

HTRW DRILLING LOG		DISTRICT		HOLE NUMBER	
1. COMPANY NAME SAC		Louisville		AS Sw / sd 003	
2. DRILL SUBCONTRACTOR NA				SHEET 1 OF 1	
3. PROJECT Phase II R1		4. LOCATION Ravenna Arsenal			
5. NAME OF DRILLER N/A		6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT S.S. bowls & spoons		8. HOLE LOCATION See map			
		9. SURFACE ELEVATION N/A			
		10. DATE STARTED 4-23-98		11. DATE COMPLETED 4-23-98	
12. OVERBURDEN THICKNESS N/A		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK N/A		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 0-1/2'		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR	
		MONITORING WELL		SMITH	
LOCATION SKETCH/COMMENTS					
SCALE: none					
PROJECT RVAAP		C-151		HOLE NO. Sw / sd 003	

HTRW DRILLING LOG		DISTRICT <i>Louisville</i>		HOLE NUMBER <i>SW/SD 002</i>	
1. COMPANY NAME <i>SAIC</i>		2. DRILL SUBCONTRACTOR <i>NA</i>		SHEET <i>1</i> OF <i>1</i>	
3. PROJECT <i>Ravenna Phase II RI</i>		4. LOCATION <i>Ravenna Arsenal</i>			
5. NAME OF DRILLER <i>N/A</i>		6. MANUFACTURERS DESIGNATION OF DRILL <i>NA</i>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <i>SS bowls & scoops</i>		8. HOLE LOCATION <i>0.75 mi EAST of Guard Shack F-5 on gravel perimeter</i>			
		9. SURFACE ELEVATION <i>N/A</i>			
		10. DATE STARTED <i>4-23-98</i>		11. DATE COMPLETED <i>4-23-98</i>	
12. OVERBURDEN THICKNESS <i>N/A</i>		15. DEPTH GROUNDWATER ENCOUNTERED <i>N/A</i>			
13. DEPTH DRILLED INTO ROCK <i>N/A</i>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <i>N/A</i>			
14. TOTAL DEPTH OF HOLE <i>N/A</i>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <i>N/A</i>			
18. GEOTECHNICAL SAMPLES <i>yes</i>		DISTURBED ☒		UNDISTURBED	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY) <i>SVOC'S</i>	
		METALS <i>CN</i>		OTHER (SPECIFY) <i>Field Exp</i>	
22. DISPOSITION OF HOLE		BACKFILLED		OTHER (SPECIFY)	
		MONITORING WELL		23. SIGNATURE OF INSPECTOR <i>Heather Smith</i>	
				21. TOTAL CORE RECOVERY % <i>N/A</i>	

LOCATION SKETCH/COMMENTS

SCALE:

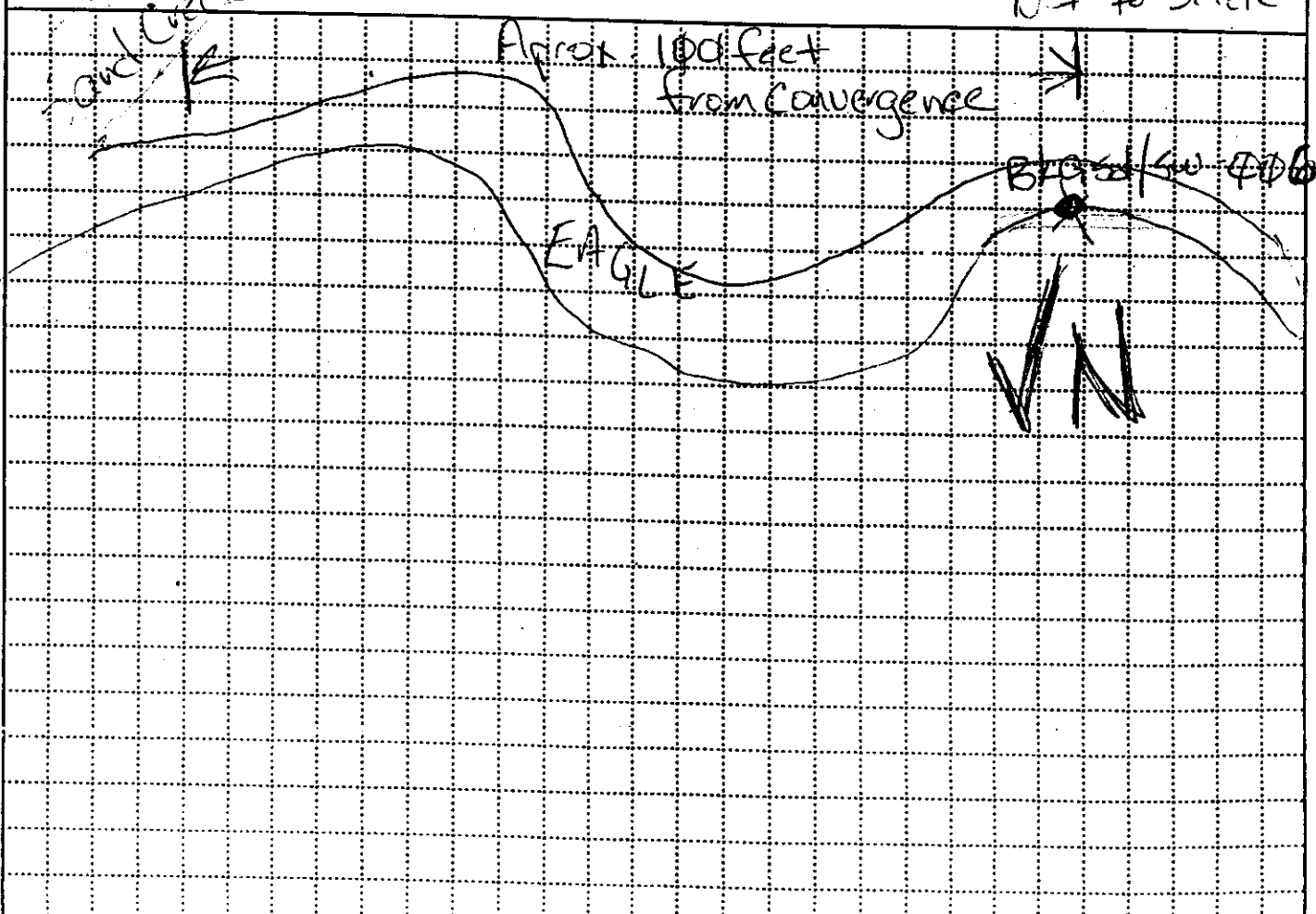


PROJECT <i>RUAAP</i>	C-152	HOLE NO. <i>SW/SD 002</i>
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HTRW DRILLING LOG		DISTRICT USACE Louisville		HOLE NUMBER BKGsw-sd 406	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RVAAP Phase II RI		4. LOCATION Background/Eagle Creek			
5. NAME OF DRILLER NA		6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 55 Bowl/Scoop		8. HOLE LOCATION See Sketch			
		9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA		10. DATE STARTED 27 APR 98		11. DATE COMPLETED 27 APR 98	
13. DEPTH DRILLED INTO ROCK NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 0.5 ft		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS NA	
		OTHER (SPECIFY) FIELD ENP		OTHER (SPECIFY) SVOCs	
22. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA	
		OTHER (SPECIFY) NA		OTHER (SPECIFY) NA	
		21. SIGNATURE OF INSPECTOR MacClough			
21. TOTAL CORE RECOVERY % NA					

LOCATION SKETCH/COMMENTS

SCALE: **N + to Scale**



PROJECT RVAAP PHASE II R.I.		C-153	HOLE NO. BKGsw-sd-406
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HTRW DRILLING LOG			DISTRICT			HOLE NUMBER	
1. COMPANY NAME SAIC			USACE Louisville			BKG 50/sw-001	
3. PROJECT RUAAP Phase II RI			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
5. NAME OF DRILLER NA			4. LOCATION RUAAP Perimeter				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 55 Bowl / SCORP			6. MANUFACTURERS DESIGNATION OF DRILL NA				
			8. HOLE LOCATION See sketch				
			9. SURFACE ELEVATION NA				
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 27 APR 98		11. DATE COMPLETED 27 APR 98		
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
14. TOTAL DEPTH OF HOLE NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
18. GEOTECHNICAL SAMPLES			DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE			BACKFILLED NA		MONITORING WELL NA	OTHER (SPECIFY) NA	21. TOTAL CORE RECOVERY NA
							23. SIGNATURE OF INSPECTOR <i>Mat Cless</i>
LOCATION SKETCH/COMMENTS							
SCALE: Not to Scale							
PROJECT RUAAP Phase II RI			C-154			HOLE NO. BKG 50/sw-001	

