APPENDIX 7

SOIL INFORMATION

EAST BEND STATION
WEST LANDFILL

ATTACHMENT 34

Rock Core Log Data

West Special Waste Landfill East Bend Station Boone County, Kentucky

Boring and test pit logs included within this attachment consist of geological data obtained from investigations performed on the proposed landfill site. Locations of the explorations are depicted on the drawings included in Attachment 20, and on the Geologic Map included as Attachment 35.



4120 AIRPORT ROAD . CINCINNATI, OHIO 45226 . TEL. 513-321-5816

"AE A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC, AND OURBELVES, ALL REPORTS ARE SUBMITTED AS THE COMPIDENTIAL PROPERTY OF GLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS, OR EXTRACTS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL."

11-20-80 vf

FIELD TEST BORING REPORT

CLIENT			s & Electric Compa wer & Light Compar			_ORDER N	o	373.233	
PROJECT	East l	Bend Gen	erating Station, E	Soone County,	Kentucky	HOLE No.	· · · · · · · · · · · · · · · · · · ·	Well #7	(EB-7)
LOCATION_	As sh	own on p	lan		<u> </u>				
DRILLER	C. Mod	ore - E.	Philpot	DRILL No	35	DATE STA	RTED	10-27-80)
ELEVATION : CASING: DIA SAMPLER: D DEPTH TO !	IAMETER WATER: !!	MMEDIATE.	None	rilling fluid	_HAMMER _UPON CO	WT	FALL_ 20 '		
ELEVATION	DEPTH О¹		DESCRIPTION OF MATE	RIALS	SAMPLE No.	SAMPLE DEPTH	TYPE OF SAMPLE	BLOWS PER 6" ON SAMPLER or % Core Rec.	Recovery
	1.5' 8.0' 86.0'	1.5' 6.5' 78.0'	Brown fine sand Brown sandy clay Brown fine to coagravel and coarse (89.0' P.V.C. 4") BORING COMPLETED	e gravel, dens		amples		or vs. Core yes.	

Samples recovered from this test boring are available for inspection, which is strongly recommended. The company assumes no responsibility for interpretations made by others of load bearing, stability, excavating or other physical characteristics of materials penetrated in the boring.

THE	 NUTTING	co.
Ву	 	

48" DIA_STEEL CASING CONCRETE_SEAL GRADE_EC.520--20 COARSE SANT & GRAVEL FINE SAND WITH MEDIUM CASING INNER OUTER CASING. COARSE SAND WITH MEDIUM GRAVEL & SMALL BOULDERS ... 96-0° FINE SAND WITH SMALL TO MEDIUM GRAVEL COARSE SAND WITH MEDIUM FINE SAND & MEDIUM GRAVEL TOP FITTING FINE & COARSE SAND WITH SOME COARSE GRAVEL & SMALL BOULDERS ÷ '; - SILICA GRAVEL"PACK COARSE SAND LARGE GRAVEL WITH SOME LARGE BOULDERS REDISH BROWN SANDY CLAY WITH IMBEDDED GRAVEL TPLATE EL. 394-0 IST TIMESTONE, MEDIUM HARD.... 131 DEPTH OF WELL EL 388'-0" DATA PER MOODY'S OF DAYTON INC. DRILLERS LOG DATED: 10-13-78 __

TOG-WELL #2 CEB-IZ)

___N_T_5.: ...

PLATE 2

EXHIBIT 4
Page 425 of 510

BBCM	LOG OF BORING EAST BEND WEST BOONE COUNTY, F	LANDFILL	Page 1 of 2
LOCATION: N-51	4,325; E-1,467,220 ELEVATION:	538.0 DATE:10/14/0	3 - 10/15/03
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger	COMPLETION DEPTH	60.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler		
压, 甲酰甲甲基		NATURAL CONSISTENCY INDEX NATURAL MOISTURE CONTE	TEST
DEPTH, SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	DESCRIPTION	× NATURAL MOISTORE CONTE	RESULTS
LU O AS DE AS HE		PLASTIC LIMIT LIQUID LIM	II ROOLIS
 	FILL: Brown fine to coarse sand, trace fine to coarse gravel (access road).	1 1 1 1 1 1	1
1 9/17/20	graver (access road).		
17/20			-;
	Loose brown fine to medium sand, trace silt.		
	,		
2 5 / ₂ / ₄			:
2 2/2/			
⁴			
			<u>: </u>
<u> </u>	Medium-stiff brown clayey silt, some fine to coarse		=======================================
3 2/5/6	sand, trace fine gravel.	• ×	H=0.75-1.0
10 - 10 - 5/6			<u>:</u> G
			1
			!
	Medium-dense to dense brown fine to coarse sand,		=======================================
	some fine to coarse gravel, trace silt.		
☐ 16,			.
$\begin{array}{c c} & 4 & $			· ··
15 7 723			
<u> </u>			
			<u>:</u>
5 15/11/10			
5 11,			<u>:</u>
20 - '10			-
	Very-dense brown fine to coarse sand, "and" fine to		
	coarse gravel, trace silt, many cobble fragments.		
- 25 - 6 25 _{/35/35}			
6 /35,			
- 25 - 32			
27/			_
7 49/			ゴ
30 - 50-5	n i		
			:
	Dense brown fine to coarse sand, some fine to coarse		
`	gravel, trace silt, few cobble fragments.		: -
=	Protection and a profession and a profes		
8 3/15/2	1		<u> </u>
35 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	W 77	SYMBOLS USED TO INDICATE TEST RE	
WATER NOTE: EI	nd of Day (5.0') Caved at 47.0' Q - UNCONE T - TRIAXI	FINED COMPR SEPARATE W - UNIT	PROMETER (tsf) DRY WEIGHT (pcf PIVE DENSITY (%)
DATE:	C CONDO	DIDATION	PLATE 3
JOB: 011-09323-005	-CONTINUED-		ADDANS 3

