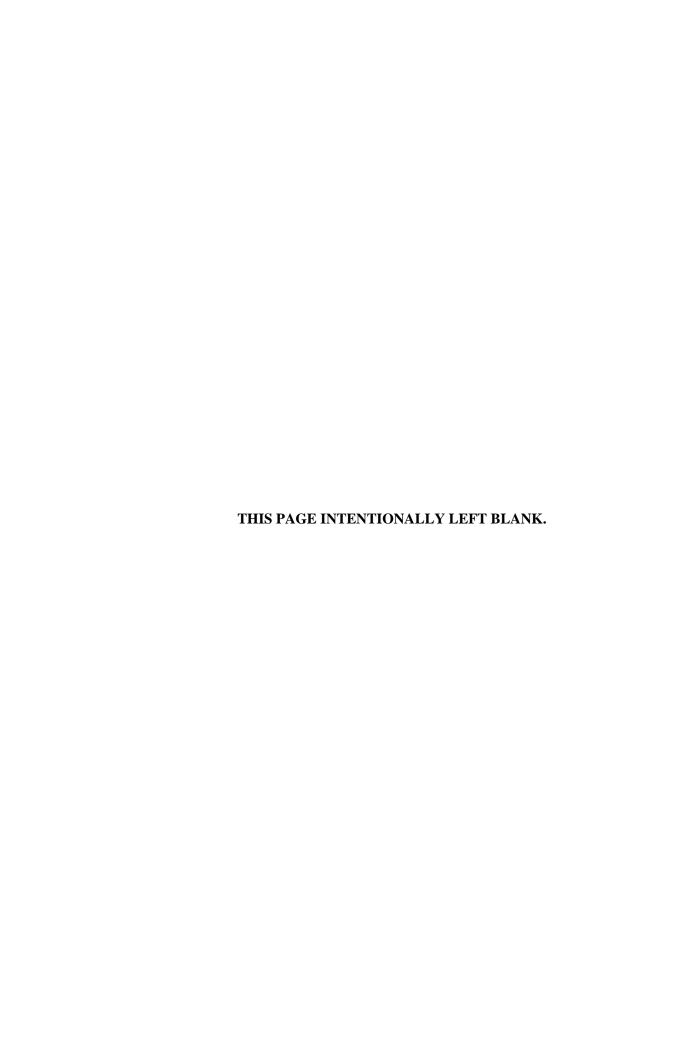
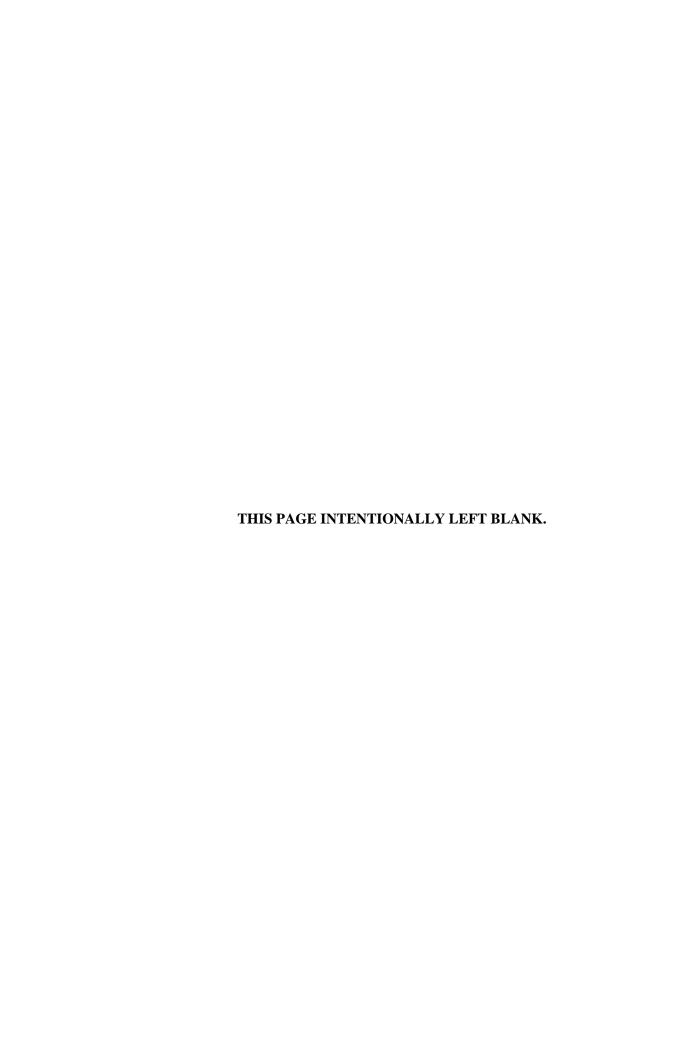
APPENDIX A