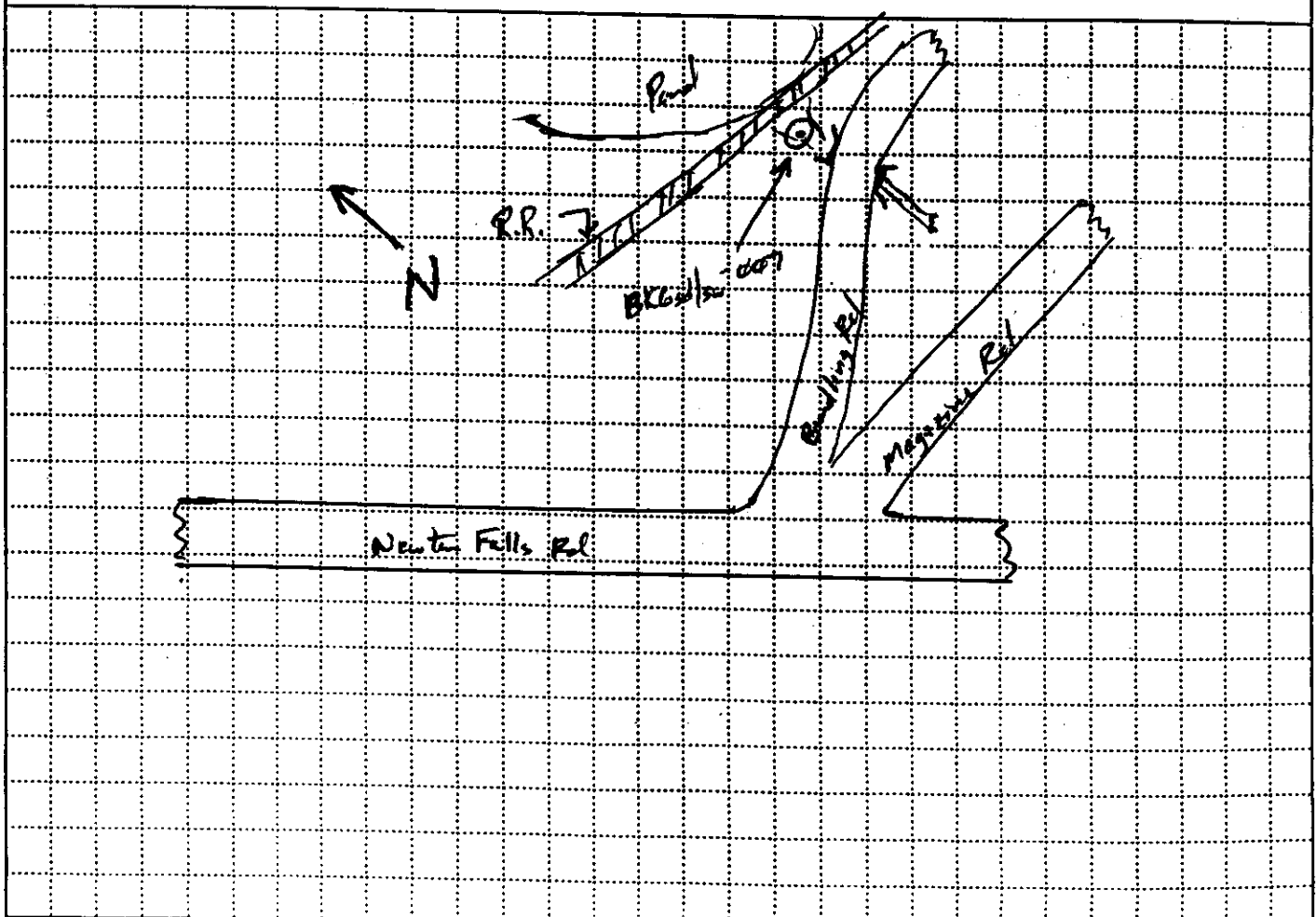
HTRW DRILLING LOG				DISTRICT USACE Louisville		HOLE NUMBER BKG 50150-004	
1. COMPANY NAME SAIC				2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT RVAAP Phase II RI				4. LOCATION RVAAP - Background 004			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 55 Bowl / Scoop				8. HOLE LOCATION See sketch			
				9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 27 APR 98		11. DATE COMPLETED 27 APR 98	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE 0.5				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
18. GEOTECHNICAL SAMPLES				19. TOTAL NUMBER OF CORE BOXES NA		21. TOTAL CORE RECOVERY % NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		DISTURBED X VOC		UNDISTURBED NA		OTHER (SPECIFY) NA	
		METALS ECN		OTHER (SPECIFY) FIELD ETD.		OTHER (SPECIFY) SUOC	
22. DISPOSITION OF HOLE		BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) NA	
				23. SIGNATURE OF INSPECTOR MacLaren			
LOCATION SKETCH/COMMENTS							
SCALE: Not to Scale							
PROJECT RVAAP				C-155		HOLE NO. BKG 50150-004	

HTRW DRILLING LOG				DISTRICT		HOLE NUMBER	
1. COMPANY NAME SAIC				USACE Louisville		BKG-005	
3. PROJECT RVAAP Phase II RI				2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
5. NAME OF DRILLER NA				4. LOCATION BKG			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT				6. MANUFACTURERS DESIGNATION OF DRILL NA			
55 Bore / SCUP				8. HOLE LOCATION See sketch			
				9. SURFACE ELEVATION NA			
12. OVERBURDEN THICKNESS NA				10. DATE STARTED 27 APR 98		11. DATE COMPLETED 27 APR 98	
13. DEPTH DRILLED INTO ROCK NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
14. TOTAL DEPTH OF HOLE NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED X		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC X		METALS SCN		OTHER (SPECIFY) FIELD EXP	
		BACKFILLED NA		MONITORING WELL NA		OTHER (SPECIFY) NA	
22. DISPOSITION OF HOLE						21. TOTAL CORE RECOVERY %	
						23. SIGNATURE OF INSPECTOR	
LOCATION SKETCH/COMMENTS							
SCALE: Not to Scale							
BKG 54/50-005 medium to coarse sand 1' under surf Gravel - rounded DUE EAST WEST OF FIELD AT PARKING AREA							
PROJECT RVAAP Phase II R.I.				C-156		HOLE NO. BKG 54/50-005	

HTRW DRILLING LOG				DISTRICT <u>SANJOHNS</u> <u>LOUISVILLE</u>		HOLE NUMBER <u>BKGW/sw-007</u>	
1. COMPANY NAME <u>SAIC</u>				2. DRILL SUBCONTRACTOR <u>NA</u>		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT <u>Phase II RI @ WBG i Background Inv.</u>				4. LOCATION <u>Background</u>			
5. NAME OF DRILLER <u>NA</u>				6. MANUFACTURERS DESIGNATION OF DRILL <u>NA</u>			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>bowl & spear</u>				8. HOLE LOCATION <u>see sketch</u>			
				9. SURFACE ELEVATION <u>NA</u>			
				10. DATE STARTED <u>5/8/96</u>		11. DATE COMPLETED <u>5/8/96</u>	
12. OVERBURDEN THICKNESS <u>NA</u>				15. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>			
13. DEPTH DRILLED INTO ROCK <u>NA</u>				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>			
14. TOTAL DEPTH OF HOLE <u>0.5' logs</u>				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED <u>NA</u>		UNDISTURBED <u>NA</u>		19. TOTAL NUMBER OF CORE BOXES <u>NA</u>	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC <u>F</u>		METALS <u>ECN</u>		OTHER (SPECIFY) <u>SWR</u>	
						OTHER (SPECIFY) <u>Field Exp.</u>	
22. DISPOSITION OF HOLE		BACKFILLED <u>X</u>		MONITORING WELL <u>NA</u>		OTHER (SPECIFY) <u>NA</u>	
						23. SIGNATURE OF INSPECTOR <u>NA</u>	
21. TOTAL CORE RECOVERY <u>NA</u>							

LOCATION SKETCH/COMMENTS

SCALE:



PROJECT <u>Phase II RI @ WBG i Background Inv.</u>		C-157	HOLE NO. <u>BKGW/sw-007</u>
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**SUBSURFACE SOIL
MAP AND CORE RECORDS**

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-1	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver - 5 3/4" drill 3" hand bucket auger bow/spoon			8. HOLE LOCATION See sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 4/24/98		11. DATE COMPLETED 4/24/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 6 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		☒ DISTURBED ☐ UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA	METALS Granite	OTHER (SPECIFY) Exp	OTHER (SPECIFY) Field Exp
22. DISPOSITION OF HOLE		BACKFILLED —	MONITORING WELL —	23. SIGNATURE OF INSPECTOR Paul Alkema	
21. TOTAL CORE RECOVERY % NA					
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
* WBGSS-071 used as reference point Pallet Road E, East					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-1

HTRW DRILLING LOG						HOLE NUMBER
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR <i>Paul Alkelma</i>		HOLE NUMBER <i>SB-1</i>	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	2"	angular gravel with silt and silt	NA	NA	NA	Done with Little Beaver, 5 3/4" drill
	1 ft.	CLAY with traces of sand (CL), clay is modelled, moist, yellowish brown (10YR 5/8)	NA	NA	NA	
	2 ft.	Sandy CLAY with traces of gravel (CL), clay is modelled, sand is poorly sorted, gravel is sub-rounded, moist, dark yellowish brown (10YR 4/4), on 4/24/98 3.0'-3.1' angular limestone cobble			WB#748	3" hand bucket auger
	3 ft.					
	4 ft.	SAA 4.0'-6.0': SAA but gravel consists of some angular shale		WB#749	WB#749	
	5 ft.					
	6 ft.	bottom of boring = 6.0'				
			C-162			

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER 8B-2			
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1			
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Winklepeck Burning Grounds						
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA						
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver, 5 3/4" drill 3" hand bucket auger bowl / spoon			8. HOLE LOCATION SA sketch						
			9. SURFACE ELEVATION NA						
			10. DATE STARTED 4/24/95			11. DATE COMPLETED 4/24/95			
12. OVERBURDEN THICKNESS NA			13. DEPTH GROUNDWATER ENCOUNTERED NA						
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA						
14. TOTAL DEPTH OF HOLE 5.0 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA						
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA		METALS Exp. NA		OTHER (SPECIFY) Field Exp. NA		21. TOTAL CORE RECOVERY NA %	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) bentonite		23. SIGNATURE OF INSPECTOR Paul Adkins	
LOCATION SKETCH/COMMENTS see sketch page 7, logbook 9A, SCALE: 1" = 30'									
Pallet Road E, East 55' WBGSS-068 WBGSS-069 SB-2 N 90° PAD 66 N * WBGSS-068 used as reference point									
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. SB-2			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-3	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation		4. LOCATION Winklepeck Burning Grounds			
5. NAME OF DRILLER NA		6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver, 5 1/4" drill 3" hand bucket auger bowl / Spoon		8. HOLE LOCATION see sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 4/24/98		11. DATE COMPLETED 4/24/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES	DISTURBED ☒	UNDISTURBED ☐	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC NA	METALS iGard	OTHER (SPECIFY) Exp.	OTHER (SPECIFY) Field Exp. S VOC	21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) bountards	23. SIGNATURE OF INSPECTOR Paul Adkerson	
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. SB-3	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-4	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver, 5 3/4 inch auger 3" hand bucket auger bowl/spoon		8 HOLE LOCATION see sketch			
		9 SURFACE ELEVATION NA			
		10. DATE STARTED 4/24/98		11. DATE COMPLETED 4/24/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 5.2 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED ☒		UNDISTURBED ☒	
		NA		NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
		NA		Field Exp.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
		NA		NA	
				23. SIGNATURE OF INSPECTOR Paul Alkema	
LOCATION SKETCH/COMMENTS					
SCALE: 1"=30'					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-4