3B	<u>C</u>	ン N	LOG OF BORING EAST BEND WEST BOONE COUNTY, K	LANDFILL			Page 2 of	
OCATION	Į: _	N-514	1,325; E-1,467,220 ELEVATION:	538.0	DATE:	10/14/03 -		
RILLING	MET	HOD:	4-1/4" I.D. Hollow-stem Auger		COMPLET	ION DEPTH:	60.0'	
AMPLER((S):	2" O	.D. Split-barrel Sampler					
· 円	张 巨	벽님				TURE CONTENT	TEST	
SAMPLE	NUMBER	SAMPLE	DESCRIPTION - CONTINUED	X	KAL MOIS	X	RESULTS	
SA E	S S	SA H		- PLASTIC		LIQUID LIMIT	KESULIS	
35			Dense brown fine to coarse sand, some fine to coarse	10	20 30	1 40		
			gravel, trace silt, few cobble fragments.					
				 				
		14						
9		14 _{/23_{/11}}						
10 -		111						
				<u> </u>				
					1::::			
			Medium-dense brown fine to coarse sand, little fine					
			gravel, trace silty clay.					
		3,	³ / _{4/8}					
10 5 -		4/						
		1 8						
		gravel, trace	•					
			Loose brown fine to coarse sand, little fine to coarse					
			gravel, trace silt.		1: 1:			
⇉ .,		3,						
11		³ / _{4/5}						
0 -		اد [<u>: ;</u>		
		1			:			
12	. 1	¹ / ₂ ,						
55 -		′ 4						
	1							
		j				: : : :		
-			Dense brown fine to coarse sand, some fine to coarse		: : : :			
	L	,,	gravel, trace silt, few cobble fragments.					
13	1	13/16						
50 -	-	13, 16, 16		1 1 1				
			- Encountered cobbles from 13.5' to 14.5'.					
			- Boring backfilled with cuttings at completion.					
					1			
			- Boring elevation estimated from USGS topographic		: : : : :			
55			map.					
					1			
				 	<u> </u>			
		1			-[
					1			
70								
70 —— WATER	LEV	EL: \(\frac{\triangle}{\triangle}\)	Dry - Dry - G - GRADAT	YMBOLS USED '	ro indica See	H - PENETROM		
WATE	R NO	TE: <u>Enc</u>	d of Day (5.0') Caved at 47.0' Q - UNCONF	INED COMPREAL COMPRE	SEPARATI CURVES		WEIGHT (
	DA	TE:	10/15/03 10/15/03 C - CONSOL	IDATION J	COLATO	2		