Field Sampling Logs

Soil Boring Samples







HTRW DRILLING LOG						DISTRICT							BOREHOLE NUMBER										
HIR	W DRILL	LING	LOC	3				US	SACE	- Lo	uisvi	lle							CBL56-0607				
	1. COMPANY NA	ME						2. D	RILLING	G SUB	CONT	RACTO	OR								1		7
	SAIC							Fro	ontz D	Drillin	ng								SH	HEET	1	OF	
	3. PROJECT	WAAP	PBA	148	-RI						OCATIO				8451	Stat	e R	oute	5 Ra	aven	na, O	H 44	266
5. NAME OF	ND TYPES OF SAM	ier La	uri24										OF DR			Geo	pro	be					
7. SIZES AN	ND TYPES OF SAM	IPLING EQUI	IPMENT	,						8. BO	OREH	OLE LC	CATIC	N E	230	13	72	5,3	14	N	559	645	7.74
	3 140	end Ar	7-							5. 30	JINFAC	E ELE	VATIO	N/DATI	JIVI	N	CA	8	3				
	35 Bo	w)								15. E	DEPTH	GROU	JNDWA	TER E	RTED: NCOUN	NTERE	D		-		ED: /	74	5
12. OVERBI	URDEN THICKNES	S	·7′	L				-		16. [DEPTH	TO W	ATER/I	ELAPSI	ED TIMI		ER BO		DLE CC	OMPLE	TION		
13. DEPTH	DRILLED INTO BE	DROCK	NA							17. 0	OTHER	WATE	R LEV	EL ME	ASURE	-	200		E DAT	E/TIME	Ε)		
14. TOTAL I	DEPTH OF BOREH	OLE	7'	-		-	-			+						1	NO	4					
18. GEOTE	CHNICAL SAMPLE	S	UNDI	STUR	BED:	1		DIST	TURBEI	D:			-	119. T	OTAL N	IUMBE	R OF	CORE	BOXE	-S	NA		
20. CHEMIC	CAL SAMPLES	-			P! /met	NA	D.	NA	O 8 0 10 1	отн	CD.	-			2,43,710						VERY	%	_
	SITION OF BOREHO	DLE			TED/INS			0.00		OTH	ER.		DAT	- 001	DI ETE:		200		Contract Contract				-
		GROUT	DATE		BENTO			1110		0004	DV 147			= COM	PLETE				-	22	100		
23. NOTES								*	IEM			LL PO				MONI	7.7	24/20/2					
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LOCATI	ON SKETCH	СОММЕ	NTS													SCA	ALE:		Nor	ne			
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RVAAP-06 C-Block Quarry CBLsb-007

Driller : Ryan Laurich : NA

Designation of Drill Type of Drill Rig : NA

Drilling Company

Geologist : Steve Visocky

: SAIC

Oversight Company : SAIC Borehole Diameter : 3"

RVAAP PBA 2008 Remedial Investigation Ravenna Army Ammunition Plant 8451 State Route 5 Ravenna, Ohio 44266 Portage County

Start Date : 03/22/10; 1550 **End Date** : 03/22/10; 1745 Northing Coord. : 559645.74 Easting Coord. : 2343725.34

Total Depth of Boring : 7.0 ft

Sampling Equipment : 3" Hand Auger

Depth in feet	USCS Symbol	USCS Graphic	Description	Analyses	Recovery	Collection Interval	Comments
0-			(0.0' - 5.5') SILT (ML); little Sand; trace Gravel; 10YR3/3 very dark brown; soft; damp; low plasticity; trace organics and roots.	CBLsb-007-5249-SO collected from 0.0' - 1.0' on 03/22/10 at 1615 for TAL Metals + Hg, Explosives, and Asbestos.	1.0'/1.0'		Soil Color Chart Munsell 1994 Rev. Ed.
3-	ML			CBLsb-007-5250-SO collected from 1.0' - 4.0' on 03/22/10 at 1645 for TAL Metals + Hg, Explosives, and Asbestos.	3.0'/3.0'		
4	sw		(5.5' - 7.0') Fine grained SAND (SW); little Silt; trace Gravel; 10YR3/3 very dark brown with 10YR6/8 brownish yellow iron accumulations; loose; nonplastic; trace organics and roots.	CBLsb-007-5251-SO collected from 4.0' - 7.0' on 03/22/10 at 1710 for TAL Metals + Hg, Explosives, and Asbestos.	3.0'/3.0'		
7-			Boring terminated at 7.0 ft bgs.				Coordinate System: NAD 83

Boring backfilled with sodium bentonite chips and hydrated. 0.0' - 1.0' sampled using a 3" hand auger and triangular subsample procedure for explosives as presented in Section 4.5.2.1.1 of the Facility-Wide SAP. Samples were composited and homogenized for all analyses.

		DISTRICT			BOR	EHOLE NUMBER	
HTRW DRILLING	LOG	USACE -	Louisville		c	BL 56 -	448
1. COMPANY NAME	•	2. DRILLING S	SUBCONTRACTOR				
SAIC		Frontz Dri				IEET 1 O	
3. PROJECT PBAD	g-RI			RVAAP 8451 Stat			4266
5. NAME OF DRILLER 7. SIZES AND TYPES OF SAMPLING EQUI	Lounch		S. MAKE/MODEL OF I	DRILL Gee	probe-5v 5	22/10	
	PMENT	E	i, BOREHOLE LOCAT	TION E 23437	73.27	V55954	9.07
3" Hud Auger		8	. SURFACE ELEVAT	TION E 23437	NAD 8	3	
55 Bewl.		1	10. DRILL DATE/TIME	STARTED: 125	COM	IPLETED: 14	<u> </u>
		[15. DEPTH GROUND	WATER ENCOUNTERE	D		
		7	6. DEPTH TO WATE	R/ELAPSED TIME AFTI	R BOREHOLE CO	MPLETION	
12. OVERBURDEN THICKNESS	2			M			
13. DEPTH DRILLED INTO BEDROCK	NA	1	7. OTHER WATER L	EVEL MEASUREMENT	S (INLCLUDE DAT	E/TIME)	
14. TOTAL DEPTH OF BOREHOLE	2.			M			
18. GEOTECHNICAL SAMPLES	UNDISTURBED: NA	DISTURBED:	NA	19 TOTAL NUMBE	R OF CORE BOXE	s NA	
20. CHEMICAL SAMPLES	CHEM: Expl / he fe PAD:	NA (OTHER:		21 TOTAL CORE	RECOVERY %	
22. DISPOSITION OF BOREHOLE	DATE STARTED/INSTALLED: 3/2	2/10	D,	ATE COMPLETED/ABA	NDONED: 3/1:	2/16	
BACKFILL TYPE GROUT	₩ BENTONITE		RARY WELL POINT		TORING WELL	-y +	
23. NOTES BKG: ≤ Background	BGS: Below Ground Surfac	e (CPM: Counts per M	linute PPM	Parts per Million	l	•
: First Water E	incountered : S	tatic Water Lev	el N	A: Not Applicable			
LOCATION OVETONIOSMA							
LOCATION SKETCH/COMME	:N15			SCA	ALE: Noi	ne	
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Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266