HTRW DRILLING LOG						HOLE NUMBER
PROJECT Phase II RI at WBG and Background Investigation				INSPECTOR <i>Paul Albema</i>		SHEET
ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1" —	Gravelly CLAY (CL), gravel is angular to subangular, moist, olive brown (2.5Y 4/4)	NA	NA	NA	Little Beaver, 5 3/4" auger petroleum odor from auger cuttings
	1 ft —					
	2 ft —	2.0': Iron bolt, primer, black spalling on surface	NA	1	WB0754	Ham 3" hand bucket auger Water running down from about 2.0 ft.
	3 ft —	CLAY with a trace of gravel (CL), wet, gravel is subangular to sub- rounded, olive brown (2.5Y 4/4)		WB0754		
	4 ft —		NA	NA	WB0755	
	5 ft —					
	6 ft —	Refusal due to rock. Bottom of boring = 5.2 ft.				Shear on standing water in bore hole
			C-168			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-5	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Winklepeck Burning Grounds		
5 NAME OF DRILLER NA			6 MANUFACTURER'S DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver, 5 3/4" auger 3" hand bucket auger bowl / spoon			8 HOLE LOCATION See sketch		
			9 SURFACE ELEVATION NA		
			10. DATE STARTED 4/24/98		11. DATE COMPLETED 4/24/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 6.0 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) ND		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
VOC NA		METALS EGANAL		OTHER (SPECIFY) Exp.	
22. DISPOSITION OF HOLE BACKFILLED		MONITORING WELL OTHER (SPECIFY) bent pipe		23. SIGNATURE OF INSPECTOR Paul Al Blum	
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
* WBG ss-058 used as reference point Pallet Road E, West SB-14 (WBG 711) (42' 270° N) WBG ss-058 49' SB-5 N 90° PAD: 60					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-5

HTRW DRILLING LOG		DISTRICT <u>Louisville Corps</u>		HOLE NUMBER <u>SB-6</u>	
1 COMPANY NAME <u>SAIC</u>		2 DRILL SUBCONTRACTOR <u>NA</u>		SHEET <u>1</u> OF <u>1</u>	
3 PROJECT <u>Phase II RI at Winklepeck Burning Ground and Background Investigation</u>			4 LOCATION <u>Winklepeck Burning Ground</u>		
5 NAME OF DRILLER <u>NA</u>			6 MANUFACTURERS DESIGNATION OF DRILL <u>NA</u>		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Little Beaver 5 3/4" AUGER</u> <u>3" HAND BUCKET AUGER</u> <u>55 BOWL / SPOON</u>		8 HOLE LOCATION <u>See sketch</u>			
		9 SURFACE ELEVATION <u>NA</u>			
		10. DATE STARTED <u>25 APR 98</u>		11. DATE COMPLETED <u>25 APR 98</u>	
12. OVERBURDEN THICKNESS <u>NA</u>		13. DEPTH GROUNDWATER ENCOUNTERED <u>NA m/s</u> <u>2.0 ft</u>			
13. DEPTH DRILLED INTO ROCK <u>NA</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>			
14 TOTAL DEPTH OF HOLE <u>6.0</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA m/s</u> <u>2.6' BGSE 0934</u>			
18. GEOTECHNICAL SAMPLES		DISTURBED <u>X (2.0-2.5)</u>		UNDISTURBED	
		19. TOTAL NUMBER OF CORE BOXES <u>NA</u>			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS / CN	
				OTHER (SPECIFY) <u>EXP.</u>	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY) <u>Bentonite</u>	
				23. SIGNATURE OF INSPECTOR <u>Mauro C. Clouse</u>	
21. TOTAL CORE RECOVERY % <u>NA</u>					
LOCATION SKETCH/COMMENTS SCALE: 1" = 30' PAULET ROAD E, WEST SB-6 • (WBGS-062) PAD 62 ↑ N					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. <u>SB-6</u>	

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER SB-7		
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1		
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBG				
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver 5 3/4" Auger 3" Hand Bucket Auger SS Bowl Spoon				8. HOLE LOCATION See Sketch				
				9. SURFACE ELEVATION NA				
				10. DATE STARTED 25 APR 98		11. DATE COMPLETED 25 APR 98		
12. OVERBURDEN THICKNESS NA				13. DEPTH GROUNDWATER ENCOUNTERED ~1.9 ft.				
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 4.0				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS 2, CN		OTHER (SPECIFY) Explosive		21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Exp.		
				Brute force		23. SIGNATURE OF INSPECTOR <i>Maucha C Clough</i>		
LOCATION SKETCH/COMMENTS						SCALE: 1" = 30'		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. SB-7		

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-8	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION			
1. HIC BEAVER 5 3/4" Auger		See Sketch			
2. 3" Auger Hand Bucket					
3. 55 Bowl / Spoon		9. SURFACE ELEVATION NA			
		10. DATE STARTED 25 APR 98		11. DATE COMPLETED 25 APR 98	
12. OVERBURDEN THICKNESS NA		13. DEPTH GROUNDWATER ENCOUNTERED 2.0 ft BGS			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 4.0		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) 2.5 ft BGS			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR	
		MONITORING WELL		MADE C Clough	
		Bentonite			
LOCATION SKETCH/COMMENTS					
SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-8

HTRW DRILLING LOG						HOLE NUMBER SB-8
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR			SHEET 1 of 1
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1.0	CLAY with some sand (CL). Sand is poorly sorted. Clay is mottled. Moist Dark Yellowish Brown 10 YR 4/6	NA	NA	NA	OVA = ϕ ppm
	2.0	Same as above with trace sand.	NA	NA		Water encountered at 2.0 ft
	3.0				WB761	
	4.0	Bottom of boring 4.0				
			C-176			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-9	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver 5 3/4" Auger 3" HAND BUCKET AUGER SS BOWL SPOON		8. HOLE LOCATION SEE SKETCH			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 25 APR 98		11. DATE COMPLETED 25 APR 98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED ~ 3.0 ft.			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 4.0		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		21. TOTAL CORE RECOVERY NA %	
		MONITORING WELL		23. SIGNATURE OF INSPECTOR <i>Maucha & Clough</i>	
		<i>Exhibit</i>			
LOCATION SKETCH/COMMENTS SCALE: 1" = 30'					
PALLET ROAD C, EAST					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. SB-9	

HTRW DRILLING LOG		DISTRICT <u>Louisville Corps</u>		HOLE NUMBER <u>SB-10</u>	
1. COMPANY NAME <u>SAIC</u>		2. DRILL SUBCONTRACTOR <u>NA</u>		SHEET <u>1</u> OF <u>1</u>	
3. PROJECT <u>Phase II RI at Winklepeck Burning Ground and Background Investigation</u>			4. LOCATION <u>See Sketch, WBG</u>		
5. NAME OF DRILLER <u>NA</u>			6. MANUFACTURERS DESIGNATION OF DRILL <u>NA</u>		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		8. HOLE LOCATION <u>See sketch, WBG</u>			
<u>Little Beaver 5 3/4" Auger</u> <u>3" Bucket Hand Auger</u> <u>SS Bowl/Spoon</u>		9. SURFACE ELEVATION <u>NA</u>			
12. OVERBURDEN THICKNESS <u>NA</u>		10. DATE STARTED <u>25 APR 98</u>		11. DATE COMPLETED <u>25 APR 98</u>	
13. DEPTH DRILLED INTO ROCK <u>NA</u>		15. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>	
14. TOTAL DEPTH OF HOLE <u>4.0</u>		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>			
18. GEOTECHNICAL SAMPLES	DISTURBED <u>NA</u>	UNDISTURBED <u>NA</u>	19. TOTAL NUMBER OF CORE BOXES <u>NA</u>		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)
		<u>3 CN</u>	<u>EXP</u>	<u>FED EXP</u>	
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <u>Manha Clough</u>	
		<u>Pentwite</u>			
LOCATION SKETCH/COMMENTS			SCALE: <u>1" = 30'</u>		
<u>PALLET ROAD C, EAST</u> SB-10 (WBG) 35 PAD 38					
PROJECT <u>Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP</u>				HOLE NO. <u>SB-10</u>	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-11	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION WBG		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT Little Beaver 5 3/4" Auger 3" Auger Bucket, Hand SS Bowl/Spoon			8 HOLE LOCATION See Sketch		
12 OVERBURDEN THICKNESS NA			15 DEPTH GROUNDWATER ENCOUNTERED ~ 2.5 ft		
13 DEPTH DRILLED INTO ROCK NA			16 DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14 TOTAL DEPTH OF HOLE 4.0			17 OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18 GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19 TOTAL NUMBER OF CORE BOXES NA		20 SAMPLES FOR CHEMICAL ANALYSIS		21 TOTAL CORE RECOVERY NA%	
22 DISPOSITION OF HOLE		BACKFILLED		23 SIGNATURE OF INSPECTOR Y. C. Chen	
LOCATION SKETCH/COMMENTS		SCALE: 1" = 30'			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-11

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-12	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION WBG		
5 NAME OF DRILLER NA			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 1. Hlt Beaver 5 3/4" Auger 3" Bucket + Hand Auger SS Bowl/Spoon		8 HOLE LOCATION See Sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 25 APR 98		11. DATE COMPLETED 25 APR 98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 3.2'		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR Madeline Clark	
		MONITORING WELL			
		OTHER (SPECIFY)			
		Kentonite			
LOCATION SKETCH/COMMENTS SCALE: 1" = 30' ROAD SB-12 (WBG 55-005) PAD 5					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. SB-12	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-13	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBCG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 5 3/4" Auger - Little Beaver 3" Bucket Hand Auger 54" Bucket Spoon			8. HOLE LOCATION See Sketch p. 39		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 28 APR 98		
			11. DATE COMPLETED 28 APR 98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED ~ 2.5 ft.		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 4.0			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
		21. TOTAL CORE RECOVERY NA			
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR	
		MONITORING WELL		M. C. Clough	
				Bentone	
LOCATION SKETCH/COMMENTS					
SCALE:					
See Sketch on PAGE 39 Logbook 2					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					
HOLE NO. SB-13					