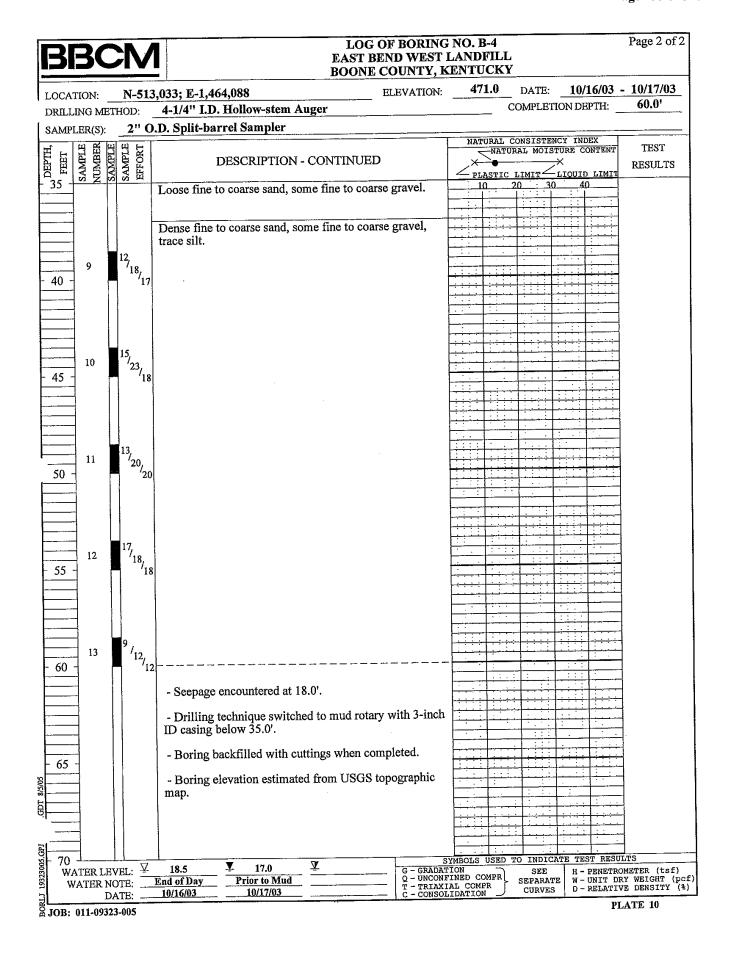
BBCN	LOG OF BORING EAST BEND WEST BOONE COUNTY, I	LANDFILL		ge 1 of 2
LOCATION: N-515	5,352; E-1,465,548 ELEVATION:	525.0 DATE	i: <u>10/15/03</u>	- 10/16/03
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger	COMPL	ETION DEPTH: _	60.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler			
		NATURAL CONSIST	ENCY INDEX	TEST
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION	X NATURAL NO	-×	RESULTS
SAU SAU SAU EFF		PLASTIC LIMIT	LIQUID LIMIT	
<u> </u>	Loose brown fine to medium sand, trace clayey silt.			
1 2/ _{2/3}				
2/ ₃				
	Loose brown fine to coarse sand, little fine to coarse		1	
	gravel, trace clayey silt.			
- 5 - 2 5/ _{4/5}				
- 4/ ₅				
	Dense to very-dense brown fine to coarse gravel "and" fine to coarse sand, trace silt, few cobble fragments.			
	inte to course suitd, trace sirt, few cooste fragments			
3 8 1 _{15,17}				
- 10 - 17				
17,				_
- 15 - 4 - 17 _{/26/21}				G
15 - 21				
5 23 _{/33/44}				
- 20 -				
				i -
				1
6 18/20				
- 25 - 6 18 _{/20/28}				1
			<u> </u>	1
			- 	
	·			1
23/				1
7 29/				1
- 30 - 50-5	1			
CONCUE				-
8				
<u></u>				-
38/				
8 50-4"		SYMBOLS USED TO IND] LTS
S S S S S S S S S S S S S S S S S S S	Dry Dry G-GRADA Coved at Surface O-UNCON	TION SE	E H - PENETRO	OMETER (tsf) RY WEIGHT (pcf
DATE:	10/15/03 10/16/03 10/16/03 T - TRIAX C - CONSO	IAL COMPR } CITE	ES D-RELATI	VE DENSITY (%)
G JOB: 011-09323-005	-CONTINUED-		ı	LININ J

BBC		LOG OF BORING EAST BEND WEST BOONE COUNTY, K	LANDFILL	Page 2 of
LOCATION:	N-515	5,352; E-1,465,548 ELEVATION:	525.0 DAT	
DRILLING ME		4-1/4" I.D. Hollow-stem Auger	COMPL	ETION DEPTH: 60.0'
SAMPLER(S):	2" 0	.D. Split-barrel Sampler		
			NATURAL CONSIS	
DEPTH, FEET SAMPLE NUMBER	SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	NATURAL MC	TEST RESULTS
SAMPLE NUMBER	E S E		∠ PLASTIC LIMIT	←LIQUID LIMIT
35		Dense to very-dense brown fine to coarse gravel "and"	10 20	30 40 ::
		fine to coarse sand, trace silt, few cobble fragments.		
 				· · · · · · · · · · · · · · · · · · ·
	47 _{/30_{/33}}			
9	′30/22			
- 40 -	33			: . : . : : : : : :
	16 _{/38_{/34}}			
10	'38/	·		
- 45 -	34			
				
 		Dense brown fine to coarse sand, trace fine gravel,		
		trace silt.		
	17,			
11	17 _{/26/22}			
50 -	$\prod \frac{22}{}$			
		Very-dense brown fine to coarse sand, little fine to		
		coarse gravel, trace silt.		
10	18,			
- 55 -	18/31/38		* * * * * * * * * * * * * * * * * * * *	
33	30			
		Very-dense brown fine to coarse sand, some fine to		1 . i
		coarse gravel, trace silt, few cobble fragments.		
13	19,			
- 60 -	19 _{/36/37}			
	"			
		- Augers left in ground overnight for extended water		
		level readings.		
		- Boring backfilled with cuttings when completed.		
- 65 -		- Boring elevation estimated from USGS topographic		
		map.		
50/5/8				
6				
21				
8 70	Ш.,,			CATE TEST RESULTS
WATER LE	IOTE: E	Dry Dry G-GRADAT	ION SE INED COMPR SEPAR AL COMPR CURN	E H - PENETROMETER (tsf) RATE W - UNIT DRY WEIGHT (F
G JOB: 011-0932	23-005	10 00000		PLATE 6