RVAAP-06 C-Block Quarry CBLsb-008

 Start Date
 : 03/22/10; 1250

 End Date
 : 03/22/10; 1415

 Northing Coord.
 : 559549.07

 Easting Coord.
 : 2343773.27

Drilling Company : SAIC

Driller : Ryan Laurich

Designation of Drill : NA Type of Drill Rig : NA

Geologist : Steve Visocky
Oversight Company : SAIC

Borehole Diameter : 3"

Sampling Equipment : 3" Hand Auger

	Г	Portage County	Easting Coord. : 234 Total Depth of Boring : 2.0	ft			
Depth in feet USCS Symbol	USCS Graphic	Descriptio	on	Analyses	Recovery	Collection Interval	Comments
1-ML 2		(0.0' - 2.0') SILT (ML); little Sand; to 10YR4/2 dark grayish brown; soft; (1.75' - 2.0') Sand content increase. Boring terminated at 2.0 ft bgs. Sand	damp; medium plasticity.	CBLsb-008-5253-SO, CBLsb-008-6126-FD, & CBLsb-008-6128-QA collected from 0.0' - 1.0' on 03/22/10 at 1300 for TAL Metals + Hg, Explosives, and Asbestos. CBLsb-008-5254-SO collected from 1.0' - 2.0' on 03/22/10 at 1350 for TAL Metals + Hg, Explosives, and Asbestos.	1.0'/1.0'		Soil Color Chart Munsell 1994 Rev. Ed.
7							Coordinate System: NAD 83

Boring backfilled with sodium bentonite chips and hydrated.
0.0' - 1.0' sampled using a 3" hand auger and triangular subsample procedure for explosives as presented in Section 4.5.2.1.1 of the Facility-Wide SAP.
Samples were composited and homogenized for all analyses.

* Also SHELBY TUBE LOCATION

	DISTRICT	BOREHOLE NUMBER
HTRW DRILLING LOG	USACE - Louisville	CBL5b-\$10
1, COMPANY NAME	2. DRILLING SUBCONTRACTOR	
SAIC	Frontz Drilling	SHEET 1 OF Z
3. PROJECT PISAGE RI		51 State Route 5 Ravenna, OH 44266
5. NAME OF DRILLER 7. SIZES AND TYPES OF SAMPLING EQUIPMENT	6 MAKE/MODEL OF DRILL	Geoprobe 3 3/20/10
7. SIZES AND TYPES OF SAMPLING EQUIPMENT	8. BOREHOLE LOCATION E 23	343833 58 NG59461.51
	9, SURFACE ELEVATION/DATUM	N4D 83
311 Hond Auger	10 DRILL DATE TIME STARTE	D. 0945 COMPLETED: 1100
	15, DEPTH GROUNDWATER ENC	OUNTERED
	16. DEPTH TO WATER/ELAPSED	TIME AFTER BOREHOLE COMPLETION
12. OVERBURDEN THICKNESS		NA
13, DEPTH DRILLED INTO BEDROCK NA	17, OTHER WATER LEVEL MEASU	JREMENTS (INLCLUDE DATE/TIME)
14. TOTAL DEPTH OF BOREHOLE		will.
18 GEOTECHNICAL SAMPLES UNDISTURBED MA	DISTURBED: 19 TOTA	AL NUMBER OF CORE BOXES NA
20 CHEMICAL SAMPLES CHEM: 5 1143 m.h.l.		21. TOTAL CORE RECOVERY %
22. DISPOSITION OF BOREHOLE DATE STARTED/INSTALL	ED: 3/27// DATE COMPLE	TED/ABANDONED: 3/2 2/10
BACKFILL TYPE: GROUT F BENTONITE		MONITORING WELL
23. NOTES BKG: ≤ Background BGS: Below Grou		
: First Water Encountered	: Static Water Level NA: Not Appli	· · · · · · · · · · · · · · · · · · ·
V 11 Hat Fraid: Elizodikeled	WA: NOT Appli	NAME .
LOCATION SKETCH/COMMENTS		SCALE: None
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	CDLSD-010 CDLSD-011	
	07 + d COLSB-411	
2) 2 June 1944	0/4	
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GEOLOGIST SIGNATURE/DATE	QAQC SIGNATUBE/DATE	, BOREHOLE NUMBER
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Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266

Portage County

RVAAP-06 C-Block Quarry CBLsb-010

: 2343833.58

 Start Date
 : 03/22/10; 0945

 End Date
 : 03/22/10; 1100

 Northing Coord.
 : 559401.51

Total Depth of Boring : 4.0 ft

Easting Coord.

Drilling Company : SAIC

Driller : Ryan Laurich

Designation of Drill : NA Type of Drill Rig : NA

Geologist : Steve Visocky
Oversight Company : SAIC

Borehole Diameter : 3"

Sampling Equipment : 3" Hand Auger

			Total Boptil of Bolling : 1.0				
Depth in feet	USCS Symbol	USCS Graphic	Description	Analyses	Recovery	Collection Interval	Comments
1-	SM		(0.0' - 1.0') Fine grained SAND (SM); little Silt; trace Gravel; 2.5Y6/3 light yellowish brown; very loose; moist; nonplastic. (1.0' - 3.0') SILT (ML), little fine grained Sand; trace coarse Gravel; trace Clay; 10YR5/2 grayish brown with 10YR5/8 yellowish brown iron accumulations; soft; damp; nonplastic.	CBLsb-010-5257-SO collected from 0.0' - 1.0' on 03/22/10 at 1000 for TAL Metals + Hg, Explosives, and Asbestos. CBLsb-010-5258-SO collected from 1.0' - 4.0' on 03/22/10 at 1025 for TAL Metals + Hg, Explosives, and Asbestos.	1.0'/1.0'		Soil Color Chart Munsell 1994 Rev. Ed.
3-	ML		(3.0' - 4.0') Medium to coarse grained SAND (SM); trace Silts trace Gravel; 10YR6/2 light brown; moist; nonplastic; sandstone fragments throughout.		3.0'/3.0'		
5-	-		Boring terminated at 4.0 ft bgs. Sandstone Bedrock Refusal.				
6-							Coordinate System: NAD 83