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-14	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 5 3/4" Auger - Little Beaver 3" Hand Bucket Auger SS Bowl / Spoon			8. HOLE LOCATION See Sketch p 23		
9. SURFACE ELEVATION NA			10. DATE STARTED 28 APR 98		
11. DATE COMPLETED 28 APR 98			12. OVERBURDEN THICKNESS NA		
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
14. TOTAL DEPTH OF HOLE 4.0 ft. 3.8 ft.			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			18. GEOTECHNICAL SAMPLES		
DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)	
21. TOTAL CORE RECOVERY % NA		22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR	
BACKFILLED		MONITORING WELL		Bentonite	
LOCATION SKETCH/COMMENTS SCALE:					
SEE SKETCH ON PAGE 23 LOGBOOK 2					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-14

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-15	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 5 1/4" Auger Little Bore 3" Bucket Hand Auger 55 Bowl/Spoon			8. HOLE LOCATION See sketch p. 11		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 28 APR 98		11. DATE COMPLETED 28 APR 98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED 1.5 ft		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 4.0 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC		OTHER (SPECIFY)	
		METALS		OTHER (SPECIFY)	
		OTHER (SPECIFY)		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR Ma & Cloud	
		MONITORING WELL			
		OTHER (SPECIFY)			
		Bentall			
LOCATION SKETCH/COMMENTS			SCALE:		
SEE SKETCH PAGE 11 LOGBOOK 2					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					
HOLE NO. SB-15					

HTRW DRILLING LOG						HOLE NUMBER
PROJECT Phase II RI at WBG and Background Investigation				INSPECTOR		SHEET
ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1.0	Silty CLAY with some gravel. (GL) traces of sand. Moist Dark Olive Brown 2.5 Y 2.5/1	NA	NA	NA	Soil Red stained until approx 3 ft. water rose to within 1 ft of surface Entered at ~1.5 ft.
	2.0		NA	NA		
	3.0				WB0768	
	4.0	CLAY with some sand. WET. Dark Yellowish Brown 10 YR 3/4				
		Bottom of Boring 4.0 ft.				
			C-190			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-16	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 7 OF 7	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION See sketch		
5 3/4" Auger - Little Beaver			9. SURFACE ELEVATION NA		
3" Bucket Hand Auger			10. DATE STARTED 28 APR 98		
55 Bowl / Spoon			11. DATE COMPLETED 28 APR 98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED water at surface		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 3.5 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
VOC		METALS		OTHER (SPECIFY)	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
OTHER (SPECIFY)		OTHER (SPECIFY)		OTHER (SPECIFY)	
23. SIGNATURE OF INSPECTOR		Bentonite		NA & Clough	
LOCATION SKETCH/COMMENTS					
SCALE:					
SEE SKETCH PAGE 7 LOGBOOK 2					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. SB-16	

HTRW DRILLING LOG						HOLE NUMBER
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR		SHEET	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1.0	Silty CLAY with some gravel + trace sand. (CL) Moist. Dark Brown 10 YR 3/3	NA	NA	NA	Water to Surface
	2.0	Silty CLAY with some sand + trace gravel (CL) WET. Dark Yellowish Brown 10 YR 3/4.	NA	NA	WB 769	
	3.5	Bottom of Boring 3.5 ft Auger Refusal				
			C-192			

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER SB-17			
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1 SHEETS			
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION WBG					
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT			8. HOLE LOCATION See Sketch p. 7						
5 3/4" Auger - Little Beaver			9. SURFACE ELEVATION NA						
3" Bucket Hand Auger			10. DATE STARTED 28 APR 98			11. DATE COMPLETED 28 APR 98			
SS Bowl/Spoon			12. OVERBURDEN THICKNESS NA						
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED 0.6 ft BGS						
14. TOTAL DEPTH OF HOLE 3.5 ft.			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA						
18. GEOTECHNICAL SAMPLES			DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		21. TOTAL CORE RECOVERY % NA	
				ECN		EXP.			
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR Mac Clark	
						Bentonite			
LOCATION SKETCH/COMMENTS				SCALE:					
SEE SKETCH PAGE 7 LOGBOOK #2									
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP							HOLE NO. SB-17		

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER SB-18	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 5 3/4" Auger - Little Beaver 3" Bucket Hand Auger 55 Bowl / Spoon			8. HOLE LOCATION See Sketch p. 15		
			9. SURFACE ELEVATION NA		
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 28 APR 98		
			11. DATE COMPLETED 28 APR 98		
13. DEPTH DRILLED INTO ROCK NA			15. DEPTH GROUNDWATER ENCOUNTERED ~1.5 ft		
14. TOTAL DEPTH OF HOLE 4.0 ft			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			19. TOTAL NUMBER OF CORE BOXES NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY) EXP.	
		METALS ECN		OTHER (SPECIFY) FIELD EXP.	
22. DISPOSITION OF HOLE		BACKFILLED		21. TOTAL CORE RECOVERY NA	
		MONITORING WELL		23. SIGNATURE OF INSPECTOR Mark C. Clough	
LOCATION SKETCH/COMMENTS			SCALE:		
See Sketch page 15 Logbook #2					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. SB-18

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER SB-19	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 5 3/4" Little Beaver Auger 3" Bucket Hand Auger 25 Bowl Spoon			8. HOLE LOCATION See Sketch P. 15				
			9. SURFACE ELEVATION NA				
			10. DATE STARTED 28 APR 98		11. DATE COMPLETED 28 APR 98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED ~ 2.0 ft				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 3.75 ft			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)	OTHER (SPECIFY)	21. TOTAL CORE RECOVERY % NA	
		ECN	EXP.	Field EXP.			
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) Bentonite	23. SIGNATURE OF INSPECTOR <i>Max C. Clark</i>			
LOCATION SKETCH/COMMENTS				SCALE:			
SEE SKETCH ON PAGE 15, Logbook #2							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. SB-19	

**SUBSURFACE SOIL
BORING LOGS**

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WB60-054	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" AUGER BUCKET			8. HOLE LOCATION See sketch		
SS bowl / spoon			9. SURFACE ELEVATION NA		
6" power auger			10. DATE STARTED 5 MAY 98		11. DATE COMPLETED 5 MAY 98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE NA			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES NA	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC NA	METALS ECN	OTHER (SPECIFY) EXP	OTHER (SPECIFY) NA	OTHER (SPECIFY) NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) backfill	23. SIGNATURE OF INSPECTOR Jama M. Obay	
LOCATION SKETCH/COMMENTS			SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WB60-054	