BBCV	LOG OF BORING EAST BEND WEST BOONE COUNTY, I	LANDFILL	Page	1 of 2
LOCATION: N-517	7,491; E-1,464,176 ELEVATION:			
ORILLING METHOD:	4-1/4" I.D. Hollow-stem Auger	COMPLE	ITON DEPTH:	60.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler			
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	D. T. G. C. T. T. C. T.	NATURAL CONSISTE NATURAL MOIS	STURE CONTENT	TEST
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION	ZPLASTIC LIMITZ	-FIONID FIWIT B	ESULTS
0 0 2 0 0 1	TOPSOIL: Very-stiff brown clayey silt, little fine sand.	10 : 20 3	0 40	
3,			н	[=2.5
1 3/3/3			*	. 5.0
	Very-stiff to hard brown silty clay, trace fine sand, few			
	silt seams.			
- 5 - 2 4/5		1 1 1 1	H X H	[=3.5 - 4.25
2 4/5/6			· · · · · · · · · · · · · · · · · · ·	
	•			
3 4/4			H.	I=2.0-2.5
3 4/4/6				
— ▼				
7				
15 - 4 7/3/4				I=2.5-3.0
15 - 4				
	Soft brown clayey silt, "and" fine sand, few silt seams.			
5 11/1/2		★ •	Į Į	I =0.25 }
20				•
	Stiff brown mottled with gray clayey silt, some fine			
	sand, few silt seams.			
2,			I I	I= 2.0
6 2/2/1				
<u> </u>		****		
2				T. 4.0
7 2/2/3		X.0		H=2.0 3
V				
	Very-loose to loose fine to coarse sand, "and" fine to			
8 35 <u></u>		YMBOLS USED TO INDIC	ATE TEST RESULTS	
The state of the	34.0 Y 32.0 G - GRADAY	TION SEE TINED COMPR SEPARAT CAL COMPR LIDATION CURVES		WEIGHT (pcf
JOB: 011-09323-005	-CONTINUED-		PLA	TE 7

BC		LOG OF BORING EAST BEND WEST BOONE COUNTY, K	LANDI	FILL				Page 2 of
CATION:	N_51'	7,491; E-1,464,176 ELEVATION:	468	8.5	DATE:	10/	/16/03	- 10/16/03
ILLING ME		4-1/4" I.D. Hollow-stem Auger		C	OMPLET	TION D	EPTH:	60.01
				_			-	
MPLER(S):		D. Split-barrel Sampler	Nami	TDAY C	ONSISTE	NCV IN	DEX	
SAMPLE NUMBER	SAMPLE SAMPLE EFFORT		WAI	-NATUE	RAL MOIS	STURE C	ONTENT	TEST
FEET AMPL UMBE		DESCRIPTION - CONTINUED	_×	`		-×		RESULTS
S E	N S E	1, 1,	2 PL/	ASTIC 2			D LIMIT	
8	2/2/4	coarse gravel, trace silt.		· · · ·		• : : .		
	² / ₄				1 1 1 1			
		Medium-dense to very-dense fine to coarse sand, "and"	÷ ÷ ÷ ÷					
		fine to coarse gravel, trace silt.						
_	12			: .			\vdash	
9	12 _{/23} _{/28}				· : : : : :			
0 -	′28			+ + + + +				
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				-: ! : :	 : : : :	1111	1 1 1	
10	20 _{/41/45}							
5 -	41/45				+	1	:	
	"							
			+++++	1111	+++++	 	: : : : : !	
				:	1			
			-		-	-		
\dashv	16							
11	19/8/					++++		
0 +	16/ ₈ / ₁₂						: : : : -	
] [1			ļ
_				- : · · ·		ļ:	+	
		Dense fine to coarse sand, "and" fine to coarse gravel,	1 : : :	1 1 1 1	1111			
		trace silt.			1		\ 	
12	25,							
5 - 12	23/ _{21/15}		<u> </u>	1	1 1 1 1	-		1
_	'					1	1:::-	-
			<u> </u>	<u> </u>	1	+		1
				٠	1	ļ	 	
					1::			1
	27.				<u> </u>	1	+	-
13	27 _{/25/1}					1		1
50 -	1 '1'	7	::.		1::-	1		1
		- Seepage encountered at 32.0'.]
				 	 	++++		_
		- Drilling technique switched to mud rotary using				-	Ţ	-
		3-inch ID casing below 40.0'.	1 1	+	+	\perp		
—		Paris In a letter design and the complete d		1:				-{
55 -		- Boring backfilled with cuttings when completed.	1	+ : : :		1:::	 	1
-		- Boring elevation estimated from USGS topographic			J	1		4
		map.		1::			<u> </u>	1
		•				+ : : :		4
					++++		-]
					+	+	+	-
				1::.			: : :	
70 ———	ANEL: Z	34.0 ¥ 13.0 ¥ 32.0 G - GPanar	SYMBOLS FION	_	ro indic		ST RESU	OMETER (tsf
WATER LI WATER I		Prior to Mud Completion of Drilling Caved at 35.0' Q - UNCON	FINED CO	MPR	SEPARA	TE W-	- UNIT D	RY WEIGHT
44 4 7 7 7 7 7 7	DATE:	10/16/03 10/16/03 10/16/03 C - CONSO	LEIO LONIE	· - ` 1	CURVE	s I D -	- KKLATT	VE DENSITY