Boring backfilled with sodium bentonite chips and hydrated. 0.0' - 1.0' sampled using a 3" hand auger and triangular subsample procedure for explosives as presented in Section 4.5.2.1.1 of the Facility-Wide SAP. Samples were composited and homogenized for all analyses.





Ravenna Army Ammunition Plant

8451 State Route 5

Boring backfilled with sodium bentonite chips and hydrated.

Shelby tube sealed with wax and capped.

RVAAP-06 C-Block Quarry CBLsb-010

Start Date : 03/22/10; 1650 **End Date** : 03/22/10; 1700 Northing Coord. : 559401.51

: Frontz Drilling **Drilling Company** Driller : Jeremy Leckrone

Designation of Drill : NA Type of Drill Rig : NA

Borehole Diameter

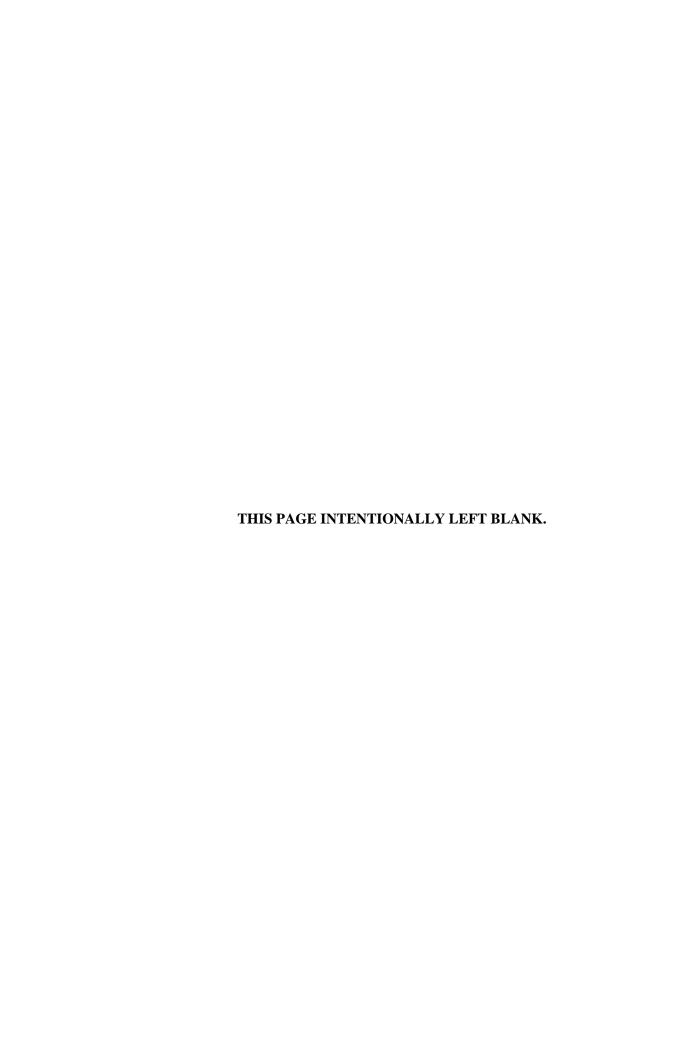
Geologist : Steve Visocky Oversight Company : SAIC

Sampling Equipment : 3" Hand Auger

: 3"

CBLsb-010

		F	8451 State Route 5 Ravenna, Ohio 44266 Portage County	_	9401.51 43833.58 5 ft	Sampling Equ	Причени	: 28" x 3" Shelby Tube
Depth in feet	USCS Symbol	USCS Graphic	Descripti	on	Analyses	Recovery	Collection Interval	Comments
0-	SM		(0.0' - 1.0') Fine grained SAND (SI Gravel; 2.5Y6/3 light yellowish brown; very nonplastic.					Soil Color Chart Munsell 1994 Rev. Ed.
3-	ML		(1.0' - 3.0') SILT (ML), little fine gracoarse Gravel; trace Clay; 10YR5/10YR5/8 yellowish brown iron acc damp; nonplastic. (3.0' - 3.5') Medium to coarse grain Silt; trace Gravel; 10YR6/2 light br nonplastic; sandstone fragments to	2 grayish brown with umulations; soft; ned SAND (SM); trace own; moist;	Shelby Tube CBLsb-010-5269-SO collected from 1.5' - 3.5' ton 03/22/10 at 1700 for Porosity, Bulk Density, Moisture Content, Total Organic Carbon, Permeability, and Grain S Fraction Analysis	2.0'/2.0'		Shelby tube manually collected 2.0 ft south of CBLsb-010. Shelby tube installed above bedrock observed in CBLsb-010.
5-		101310	Boring terminated at 3.5 ft bgs.					Coordinate System: NAD 83