WBG 60.054

INSPECTOR

SHEET

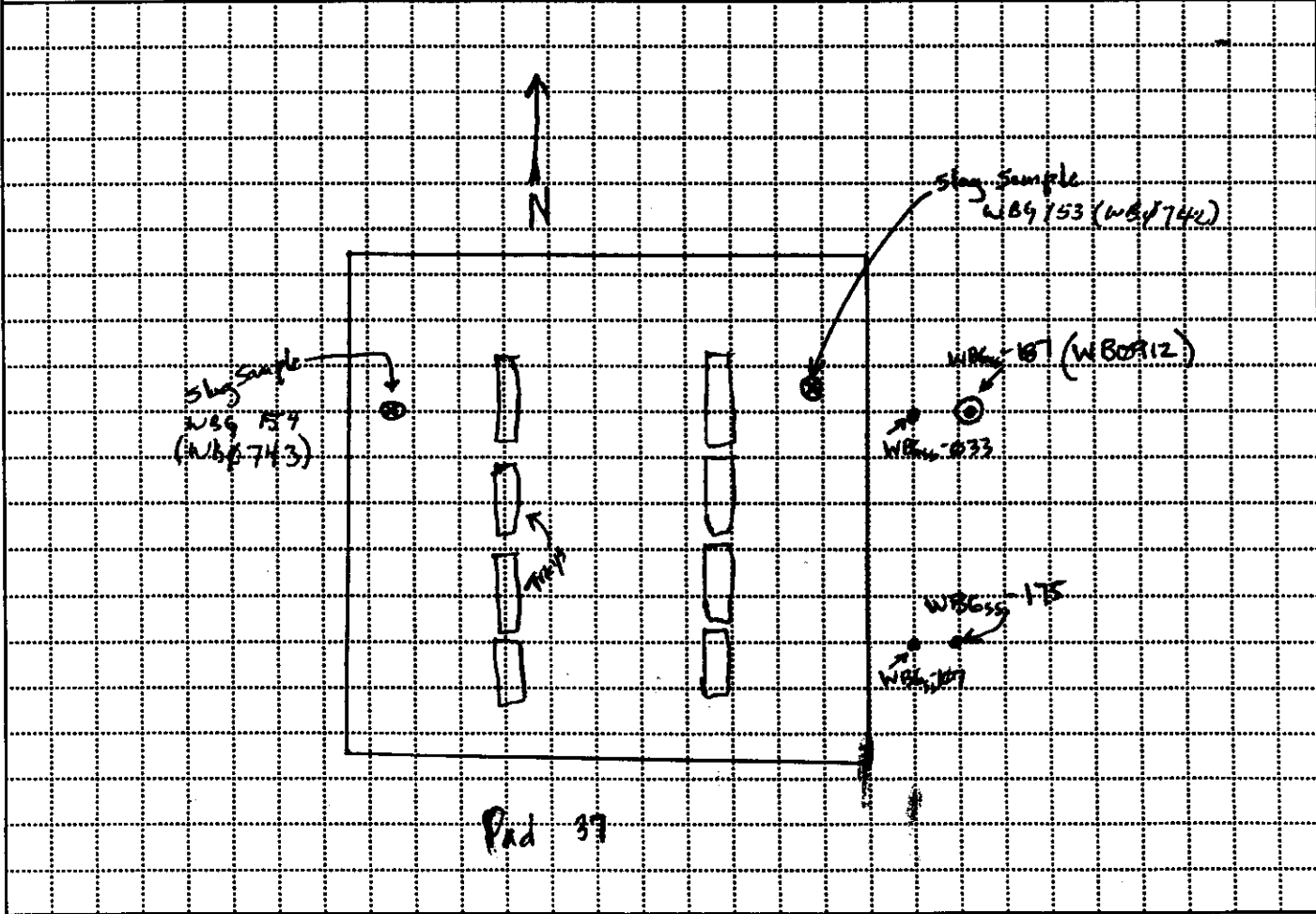
HOLE NO

WBG 50.054

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WB650-168	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION WB6		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 1/2" power auger 3" auger bucket SS bowl/spoon			8. HOLE LOCATION see sketch		
			9. SURFACE ELEVATION NA		
12. OVERBURDEN THICKNESS NA			10. DATE STARTED 5 MAY 98		
13. DEPTH DRILLED INTO ROCK NA			11. DATE COMPLETED 5 MAY 98		
14. TOTAL DEPTH OF HOLE 1.0 FT			15. DEPTH GROUNDWATER ENCOUNTERED NA		
			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES NA		DISTURBED		UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
			CN	ELP	
21. TOTAL CORE RECOVERY					
22. DISPOSITION OF HOLE		BACKFILLED	MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR Laura M. O'Leary
LOCATION SKETCH/COMMENTS			SCALE:		
PALLET ROAD E, EAST NOTE: WB650-168 approximately 20' NW of WB650-068					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WB650-068	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG_{ss}-187	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION SW^{1/4} Pad 37 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand Auger bowl, span			8. HOLE LOCATION see sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 5/6/98		11. DATE COMPLETED 5/6/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY %	
		VOC		METALS ECW	
				OTHER (SPECIFY) EXPLOSIVES	
		BACKFILLED		OTHER (SPECIFY) Field Exp	
22. DISPOSITION OF HOLE		MONITORING WELL		23. SIGNATURE OF INSPECTOR Amel 1 W	

LOCATION SKETCH/COMMENTS SCALE: 1" = 30'

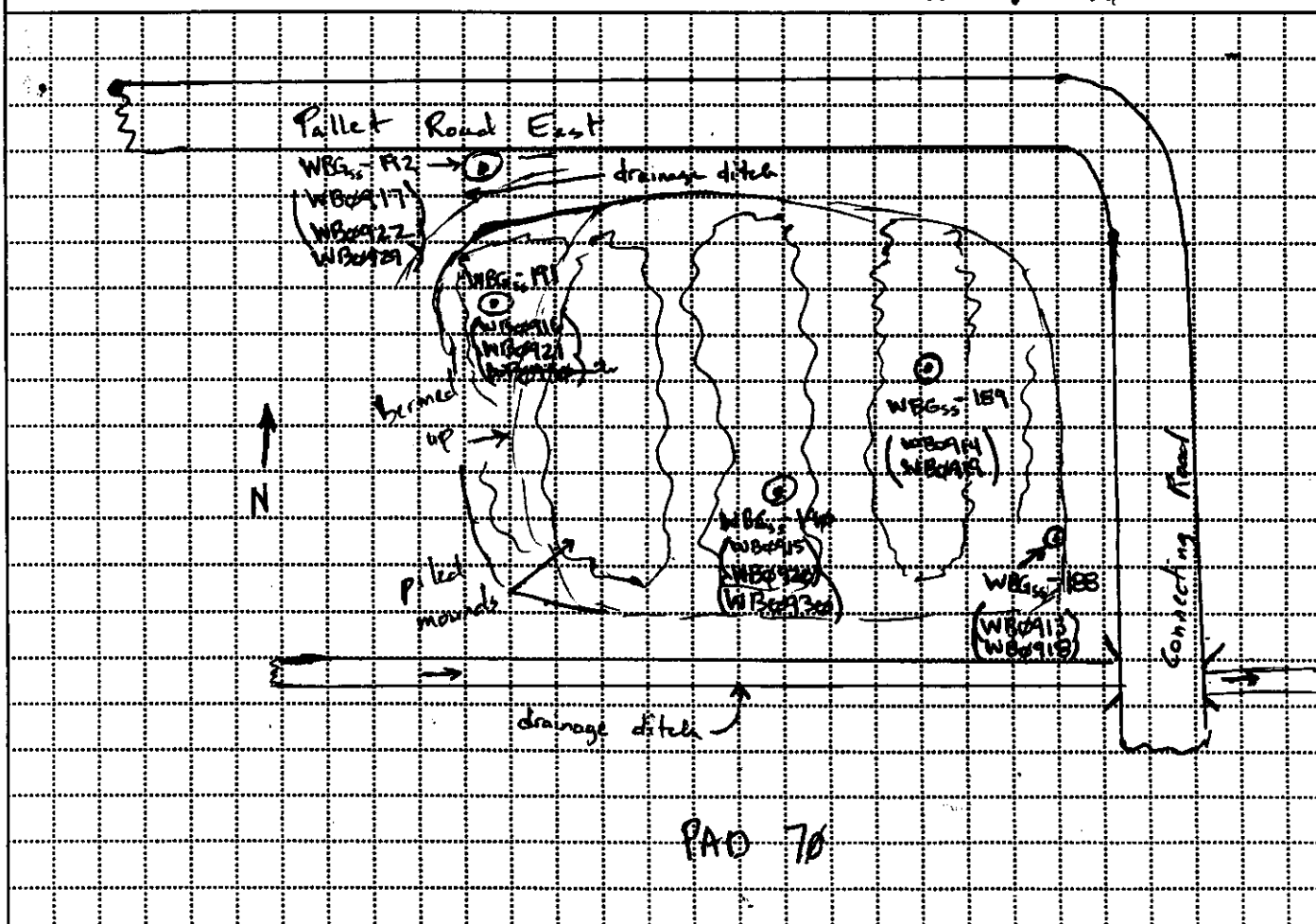


PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP		HOLE NO. WBG_{ss}-187
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HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG_{ss}-188	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pad 70 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket head auger w/ hawl & spool			8. HOLE LOCATION see sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 5/6/98		11. DATE COMPLETED 5/6/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 4 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY NA	
VOC		METALS ✓		OTHER (SPECIFY) Expl.	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Expl.	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR Paul J. W.			

LOCATION SKETCH/COMMENTS

SCALE: 1" = 30'



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.

WBG_{ss} - 188

HTRW DRILLING LOG						HOLE NUMBER WB622-18R
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR Joe Wilson		SHEET 1 of 1	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1'	CLAY w/ traces of sand Moist, yellow brown	NA	NA	WB62213	
	2'	SAA w/ traces of angular gravel	NA	NA	NA	
	3'		NA	NA	WB62218	
	4'	SAA, wet				
End 5/6/18						
			C-208			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WRG ₂₅₅ - 189	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION See sketch on pg 19		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL Hand Auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket and auger bore 1/2 spec		8. HOLE LOCATION SEE SKETCH on PAGE 2 of 19			
9. SURFACE ELEVATION NA					
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE NA			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS $\frac{1}{2}$ CO	
		OTHER (SPECIFY) EXP -		OTHER (SPECIFY) Field Exp	
21. TOTAL CORE RECOVERY NA %					
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
		NA		NA	
23. SIGNATURE OF INSPECTOR And J. Wilson					
LOCATION SKETCH/COMMENTS SEE sketch Page 2 of 19 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. WRG ₂₅₅ - 189

2

WBC-189

INSPECTOR

Joe Wilson

SHEET

1-21

HOLE NO

WBG_{ss} - 189

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG-190	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pool 70 WBC		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket auger bowl w/ spear		8. HOLE LOCATION SEE SKETCH ON PAGE 20 19			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 5/6/98		11. DATE COMPLETED 5/6/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 4.8 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS EXP	OTHER (SPECIFY) EXP.	OTHER (SPECIFY) Field exp	21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) NA	23. SIGNATURE OF INSPECTOR Shane P. W.	
LOCATION SKETCH/COMMENTS see sketch on page 20 19			SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WBG-190	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG_{ss}-191	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Post 70, WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand auger bowl: spade			8. HOLE LOCATION see sketch on Page 19		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 5/6/98		11. DATE COMPLETED 5/6/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 4.0 ft.			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES	DISTURBED NA	UNDISTURBED NA	19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS	VOC	METALS ICN	OTHER (SPECIFY) Expl.	OTHER (SPECIFY) Field Expl.	21. TOTAL CORE RECOVERY % NA
22. DISPOSITION OF HOLE	BACKFILLED	MONITORING WELL	OTHER (SPECIFY) NA	23. SIGNATURE OF INSPECTOR Ampl 7 w/ln	
LOCATION SKETCH/COMMENTS see sketch on page 19			SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WBG_{ss}-191	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG _{ss} -192	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pad 70 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand auger brass & spurs		8. HOLE LOCATION SEE SKETCH ON PAGE 19			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED 5/6/98		11. DATE COMPLETED 5/6/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 6.0 ft.		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS & CN	
				OTHER (SPECIFY) EXPL.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				OTHER (SPECIFY)	
				23. SIGNATURE OF INSPECTOR Shankar W. J.	
21. TOTAL CORE RECOVERY NA %					
LOCATION SKETCH/COMMENTS SEE SKETCH ON PAGE 19 SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WBG _{ss} -192	

HOLE NUMBER
WBC56 - A2

INSPECTOR

Joe Wilson

SHEET 1 of 1

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO.