BBCM	EAST B	OF BORING END WEST I COUNTY, K	LANDE	ILL				ge 1 of 2
LOCATION: N-513	,033; E-1,464,088	ELEVATION:	471		DATE:			- 10/17/03
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger			_ CC	MPLET	ION DE	PTH: _	60.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler							
并一品银品品符			NATUI	RAL CO	NSISTER AL MOIS	ICY IND TURE CO	EX	TEST
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE SAMPLE BEFORT	DESCRIPTION		_x_	•		. ×		RESULTS
0 8 5 8 8 B	W Liff to hand become silter along some fir	og sond	- PLAS	STIC L		LIQUID		
	Very-stiff to hard brown silty clay, some fir trace medium sand, few iron oxide stains.	ie saliu,		: 1		- 1		
$\frac{1}{1}$ $\frac{1}{2}$	11.000		-:::::					H=2.75
1 2/2/4				* * * *				
2 6/9/12							++++	H=4.5
12								
					- : : .	-		
4.						· · · · · ·		U=2 5.2 75
3 4/5/6					;	^ : : i	· · · · ·	H=2,5-3.75 G
- 10 - 6			-			. : :	•	
								
	Very-loose to loose brown fine to medium	sand, trace						
	silt, few clayey silt seams.							
15 4 2/3/3						1111		
15 - 4 1 /3/3					· · · · ·			
13 3								
								
<u> </u>								
					-:			
				: :		- : :		
5 1/2/2				<u></u> 			· :	
			::::			+++++++		
)
				: : :				
6 2/2/4						<u> </u>		
- 25 - 4				• • • •		1 1 1	-	
	Y	ail+	1	:				
	Very-stiff brown mottled with gray clayey some fine to medium sand.	siil,						
3	Some inte to mediam sand.			i				11-20
7 /5,			1					H=3.0
				: : : :	: : : : -			
						: :]
	Loose brown fine to medium sand, few cla	vev silt seam.	1		 	·	<u> </u>	-
"——		y by Dire Domini				 : : : :	 : : : :	j
$_{8A}$ $\parallel^3/_3$	Loose fine to coarse sand, some fine to coa	rse gravel.						}
8A 8B 3/3/5							m 7550	T me
WATER LEVEL: WATER	18.5 <u>¥</u> 17.0 <u>¥</u>	G - GRADAT	ION		SEE	H - I	T RESU	METER (tsf)
	End of Day Prior to Mud	Q ~ UNCONF T - TRIAXI	INED COM AL COMPR	PR	SEPARAT CURVES	E W- (UNIT DE	Y WEIGHT (pcf
DATE:	10/16/03 10/17/03	- C - CONSOL	IDATION	<u> </u>	COTTAND	<u> </u>		LATE 9



3BCM	LOG OF BORING EAST BEND WEST BOONE COUNTY, F	LANDFILI		Pa	ge 1 of 6
LOCATION: N-513	5,638; E-1,466,033 ELEVATION:	522.0	DATE:	5/25/05	- 6/3/05
ORILLING METHOD:	4-1/4" I.D. Hollow-stem Auger		COMPLET	TION DEPTH: _	179.6'
SAMPLER(S):	2" and 3" O.D. Split-barrel Samplers				
				NCY INDEX	TEST
SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE BEFORT	DESCRIPTION	X	JRAL MOIS	X	RESULTS
S S S S E	TORGOT - INCOME	PLASTIC		LIQUID LIMIT	KLOODIO
	TOPSOIL - 7 INCHES Stiff to very-stiff brown silty clay, some fine to medium	: '*	20 30 **X	40	H=1.1-1.5 G
1 1 1 1 3	sand, few silt seams.	<u> </u>		<u> </u>	
2 11/3/5			6	-x	G H=1.5-2.1
3, '5					G H=2.9-3.5
3 1 4/5	V 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				11-2,9-3,3
$5 + \frac{1}{4} = \frac{2}{12} = \frac{3}{12}$	Very-loose to loose brown interbedded silt and fine sand, trace medium sand, few silty clay seams.				H=1.1-1.5 G
$\begin{array}{cccccccccccccccccccccccccccccccccccc$,				G
2/3/4					
5A - 4					H=1.9
5B /2,		 	: : 	****	H=0.75
3, 1	Dense to very-dense brown fine to coarse sand, "and"				
10 - 6 3 /13 /24	fine to coarse gravel, trace silt, few cobbles, material varies from fine to coarse sand, "and" fine to coarse				
12 24	gravel to fine to coarse gravel, "and" fine to coarse sand.		+	- 	
7 12/24,					
7 12/24/19	•				
1 1 1		 			
8 14 _{/21/20}					
15 - 20					
 ₁₄					
9 25,					
′25					
—			1		
10 13/ _{27/₂₃}		·	<u> </u>	· · · ·	
20 - '23					
				 	