			DISTRICT				BOREHOLE NUMBER	
	DRILLING	LOG		- Louisville		(BLSb-411		
1, 0	OMPANY NAME		2. DRILLIN	IG SUBCONTRACTOR			SHEET 1 OF Z	
SA			Frontz I	-			alexa I	
3. P	ROJECT RVAAP	M34 \$8 -127					Ravenna, OH 44266	
NAME OF DRII	PES OF SAMPLING EQU	Lourich		6. MAKE/MODEL OF C		-Geoprobe - 5	1/3/23/2	
SIZES AND TY				8. BOREHOLE LOCAT	ION E 230	13866 66	N559401.51	
	3th Hend Au	30		9. SURFACE ELEVAT	ION/DATUM	41	0 83	
	SS Bowl			10 DRILL DATELTIME	STARTED:		COMPLETED: 1230	
	32 0000 (15. DEPTH GROUNDY		/0-		
		/		16. DEPTH TO WATER	R/ELAPSED TII		E COMPLETION	
		1.5'		AT OTHER WATER I	EVEL 145 4 GUE	NA		
	LED INTO BEDROCK TH OF BOREHOLE	NA		17. OTHER WATER LE	EVEL MEASUR	REMENTS (INLCLUDE	DATE/TIME)	
	CAL SAMPLES	L(-5'		1 11	I TOTAL		20752	
. CHEMICAL S		UNDISTURBED: VA		D: NH		NUMBER OF CORE	ORE RECOVERY %	
	N OF BOREHOLE	CHEM: RAD		OTHER: FULL SO				
	_	DATE STARTED/INSTALLED:				ED/ABANDONED 3		
ACKFILL TYPE 3. NOTES	BKG: ≤ Background	BGS: Below Ground		MPORARY WELL POINT CPM: Counts per M		MONITORING WEL		
	: First Water 6		Surrace 7 : Static Water I	· · · · · · · · · · · · · · · · · · ·	iinute A: Not Applica	· ·	IIIIIOTT	
		•	. Static Water i		s. Not Applice	3016		
OCATION	SKETCH/COMME	ENTS			- (SCALE:	None	
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Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266

Portage County

RVAAP-06 C-Block Quarry CBLsb-011

Start Date : 03/23/10; 1130 End Date : 03/23/10; 1230 Northing Coord. : 559401.51

: 2343866.06

Total Depth of Boring : 4.5 ft

Easting Coord.

Drilling Company : SAIC

Driller : Ryan Laurich

Designation of Drill : NA Type of Drill Rig : NA

Geologist : Steve Visocky
Oversight Company : SAIC

Borehole Diameter : 3"
Sampling Equipment : 3" Hand Auger

Collection Interval Graphic **USCS Symbol** Depth in feet Recovery **USCS** Analyses Description Comments 0 (0.0' - 3.0') Fine grained SAND (SW); trace Silt; trace fine Soil Color Chart Gravel; 10YR4/2 dark grayish brown; loose; moist; CBLsb-011-5261-SO Munsell 1994 Rev. Ed. nonplastic; sandstone fragments throughout. collected from 0.0' - 1.0' on 1.0'/1.0' 03/23/10 at 1200 for VOCs, SVOCs, PCBs, Pesticides, Explosives, Propellants, TAL Metals + Hg, and Asbestos. -SW CBLsb-011-5262-SO, 2 CBLsb-011-6127-FD, & CBLsb-011-6129-QA collected from 1.0' - 4.0' on 3.0'/3.0' 03/23/10 at 1215 for VOCs, SVOCs, PCBs, Pesticides, Explosives, Propellants, TAL Metals + Hg, and Asbestos. 3 (3.0' - 4.2') Fine grained SAND (SM); little Silt; trace Gravel; trace Clay; 10YR4/4 dark yellowish brown with 7.5YR5/6 strong brown iron accumulations; loose; moist; nonplastic. SM CBLsb-011-5263-SO collected from 4.0' - 4.5' on 03/23/10 at 1230 for VOCs, SVOCs, PCBs, Pesticides, 0.5'/0.5' (4.2' - 4.5') Medium grained SAND (SW); trace Silt; SW Explosives, Propellants, TAL 7.5YR4/6 strong brown; loose; moist; nonplastic. Metals + Hg, and Asbestos. Boring terminated at 4.5 ft bgs. Sandstone Bedrock Refusal 5

Boring backfilled with sodium bentonite chips and hydrated.
0.0' - 1.0' sampled using a 3" hand auger and triangular subsample procedure for explosives as presented in Section 4.5.2.1.1 of the Facility-Wide SAP. Samples were composited and homogenized for all analyses, except VOCs.

CBLsb-011

Coordinate System: NAD 83

		DISTRICT				BOREHOLE N	UMBER
TRW DRILLING	LOG	USACE	- Louisville			EBLSb	- ds12
1. COMPANY NAME		2. DRILLING	G SUBCONTRAC	TOR			
SAIC		Frontz D	Orilling			SHEET	1 OF 2
3. PROJECT RVAAL)	PBAOS-RP		4. LOCATION	RVAAP 84	51 State Route	e 5 Ravenna	OH 44266
NAME OF DRILLER PLANE LO	unch		6. MAKE/MODE	L OF DRILL	Geoprobe	Si-spentio	
SIZES AND TYPES OF SAMPLING EQU	IPMENT		8. BOREHOLE	LOCATION E 2	343702.01	1 559:	540 51
3" Hund A	uger		9. SURFACE EI	LEVATION/DATUM		CB GAZ	
SS Dowl			10. DRILL DATE	STARTE	D: 1430	COMPLETED:	1525
				OUNDWATER ENC			
OVERBURDEN THICKNESS	3		16. DEPTH TO	WATER/ELAPSED 1	FIME AFTER BORE	HOLE COMPLETIC	ON
DEPTH DRILLED INTO BEDROCK	NA		17. OTHER WA	TER LEVEL MEASU		IDE DATE/TIME)	
TOTAL DEPTH OF BOREHOLE	3		-		~~*	,	
GEOTECHNICAL SAMPLES	UNIDICTUDOFO.	DISTURBE	D·	19. TOTA	L NUMBER OF CO	RE BOXES N	NA.
CHEMICAL SAMPLES	CHEM: CHEM: RAD:		OTHER:		21. TOT#	L CORE RECOVE	
DISPOSITION OF BOREHOLE	DATE STARTED/INSTALLED:			DATE COMPLE	TED/ABANDONED:	3/22/10	
CKFILL TYPE GROUT	BENTONITE		PORARY WELL F		MONITORING V		
NOTES BKG: ≤ Background	BGS: Below Ground Se	urface	CPM: Counts		PPM: Parts pe		
: First Water E	Encountered	: Static Water L	.evel	NA: Not Applic			
DCATION SKETCH/COMME	INTS				SCALE:	None	
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OLOGIST SIGNATUREDATE		QA/QC SIGNATUR	フニバングで	5/24/2		BOREHOLE NI	MARCE