WBG_{ss} - 192

HTRW DRILLING LOG			DISTRICT <u>Louisville Corps</u>			HOLE NUMBER <u>67-51</u>		
1. COMPANY NAME <u>SAIC</u>			2. DRILL SUBCONTRACTOR <u>NA</u>			SHEET <u>1</u> OF <u>1</u>		
3. PROJECT <u>Phase II RI at Winklepeck Burning Ground and Background Investigation</u>			4. LOCATION <u>Pad 67 WBG</u>					
5. NAME OF DRILLER <u>NA</u>			6. MANUFACTURERS DESIGNATION OF DRILL <u>NA</u>					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>3" bucket hand auger</u> <u>bowl / spade</u> <u>little hand</u>			8. HOLE LOCATION <u>See sketch</u>					
			9. SURFACE ELEVATION <u>NA</u>					
			10. DATE STARTED <u>5/6/98</u>			11. DATE COMPLETED <u>5/6/98</u>		
12. OVERBURDEN THICKNESS <u>NA</u>			15. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>					
13. DEPTH DRILLED INTO ROCK <u>NA</u>			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>					
14. TOTAL DEPTH OF HOLE <u>6 Ft by</u>			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>					
18. GEOTECHNICAL SAMPLES		DISTURBED <u>NA</u>		UNDISTURBED <u>X</u>		19. TOTAL NUMBER OF CORE BOXES <u>NA</u>		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS <u>ECN</u>		OTHER (SPECIFY) <u>Explos-</u>		21. TOTAL CORE RECOVERY % <u>NA</u>
				<u>X</u>		<u>Field Exp.</u>		<u>SVOC</u>
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		23. SIGNATURE OF INSPECTOR <u>Sum 7 oil</u>		
				<u>Inhibit</u>				
LOCATION SKETCH/COMMENTS			SCALE:					
PROJECT <u>Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP</u>							HOLE NO. <u>67-51</u>	

HOLE NUMBER	SB-17 (67-50)
SHEET	1061

INSPECTOR Joe Wilson

SHEET 104

ELEV (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1	stiff CLAY w/ traces of sand moist Black				2-4 ft log Capital Core log of 2-4 ft sample instead of logging power auger cuttings
	2	CLAY w/ trace of sand and gravel. Wet olive-brown				
	3					
	4	CLAY w/ traces of sand For Moist, Mottled yellow-brown w/ gray	NA	WB0923 ^{2W} 7	WB0923 ^{9W} 7	
	5					
	6					

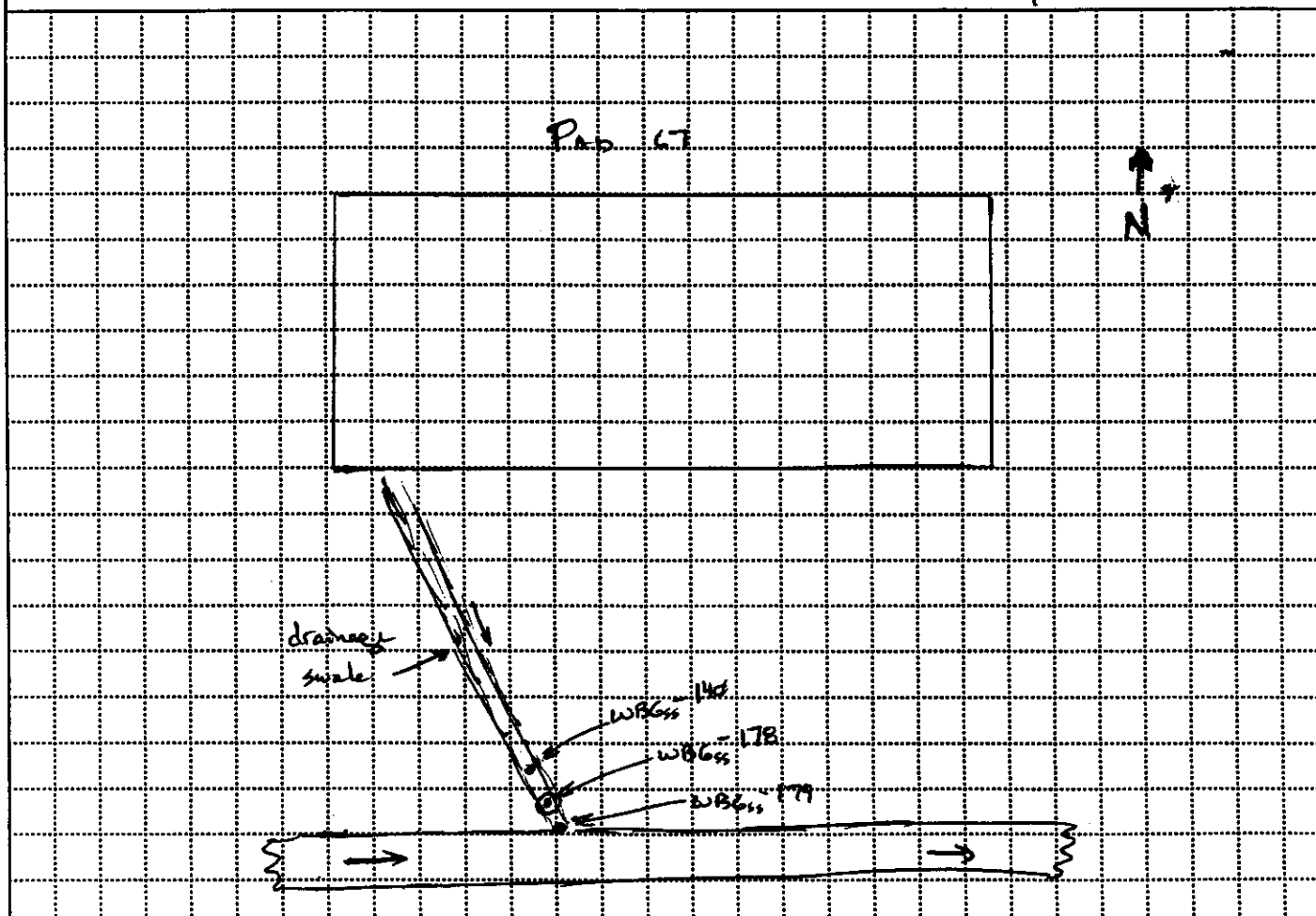
PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO SB-17 (67-51)

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG₅₀-178	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pop 67 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket auger bowl & spoon		8. HOLE LOCATION see sketch			
9. SURFACE ELEVATION NA					
10. DATE STARTED 5/6/98			11. DATE COMPLETED 5/6/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 41 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED X	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
		VOC		OTHER (SPECIFY) Field Exp.	
		METALS 2 cu		OTHER (SPECIFY) SVOC	
		OTHER (SPECIFY) Explos.			
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR Shirley J. White	
		MONITORING WELL			
		OTHER (SPECIFY) hydrate			

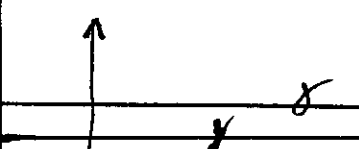
LOCATION SKETCH/COMMENTS

SCALE: 1" = 430'



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.
WBG₅₀-178

HTRW DRILLING LOG						HOLE NUMBER WBG _{so} -17B
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR Joe Wilson	SHEET 1 of 1		
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEO TECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1'					
	2'		NA	⁹⁶ WB4928 NA	WB4928	
	3'	 Sandy CLAY, moist wet brown				⁹⁶ Refused on cobbles Made several attempts.
	4'			WB4928		
			C-220			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG_{ss}-193	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION • Pad 62 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand auger handi spurs			8. HOLE LOCATION see sketch		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 5/2/98		11. DATE COMPLETED 5/2/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
VOC		METALS ICN		OTHER (SPECIFY) Explos.	
BACKFILLED		MONITORING WELL		OTHER (SPECIFY) Field Expl.	
22. DISPOSITION OF HOLE		23. SIGNATURE OF INSPECTOR James J. W.			
LOCATION SKETCH/COMMENTS					
SCALE: 1" = 15'					
WEST Pallet Road Pad 62					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. WBG_{ss}-193	

HTRW DRILLING LOG						HOLE NUMBER WB6 _{ss} - 193
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR J. Wilk		SHEET 141	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEOTECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
		CLAY w/ trace of sand moist, olive brown	NA	NA	WB0932 WB0933 WB0934	QC QA
		gw 5/7/98				
		C-222				

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER WBG _{ss} - 194	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pool 62 WBG				
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand auger hand & span			8. HOLE LOCATION see sketch on page 47				
			9. SURFACE ELEVATION NA				
			10. DATE STARTED 5/7/98		11. DATE COMPLETED 5/7/98		
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA				
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA				
14. TOTAL DEPTH OF HOLE 1 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA				
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS ☒		OTHER (SPECIFY) EXPT.	
				☒		FIELD EXP.	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL		21. TOTAL CORE RECOVERY NA %	
				OTHER (SPECIFY) hand auger		23. SIGNATURE OF INSPECTOR [Signature]	
LOCATION SKETCH/COMMENTS SEE SKETCH ON PAGE 47 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. WBG _{ss} - 194	