			1		
25 11 19/24			 		
25 11 19 _{/24_{/33}}					
				<u> </u>	
	•		4		
		<u> </u>			
70					
30 - 12 33/23					
12 33 ₁ 23 ₁ 33 ₁					
25	·				
35 WATER LEVEL:	58.9 <u> </u>	ION ¬	ro indica see	H - PENETEO	TS METER (tsf)
WATER NOTE:	A.M. Q - UNCONF T - TRIAXI	INED COMPR	SEPARAT	E W - UNIT DR	MEIER (CSI) Y WEIGHT (P E DENSITY (
DATE:	5/31/05 C - CONSOL	וארטדיייאנוז 🕽	CURVES	U - KEDATIV	e nuustri (

BBC		LOG OF BORING EAST BEND WEST BOONE COUNTY, K	LANDI	FILL				Page 2 of
LOCATION:	N-513	3,638; E-1,466,033 ELEVATION:	522	2.0	DATE:	5	/25/05_	- 6/3/05
DRILLING ME	THOD:	4-1/4" I.D. Hollow-stem Auger		_ C	OMPLET	ION DI	EPTH: _	179.6'
SAMPLER(S):	2" ai	nd 3" O.D. Split-barrel Samplers						
년 <u>-</u> [박종]	995		NATU		ONSISTE			TEST
SAMPLE NUMBER	SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	-x	MATUR	CAL MOIS	X	TMAINO.	RESULTS
S A S	SA H			ASTIC 1			D PIWII	10.50215
13	15 _{/42_{/28}}	Dense to very-dense brown fine to coarse sand, "and"		2	0 30)4	0	
	42/28	fine to coarse gravel, trace silt, few cobbles, material varies from fine to coarse sand. "and" fine to coarse						
		varies from fine to coarse sand, "and" fine to coarse gravel to fine to coarse gravel, "and" fine to coarse sand.	+++++			++++	-:-:	
			. :			··	: :	
40 -								
14A	²⁰ / ₂₉ / ₂₂			-:::	: : : : :	+ : : :		
14B	29/22	Dense to very-dense brown fine to medium sand.	 	:		:		
			· : .	:				
		Dense to very-dense brown fine to coarse sand, some					1	
		fine to coarse gravel, little silt, few cobbles.		- : : -		• • • •	1	
45 -		into to double graver, into bir, in the control	1 1 2 1					
15	6/20							
	6 / _{32,46}				11111	- : ; ;-		
	10							
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				.		-: ·· : ·	 	
50			: : : :	+ + + + +	+	: : : :		
50 -	14,		1 1 1 1	<u> </u>			:	
10	14 _{/36_{/37}}			::		:		
	31				· · · · ·			
]			+++			 	
				:	1 : .			
55 -	14 _{/28} _{/28}				 			
17	28/20				1			
	28		-	;			1	
	1				1			
—— <u> </u>					1			
					1:	 	1	
60 -	13,				. :			
18	13 _{/25/21}					- :	1	
	'21				 		 	
					1			
						<u> </u>		
					ļ <u> </u>	 	1	
65 -	22	k .	****		+	1	1	
19	²⁷ / _{22,}			1			1	
	22/22/19		<u> </u>	T:	<u> </u>		1	
				<u> </u>	1::::	1		
			+	1	1::::	1	-	
70	Ш		YMBOLS 1	USED T	O INDIC	ATE TE	ST RESUL	TS
WATER LE	EVEL: 💆	58.9	ION INED CO	MPR	SEE SEPARAT	H -	PENETRO	METER (tsf) Y WEIGHT (p
WATER N	IOTE: DATE:	A.M. T - TRIAXI C - CONSOI	AL COMP	R [CURVES		RELATIV	E DENSITY (
J.	23-005	-CONTINUED-					PI.	ATE 12

BBCM	LOG OF BORING EAST BEND WEST BOONE COUNTY,	LANDE	ILL			Page	3 of 6
LOCATION: N-513	,638; E-1,466,033 ELEVATION	522	2.0	DATE:	5/25/	<u> /05 - 6/3/0</u>	
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger		_ C	OMPLET	TION DEPTH	i: 179.	<u>6'</u>
SAMPLER(S): 2" ar	nd 3" O.D. Split-barrel Samplers			.,,			
		NATU	RAL C	ONSISTE	NCY INDEX	ENT TES	τ
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	_x	-MAION	WII HOLD	×	RESU	
SAMPLE SAMPLE SAMPLE EFFORT EFFORT		<u> </u>	STIC 1		LIQUID LI	TIM	
70 20 12, 20 12, 30	Dense to very-dense brown fine to coarse sand, some fine to coarse gravel, little silt, few cobbles.	- 10				\equiv	
30	The to course graver, nate site, ion consists.						
		1::::	:	<u> </u>	+++++++++++++++++++++++++++++++++++++++	: 	
			-				
			-:	:		-	
- 75 - _{21A} 26,						: :	
- 75 - 21A 21B 26, 27, 44						: : 	
44							
			::				1
 			 				