Ravenna Army Ammunition Plant

8451 State Route 5

Ravenna, Ohio 44266

RVAAP-06 C-Block Quarry CBLsb-012

 Start Date
 : 03/22/10; 1430

 End Date
 : 03/22/10; 1525

 Northing Coord.
 : 559540.51

 Easting Coord.
 : 2343702.04

Drilling Company : SAIC

Driller : Ryan Laurich

Designation of Drill : NA Type of Drill Rig : NA

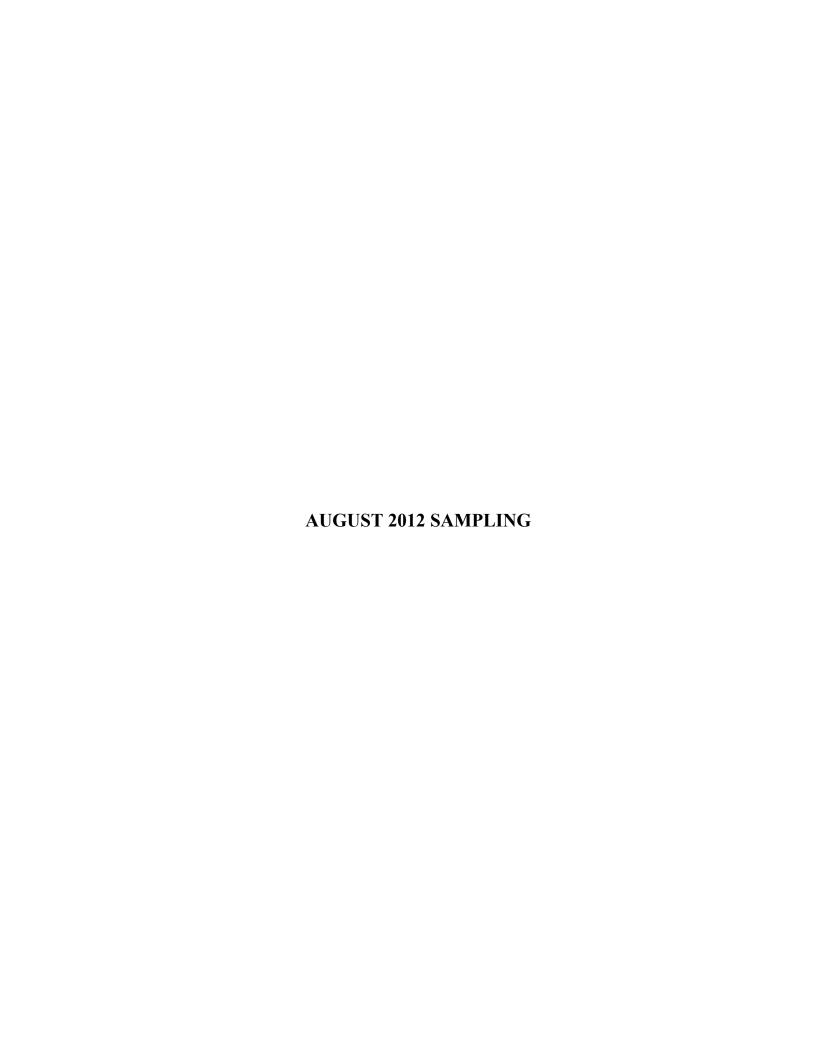
Geologist : Steve Visocky
Oversight Company : SAIC

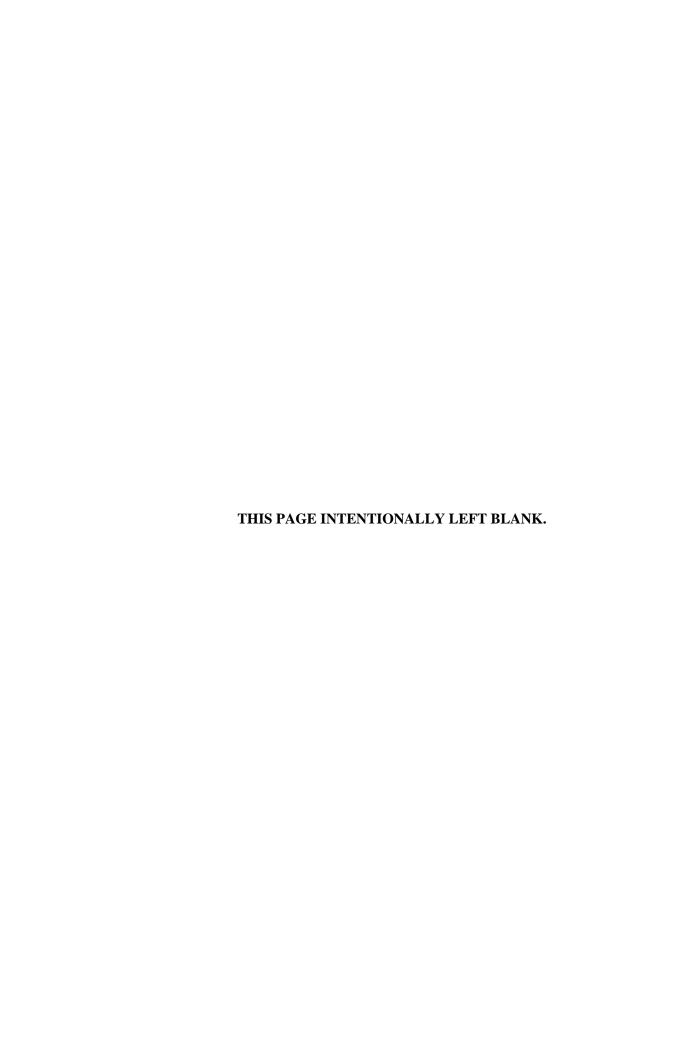
Borehole Diameter : 3"