50

FILE NUMBER
WBG-194

INSPECTOR

The work—

SHEET

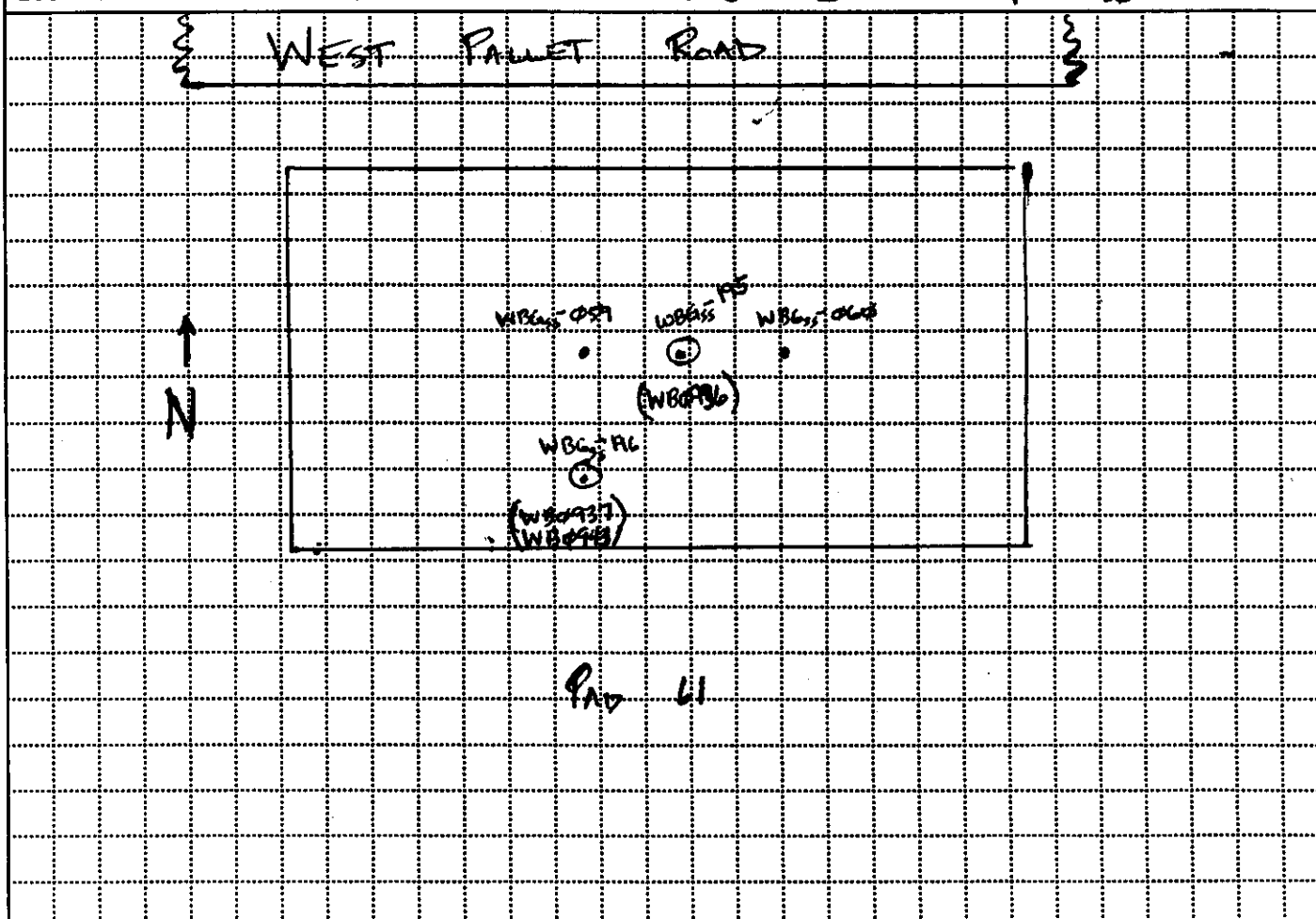
1041

HOLE NO

WB6ss-194

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER WBG _{ss} -195 / 196	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 1	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Pad 61 WBG		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" bucket hand auger bowl & spear			8. HOLE LOCATION SEE SKETCH		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED 5/7/98		11. DATE COMPLETED 5/7/98
12. OVERBURDEN THICKNESS NA			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1 ft bgs			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
19. TOTAL NUMBER OF CORE BOXES NA		20. SAMPLES FOR CHEMICAL ANALYSIS		21. TOTAL CORE RECOVERY % NA	
VOC		METALS ☒ CN		OTHER (SPECIFY) Field Exp.	
22. DISPOSITION OF HOLE		BACKFILLED		OTHER (SPECIFY) Explos.	
		MONITORING WELL		23. SIGNATURE OF INSPECTOR Emph 9 mhr	
				NA	

LOCATION SKETCH/COMMENTS Both cont. S.S. on this page ① SCALE: 1" = ~ 30'



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.

WBG_{ss} - 195 / 196

HTRW DRILLING LOG						HOLE NUMBER WB6 _{ss} -195 /196
PROJECT Phase II RI at WBG and Background Investigation			INSPECTOR		SHEET 1 of 1	
ELEV. (A)	DEPTH (B)	DESCRIPTION OF MATERIALS (C)	FIELD SCREENING RESULTS (D)	GEO TECH SAMPLE OR CORE BOX NO. (E)	ANALYTICAL SAMPLE NO. (F)	REMARKS (G)
	1'	CLAY w/ some sand and traces of angular gravel moist, yellow-brown (CL)	NA	NA	WB0436	
						Running out of logbook pages will put next station @ this pad below
	0'	CLAY w/ traces of sand (CL) and traces of angular gravel. Wet, olive-brown	NA	NA	WB0437	
	1'	SAA w/ angular gravel.	NA	NA	NA	
	2'					H ₂ O entering hole
	3'		NA	NA	WB0443	
	4'					
			C-226			

HTRW DRILLING LOG

DISTRICT Louisville Corps

HOLE NUMBER

WBG_{ss}-197

1. COMPANY NAME SAIC

2. DRILL SUBCONTRACTOR

NA

SHEET SHEETS

1 OF 1

3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

4. LOCATION

Drainage Ditch between Pads 59 & 60 WBG

5. NAME OF DRILLER

NA

6. MANUFACTURERS DESIGNATION OF DRILL

NA

7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT

3' bucket hand auger
bowl & spoon

8. HOLE LOCATION

SEE SKETCH

9. SURFACE ELEVATION

NA

10. DATE STARTED

5/7/98

11. DATE COMPLETED

5/7/98

12. OVERBURDEN THICKNESS

NA

15. DEPTH GROUNDWATER ENCOUNTERED

NA

13. DEPTH DRILLED INTO ROCK

NA

16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED

NA

14. TOTAL DEPTH OF HOLE

1 ft bgs

17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)

NA

18. GEOTECHNICAL SAMPLES

DISTURBED

NA

UNDISTURBED

NA

19. TOTAL NUMBER OF CORE BOXES

NA

20. SAMPLES FOR CHEMICAL ANALYSIS

VOC

METALS

OTHER (SPECIFY)

OTHER (SPECIFY)

OTHER (SPECIFY)

21. TOTAL CORE RECOVERY %

NA

22. DISPOSITION OF HOLE

BACKFILLED

MONITORING WELL

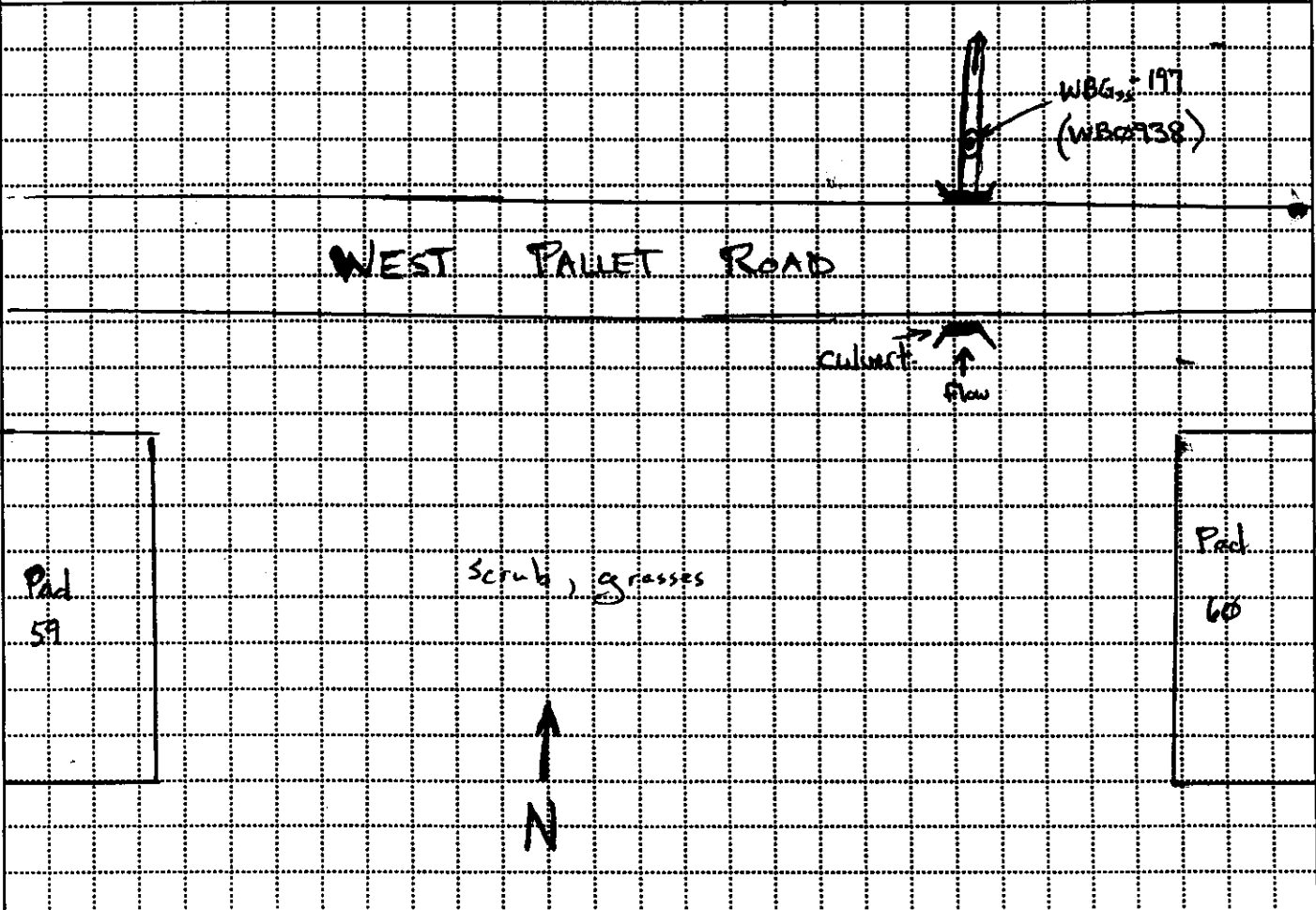
OTHER (SPECIFY)

23. SIGNATURE OF INSPECTOR

Suph 7 Well

LOCATION SKETCH/COMMENTS Rain water runoff ditch - dry today

SCALE: 1" = 60'



PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP

HOLE NO.