			<i></i>				
22 6/10/22		1					
²² 10/ ₂₂							
				1			
		1 1 1		1:			
85 -				1 1 1		: : 	
23 17/24							
23 17/34/41			<u> </u>				
		1	***	+			
	Medium-dense to dense brown fine to medium sand,	· .		<u> </u>			
- 90 -	trace coarse sand, trace fine to coarse gravel, trace silt.						
			::::	1		···	
24				<u> </u>	 : -		
24 18/19				1			
							
25 11/ _{17/23}							
23 17/23							
			-: : : :	1111			
			<u> </u>				
			<u> </u>			<u>;;</u>	
- 100 -					 		
8				1			
26 8/8/22			-				
j '22		1		<u> </u>			
			ļ			<u> </u>	
5 105 V			JSED T	O INDIC	ATE TEST F		
WATER LEVEL: 👱	Q - UNCON	FINED COM	MPR	SEE SEPARAT	E W-UNI	ETROMETER (T DRY WEIGH	T (pct
WATER NOTE: DATE:	T - TRIA	IAL COMPI LIDATION	R J	CURVES		ATIVE DENSI	TY (%)
DATE:	-CONTINUED-					PLATE 13	

<u> 3BC</u>		LOG OF BORING EAST BEND WEST BOONE COUNTY,	LANDFILL	, ,		Page 4 of
OCATION:	N-513	3,638; E-1,466,033 ELEVATION		DATE:	5/25/05 -	
RILLING ME	THOD:	4-1/4" I.D. Hollow-stem Auger		COMPLETI	ON DEPTH:	179.6'
AMPLER(S):	211 ai	nd 3" O.D. Split-barrel Samplers				
	메 백 년			CONSISTEN	CY INDEX URE CONTENT	TEST
SAMPLE NUMBER	SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	X	WAE MOISI	K CONTENT	RESULTS
No.	SA SA EF		PLASTIC	LIMIT — 1 20 30	LIQUID LIMIT	1000212
103		Medium-dense to dense brown fine to medium sand, trace coarse sand, trace fine to coarse gravel, trace silt.		20	40	
	10 _{/16_{/20}}	trace coarse said, trace fine to coarse graver, trace site.		+		
	16/20			1		
10 -	■ 4					
28	4 / 7 _{/15}					
	15					
				1::::		
				 		
.15 -				1		
	\coprod_{n}					
	$\left \left \right ^2 \right ^{7}$					
	'11					
29	4/					
	4/12/22		•			
		Medium-dense brown fine to coarse sand, some fine to				
		coarse gravel, little silt.				
125 -		-				
	3,					
30	3 /10 _{/18}					
	10			1 :		
130 -				-		
31	7/2			+		
	7/8/10					
				1		
135 -	6 ,					
32	6/9/23					
	23					
140				:	TO MEGE DOOR	10
140	EVEL: \(\sigma\)	58.9	SYMBOLS USED	ro indica: see	H - PENETROM	ETER (tsf)
WATER N	ЮТЕ:	A.M. Q - UNCON	FINED COMPRU	SEPARATE CURVES		WEIGHT ()
OB: 011-093	DATE:	5/31/05 C - CONSC	LIDATION		<u>, l </u>	TE 14

BBCN	LOG OF BOR EAST BEND W BOONE COUN	VEST LA	ANDFILL	•		Page 5 of 6
LOCATION: N-5	13,638; E-1,466,033 ELEVA	TION:	522.0	DATE:	5/25/05 -	
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger	_,		COMPLETIC	ON DEPTH:	179.61
SAMPLER(S): 2"	and 3" O.D. Split-barrel Samplers					
				CONSISTENC	URE CONTENT	TEST
SAMPLE NUMBER SAMPLE SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED		X		KE CONTENT	RESULTS
SA CAS CAS			PLASTIC	LIMIT-I	TIMIT DINOI	KESOL 15
F 140 T	13 f 1' 1 1 C 4	e to	10	20 30	40	
33 6/19/3	coarse gravel, little silt.	ļ.		1		
	2	<u> </u>		<u> </u>	: : : : : : : : :	
		-				
				1		
- 145 - L					<u> </u>	
34						
■ 8 ₁	9	F		-		
				1		-
		-		 -		
 	Loose to medium-dense brown fine to medium sand	d,				
- 150 -	trace coarse sand, trace fine to coarse gravel, little s	silt. 📙				
						1
		L:				
35		F		+		
35 /22,		_				
\square \square \square	51	<u> </u>				
155 - 364		-				
155 36A 1	- 155.5' to 157.0': Black organic silt.	Ŀ				
36A 36B	2 133.3 to 137.0. Black organic site.	F				
	4	-				
				+		ŀ
						-
		 		1 2 1		
160		2		-	:	
37						
	3	-		 		
						l l
		-				
		F				
- 165 - _{38A}		E				
165 - 38A 38B 7/16		F				
	40	ļ				
		-				
]
		}		<u> </u>		
- 170 -		F		+++		
g 1/0						
12/3	4	ŀ				
5	25					
~(<u> </u>		. h	 			
		F	· · · · · · · · · · · ·			
€ 17.5					THE PROPERTY OF THE PARTY OF TH	10
S 175 WATER LEVEL: WATER NOTE:	58.9 <u>Y</u> <u>Y</u> .	SYM	BOLS USED	TO INDICA:	H - PENETROM	ETER (tsf)
WATER NOTE:	0-	UNCONFIN	N NED COMPR COMPR	SEPARATE	W = UNIT DRY	WEIGHT (pcf) DENSITY (%)
DATE: DATE: DATE:		TRIAXIAL	DATION J	CURVES	<u> </u>	TE 15
☐ JOB: 011-09323-005	-CONTINUED-				I LA	