Sampling Equipment : 3" Hand Auger

			Portage County	Total Depth of Boring : 3.0	ft			
Depth in feet	USCS Symbol	USCS Graphic	Descriptio	on	Analyses	Recovery	Collection Interval	Comments
0- - - - - - - 1- - - - - - - - - - - -	ML		(0.0' - 2.0') SILT (ML); little fine gra 10YR5/2 grayish brown; soft; damp trace organics (wood/decaying ma	o; medium plasticity;	CBLsb-012-5265-SO collected from 0.0' - 1.0' on 03/22/10 at 1440 for TAL Metals + Hg, Explosives, an Asbestos.	1.0'/1.0'		Soil Color Chart Munsell 1994 Rev. Ed.
3-	SM		(2.0' - 3.0') Fine grained SAND (SM trace Clay; 10YR4/3 brown with 7.5 iron accumulations; loose; moist; looganics and roots thoughout. Boring terminated at 3.0 ft bgs. Sa	ow plasticity; trace	collected from 1.0' - 3.0' on 03/22/10 at 1515 for TAL Metals + Hg, Explosives, an Asbestos.	2.0'/2.0'		
4								
6								Coordinate System: NAD 83

Boring backfilled with sodium bentonite chips and hydrated. 0.0' - 1.0' sampled using a 3" hand auger and triangular subsample procedure for explosives as presented in Section 4.5.2.1.1 of the Facility-Wide SAP. Samples were composited and homogenized for all analyses.





EAIF	RVAAP - Multi-Inci	remen	tal (MI) Fie	ld Form	SHEET	1 OF	1			
JAIL.	USACE - Louisville	B\/AAB s	3451 State Rt. 5	1. Sample Team: AIDE	WELL					
From Science to Solutions	RVAAP PBA 2008 RI	_	a, OH 44266 AMANDA TRONTON							
2. Location ID:			3. Revised Coordinate	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
CBL SS- (C	003M		NA							
4. Sample ID: CB:USS - (000)	3M-5876-SO		5. Sample Date and Ti							
	03M-4247-FD		7. Split ID:							
8. MI Equipment Used:	Oo- or		9. MS/MSD Collected:	MA						
3/p" SS Pus	H PROBE		10. Activities in the Arc	ea: NONE	O stall	- 1/00	מרועו			
in quarty.	H PROBE Teld Notes: SAND (SW); tr ; loose; dry; non pla									
12. Location Sketch/Comm	nents (not to scale):		GUMRRY C	ontinues to ha	247A		4 =			
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□ Fl	xplosives Tal METALS ull suite (vocs, svocs, Meta anda Irentin oo	als, Explos	sives, Propellantś,	OTHER TOTAL + H Pesticides, PCBs) (Signature and			milum			
The corded by.	(Signature and Date)			(Signature and	i Date)		_			

<i>5/1/L</i>	RVAAP - M		1			1. Sample		3/5			
From Science to Solutions	RVAAP PBA 2008		1	3451 Stat ı, OH 442			191	MPA TRONTON			
2. Location ID:	1107-011 1 5/12000			3. Revised		Recorded:	TIMIA	NDA 120	3N72	<u>N</u>	
CBLSS - O	05M			MA							
4. Sample ID:		0 -		5. Sample t			_				
<u>CBUSS - 005</u> 6. Dupe ID:	M-5877	-50		7. Split ID:	0/12,	/ / ι ω	5				
M				MA							
0. M. Faulament Head:	0			9. MS/MSD	Collected:	M					
36" SS PL 11. Soil Description and F SWATUL; 104R5	15H PROBE	<u> </u>		10. Activitie	s in the Are	a: NDA	E				
11. Soil Description and F	ield Notes: SANO	/(sw); t	rice	SS	grave	(; lř	the orga	anies fr	m		
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12. Location Sketch/Com	ments (not to scale):		111017	y Gorne					ļ.,,,,,		4 -
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Analyses:	W FOOIAFO					n : - : - ! - ! - !					
Analyses: U E U F	XPLOSIVES	SVOCs, Meta	ls, Explos	sives, Prop	pellant s , l	esticide:	s, PCBs)	•			
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	ULL SUITE (VOCs,	tm 08/				atre		a 10/			

HTRW DRILLI	NG LOG		USACE- Louisville BOREHOLE NUM CBL 8			MBER 10b - Ø25		
1 COMPANY NAME		SUBCONTRAC	TOR	SHEET 1				
SAIC		NA				SHEEL	of 2	
PROJECT RVAAP PE	3A 08 RI		4. LOCATION		Route 5 Rave	nna OH 44266	3	
NAME OF DRILLER NA			6. MAKE/MODE	NA	7			
'. SIZES AND TYPES OF SAMPLI			8. BOREHOLE L		0			
3" Stainles	5 Steel Hand A	nger	08/14	1840	5	COMPLETED 1140		
1. OVERBURDEN THICKNESS	11		12. DEPTH TO V	VATER/ELAPSED TI	ME AFTER BORE	HOLE COMPLETION	NA NA	
3. DEPTH DRILLED INTO BEDRO	OCK NA		14. CHEMICAL S	SAMPLES (circle)	VOC SVC	Cs PAHs	DCRs.	
5. TOTAL DEPTH OF BOREHOL			Pesticides	Explosives	TAL Meta		(Total C	
6. DISPOSITION OF BOREHOLE							HEX C	
ACKFILL TYPE: \(\int \) GI	ROUT F BENTONITE	TEMP	ORARY WELL P	OINT T	MONITORING V	VELL		
7. NOTES BKG: ≤ Backs	ground BGS: Below Ground	Surface	PPM: Parts pe	r Million				
: First \	Vater Encountered	: Static Water L	evel	NA: Not Applica	ble			
OCATION SKETCH/CO	DMMENTS				SCALE:	None		
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OLDGIST SIGNATURE/DATE		QA/QC SIGNATUR	RE/DATE 1			BOREHOLE NUI	MBER	
Katie Wells	08/14/12	Ciman	da 3	nentin	08/13/12	OBLSI	5-025	