WBG_{ss}-197

HOLE NUMBER
WBGS-197

SHEET
1061

INSPECTOR

SHEET

[illegible]

HOLE NO WBG - 197

**SURFACE SOIL
BORING LOGS**

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER BKG-MW-013	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET SHEETS 1 OF 2	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Background Wilcox Wayland & Newton Falls Road		
5. NAME OF DRILLER NA			6. MANUFACTURER'S DESIGNATION OF DRILL NA		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" hand auger bucket hand/spinner		8. HOLE LOCATION SEE sketch			
		9. SURFACE ELEVATION NA			
		10. DATE STARTED Before 4/21/98 4/23/98		11. DATE COMPLETED 4/21/98 4/23/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 1 ft bgs		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA	
				19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY) Field Exp	
0-12, 1-3', 3-12'				SVOCs, HCB, cyanide	
22. DISPOSITION OF HOLE		BACKFILLED		23. SIGNATURE OF INSPECTOR 4-23-98 Doug P. White / Matt Cole	
		MONITORING WELL		OTHER (SPECIFY) benzidine	
LOCATION SKETCH/COMMENTS 56.8 ft from corner of road SCALE: 1" = 50 ft					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. BKG-MW-013	

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER BKG-MN-012	
1 COMPANY NAME SAIC		2 DRILL SUBCONTRACTOR N/A		SHEET 1 OF 2	
3 PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4 LOCATION Background		
5 NAME OF DRILLER N/A			6 MANUFACTURERS DESIGNATION OF DRILL NA		
7 SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3' bucket hand auger bar / spoon		8 HOLE LOCATION See sketch			
		9 SURFACE ELEVATION N/A			
		10. DATE STARTED 4/21/98		11. DATE COMPLETED 4/21/98	
12. OVERBURDEN THICKNESS NA		15. DEPTH GROUNDWATER ENCOUNTERED N/A			
13. DEPTH DRILLED INTO ROCK NA		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A			
14. TOTAL DEPTH OF HOLE 1 ft. BGS		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A			
18. GEOTECHNICAL SAMPLES		DISTURBED 1		UNDISTURBED NA	
		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
0.7, 1-3', 3-12'				Cyanide	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
		X		benzene	
				23. SIGNATURE OF INSPECTOR K L Dominic	
LOCATION SKETCH/COMMENTS			SCALE:		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. BKGmw-012

42

HOLE NUMBER
BKGmw-Ø12

SHEET 2 of 2

INSPECTOR

K Dominick

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

HOLE NO ^{mm}
BICK-~~DL~~

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER BKGmw-011	
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 7 OF 2	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION			
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA			
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		3" HAND AUGER EXTENSION RODS S.S. BOWLS/SPOONS		8. HOLE LOCATION		0.17 mi. N. of Newton Falls/Paris-Windham Intersection	
				9. SURFACE ELEVATION NA			
				10. DATE STARTED 4.21.98		11. DATE COMPLETED 4.21.98	
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA			
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA			
14. TOTAL DEPTH OF HOLE 0-1ft				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA			
18. GEOTECHNICAL SAMPLES		DISTURBED 1		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)	
0-1', 1-3', 3-12'				1		SVOC	
22. DISPOSITION OF HOLE		BACKFILLED ✓		MONITORING WELL		OTHER (SPECIFY)	
						23. SIGNATURE OF INSPECTOR KL Dominik	
LOCATION SKETCH/COMMENTS sec BKGmw - 012 on pg 11 SCALE:							
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. BKGmw-011	

HTRW DRILLING LOG			DISTRICT <u>Louisville Corps</u>			HOLE NUMBER <u>MW-10</u>		
1. COMPANY NAME <u>SAIC</u>			2. DRILL SUBCONTRACTOR <u>NA</u>			SHEET <u>1</u> OF <u>2</u>		
3. PROJECT <u>Phase II RI at Winklepeck Burning Ground and Background Investigation</u>				4. LOCATION <u>Ravenna Arsenal</u>				
5. NAME OF DRILLER <u>Mat / Heather</u>				6. MANUFACTURERS DESIGNATION OF DRILL <u>NA</u>				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT <u>Hard Anvils</u> <u>SS Barrels and Spoon</u>				8. HOLE LOCATION <u>Near Bldg 1200</u>				
				9. SURFACE ELEVATION <u>NA</u>				
				10. DATE STARTED <u>4-22-98</u>			11. DATE COMPLETED <u>4-22-98</u>	
12. OVERBURDEN THICKNESS <u>—</u>				15. DEPTH GROUNDWATER ENCOUNTERED <u>NA</u>				
13. DEPTH DRILLED INTO ROCK <u>—</u>				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED <u>NA</u>				
14. TOTAL DEPTH OF HOLE <u>6"</u>				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) <u>NA</u>				
18. GEOTECHNICAL SAMPLES <u>Yes</u>			DISTURBED ☒		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES <u>—</u>	
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC		METALS		OTHER (SPECIFY)	
<u>(0-1) 1-3', 3-12'</u>					<u>Explosives</u>		<u>SVOC TOC</u>	
22. DISPOSITION OF HOLE			BACKFILLED ☒		MONITORING WELL		23. SIGNATURE OF INSPECTOR <u>Mat / Heather</u>	
LOCATION SKETCH/COMMENTS						SCALE: <u>Not To</u>		
PROJECT <u>Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP</u>							HOLE NO. <u>MW-9 / MW-10</u> <u>Surface Sp. 15</u>	

22

FILE NUMBER
44-10

INSPECTOR

Next 06/04

SUBJECT

2012

C-240

HOLE NO

HOLE NUMBER

SHEET 2 of 2

PROJECT Phase II RI at WBG and Background Investigation

INSPECTOR

PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation

HOLE NO

Мл-3,4

HTRW DRILLING LOG			DISTRICT Louisville Corps			HOLE NUMBER MW-006			
1. COMPANY NAME SAIC			2. DRILL SUBCONTRACTOR NA			SHEET 1 OF 2			
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation				4. LOCATION Ravenna Arsenal					
5. NAME OF DRILLER NA				6. MANUFACTURERS DESIGNATION OF DRILL NA					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT				8. HOLE LOCATION E. from Wadsworth & Perimeter Gravel Rd.					
3" Hand Auger				9. SURFACE ELEVATION NA					
S.S. Spoons & Bore				10. DATE STARTED 4-22-98		11. DATE COMPLETED 4-22-98			
12. OVERBURDEN THICKNESS				15. DEPTH GROUNDWATER ENCOUNTERED N/A					
13. DEPTH DRILLED INTO ROCK				16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED N/A					
14. TOTAL DEPTH OF HOLE 1 foot				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) N/A					
18. GEOTECHNICAL SAMPLES		DISTURBED X		UNDISTURBED		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS		OTHER (SPECIFY)		OTHER (SPECIFY)	
0-1', 1-3', 3-12'				X		SYOC/FOC		explosives	
22. DISPOSITION OF HOLE		BACKFILLED X		MONITORING WELL		OTHER (SPECIFY)		23. SIGNATURE OF INSPECTOR Heather L Smith	
LOCATION SKETCH/COMMENTS						SCALE:			
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP						HOLE NO. MW-006			

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER MW-1, MW-2	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR _____		SHEET 1 OF 2	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation			4. LOCATION Lavenna Arsenal		
5. NAME OF DRILLER Matt / Heather			6. MANUFACTURERS DESIGNATION OF DRILL _____		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT 3" HAND Auger SS Bails and Spoon		8. HOLE LOCATION N. of Intersection of Smalley / Ludlow			
		9. SURFACE ELEVATION _____			
		10. DATE STARTED 9/23/98		11. DATE COMPLETED 9/23/98	
12. OVERBURDEN THICKNESS _____		15. DEPTH GROUNDWATER ENCOUNTERED _____			
13. DEPTH DRILLED INTO ROCK _____		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED _____			
14. TOTAL DEPTH OF HOLE _____		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) _____			
18. GEOTECHNICAL SAMPLES		DISTURBED		UNDISTURBED	
				19. TOTAL NUMBER OF CORE BOXES _____	
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		OTHER (SPECIFY)	
0.5', 1-3', 3-12'				Explosives	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
Control - 12				21. TOTAL CORE RECOVERY % 100	
				23. SIGNATURE OF INSPECTOR Matt O'Leary	
LOCATION SKETCH/COMMENTS			SCALE: None		
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP				HOLE NO. MW-1, MW-2	

7-17-

INSPECTOR

FILE NO. Mw-1 Mw-2

HTRW DRILLING LOG		DISTRICT Louisville Corps		HOLE NUMBER BK 0798	
1. COMPANY NAME SAIC		2. DRILL SUBCONTRACTOR NA		SHEET 1 OF 2 SHEETS	
3. PROJECT Phase II RI at Winklepeck Burning Ground and Background Investigation,			4. LOCATION RVAAP		
5. NAME OF DRILLER NA			6. MANUFACTURERS DESIGNATION OF DRILL hand auger		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT S.S. bowl / scoop			8. HOLE LOCATION see map		
			9. SURFACE ELEVATION NA		
			10. DATE STARTED		11. DATE COMPLETED
12. OVERBURDEN THICKNESS > 1'			15. DEPTH GROUNDWATER ENCOUNTERED NA		
13. DEPTH DRILLED INTO ROCK NA			16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED NA		
14. TOTAL DEPTH OF HOLE 1'			17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA		
18. GEOTECHNICAL SAMPLES		☒ DISTURBED		☐ UNDISTURBED	
19. TOTAL NUMBER OF CORE BOXES NA					
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC		METALS	
0-1', 1-3', 3-12'				X	
22. DISPOSITION OF HOLE		BACKFILLED		MONITORING WELL	
				Explosives SVOC/tol	
				23. SIGNATURE OF INSPECTOR Sup. [Signature]	
21. TOTAL CORE RECOVERY %					
LOCATION SKETCH/COMMENTS					
Soil [Signature] SCALE:					
PROJECT Phase II RI at Winklepeck Burning Ground and Facility-wide Background Investigation, RVAAP					HOLE NO. BK 0798