HTRW DRILLING LOG			DISTRICT		BOREHOLE NUMBER		
			JG	USACE- Louisville	CBLSD-025		
1. COMPANY NAME			<u> </u>	2. DRILLING SUBCONTRACTO	R		
SAIC				l NA			SHEET 2 OF 2
3. PROJECT	RVA	AP PBA	08 RI	4. DIRECTION OF BOREI	HOLE 🄯	VERTICAL	INCLINED DEGREES
5. NOTES PID MA	AKE/MODEL:			PID SERIAL#;		Colors from I	Munsell Soil Color Chart, Rev
	NA			NA			2000 Revised Edition
ELEVATION	DEPTH	USCS	CLASSIFICATION C		RECOVERY	MONITORING	REMARKS
	(Feet)		0 1 (541) little	an notatione tragments	(ft)	(PPM)	(Sample IDs/Depths/Etc.) CBL 8b - \$\hat{p}_25 - \$878 - \$0
			Sand (SW), little s exerce, subangular, (104R S/4), losse, das non-plassic, presence o material Cusod),	yellowish-brown	Hand		for Hex Cr & Total
			CIOURSIA), loose, da	mp (from precipitation)	auger	NA	Cr, 1135 08/10/12
	1	11,1	material (wood),	, , , , , , , , , , , , , , , , , , , ,	0-11		day of day comp a
		SW					CBLSb-028-5879-80
			Codute, subangula (104R4/5), 1005e, ol organic material (ny non-plastic,	Auger		for Hex Cr & Total Cr
	2		organic material (wood).	1-2'	NA	1140 08/10/12
			Paris tarios	to d at 21/10	<u> </u>		
			Boring terminal	real at a bysi			
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TRW DRILLIN	IG LOG	USACE- Louisville		OREHOLE NUMBER UBLSb-D26			
COMPANY NAME		2. DRILLING SUBCONTRAC		UDLOD-Wab			
AIC		NA	SHEET 1 OF A				
PROJECT RVAAP PE	A 08 RI	4. LOCATION	8451 State Route 5	Ravenna OH 44266			
NAME OF DRILLER		6. MAKE/MODI					
SIZES AND TYPES OF SAMPLI		8. BOREHOLE	LOCATION				
3" Stainless	Steel Hand Au	ger C-	Block Quar	ry			
	L	, 0. 5.11.22 57.112	TIME STARTED:	COMPLETED			
		08/\$C	0/12 /73¢	1800			
OVERBURDEN THICKNESS	101		WATER/ELAPSED TIME AFTE	DIT	, NA		
. DEPTH DRILLED INTO BEDRO	1.8'		SAMPLES (circle) VOC	SVOCs PAHs PCB			
TOTAL DEPTH OF BOREHOL	DH	Pesticide	700	AL Metals Propellants Total			
DISPOSITION OF BOREHOLE	1,0	1					
ACKFILL TYPE:	OUT F BENTONITE	TEMPORARY WELL	POINT MONITO	PRING WELL			
. NOTES BKG: ≤ Backs		Surface PPM: Parts p	er Million				
: First \	Vater Encountered	: Static Water Level	NA: Not Applicable				
OCATION SKETCH/CO	MMENTS		SCAL	E: None			
FIA				Y	9 4		
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		DISTRICT	DISTRICT			BOREHOLE NUMBER			
HTRW DRILLING LOG			USACE-				L3b- Ø26		
1. COMPANY NAM	E			2. DRILLING	SUBCONTRACTO	R			05 14
SAIC					NA			SHEET 2	OF 2
3. PROJECT		AP PBA	08 RI	4. DIR	ECTION OF BORE	HOLE 🔽	VERTICAL	INCLINED	DEGREES
5 NOTES PID M	AKE/MODEL:				ERIAL#: UA		Colors from	Munsell Soil Color (
ELEVATION	DEPTH	USCS	CLASSIFICATI	ON OF MATERIALS		RECOVERY	MONITORING	2000 Revised Ed	ARKS
	(Feet)					(ft)	(PPM)	j.	s/Depths/Etc.)
	1	SW	Sand (SW), little fragments, coa yellowish-brow non-plastic, pr organic mater	He sands rse, suba on (19425 resence of	tone ngular, 14), loose, -roots;	Hand Auger \$\phi-1'	NA	plus Ms/ms/ and Total dupe: CBL 1745 08	6-5801-80 0 for Hex Cr Cr, plus 88-926-6248-1 3/09/12
	2		organic mater	ial (wood	d), '	Hand Auger 6-1'	NA	for Hex C Cr, 1844	26-5882-80 randTotal 08/09/12
Ш			Boring termin Sandst	nated at	-1.8 bys sal				
-	3						}		
	4					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
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:	9								
GEOLOGIST SIGN	10			QA/QÇ SIGNATUR	RE/DATE	1		BOREHOLE NUM	BER
Katie		\$61	10/12	(Imar	ida J	rentin	-08/13/12	CBLSb -	-026