LOG OF BORING NO. B-101 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY											
LOCATION:	N-51:	3,638; E-1,466,033 ELEVATION:	522.0	DATE:	5/25/05 -						
DRILLING ME		4-1/4" I.D. Hollow-stem Auger		COMPLETI	ON DEPTH:	179.6'					
SAMPLER(S):		nd 3" O.D. Split-barrel Samplers									
				CONSISTEN		TEST					
SAMPLE NUMBER	SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	NAT	URAL MOIST	URE CONTENT						
E S E	SAN SAN EFF		∠ PLASTIC	LIMIT—	LIQUID LIMIT	RESULTS					
175		Loose to medium-dense brown fine to medium sand,	10	20 30	40						
39	³ / ₃ / ₃	trace coarse sand, trace fine to coarse gravel, little silt.									
	3			: :::: :							
	Ш										
40A 180 - 40B	23, 50-4"R	Medium-hard gray limestone.									
180 - 40B	30-4 K	Tradestant management of the control	1								
		- Encountered seepage at 5.0' to 8.8'.									
	d projection of the second	- Encountered water at 63.0'.									
185 -		- Heaving sand problems at 70', 80', and 115'.									
103		- Drilled using casing advancer below 160'.									
	-	- Installed 2" diameter flush joint PVC casing to 179.6.									
-		PVC for geophysical testing, no perforations. Grouted PVC in place using tremmie methods; 10%									
	1	Bentonite/Portland grout.	 								
190 -		DOMESTIC STATE OF THE STATE OF									
190											
	11			+ +							
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195 -	1		.:	- : :							
193											
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200 -				-							
-											
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205 -	1										
			1	: : : - : - : - : - : - : - : - : -							
210		i s	YMBOLS USED	TO INDICA	TE TEST RESUL	TS					
WATER LE		58.9	INED COMPR	SEE SEPARATE	H - PENETRON	ETER (tsf)					
WATER N		5/31/05	AL COMPR [CURVES	D - RELATIVE	DENSITY (
OB: 011-093	23.005				PL	ATE 16					

BBCM	EAST	OF BORING N BEND WEST E COUNTY, K	LANDFILL	ı	Page 1 of 1
LOCATION: 6' E o	of B-101	ELEVATION:	523.9	DATE:	6/1/05
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger		(COMPLETION DE	PTH: 6.0'
SAMPLER(S):	Shelby Tube				
年上品類品品工		 	NATURALNATI	CONSISTENCY IND FRAL MOISTURE CO	EX NTENT TEST
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION		×-•	X	RESULTS
			PLASTIC 10		LIMIT
1	See Log of B-101.				H=2.3
p					
2 P					H=1.4
- 5 3 P					
		e ·			: : : :
					<u> </u>
					:
					
					<u> </u>
- 10 -					
15					: • • • •
15					:
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- 20 -					
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- 25					<u> </u>
					
					-
- 30 -					
COTTE					
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§					
WATER LEVEL: WATER NOTE:	Ā Ā	G - GRADAT	C MOI	TO INDICATE TES	EMETROMETER (tsf)
WATER NOTE:		Q - UNCONF T - TRIAXI C - CONSOL	FINED COMPR	SEPARATE W - I	NIT DRY WEIGHT (pcf
WATER LEVEL: VERY WATER NOTE: DATE:		C - CONSOL	IDATION)	CORVED D 1	PLATE 17

BBCM	LOG OF BORING EAST BEND WEST BOONE COUNTY, F	LANDFILL	ı	Page 1 of 5
LOCATION: N-510	5,040; E-1,464,511 ELEVATION:	494.0		5/1/05
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger		COMPLETION DEPTH:	140.6'
SAMPLER(S):	2" O.D. Split-barrel Sampler, Shelby Tube			
H H H H H		NATURAL	CONSISTENCY INDEX FRAL MOISTURE CONTEN	TEST
PEETH, SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION	× •	 ×	RESULTS
O S S S S E	TORGOT A DIOLIEG	- PLASTIC	LIMIT LIQUID LIM	[7]
P	TOPSOIL - 4 INCHES Stiff to hard brown mottled with gray silty clay, little	•		G
1	fine to medium sand, few silt seams.			H=4.1
p				<u>- </u>
2				H=1.75
				G
- 5 - 2 P				∏ G
3				÷
	Y 1 C 1			·
1,	Loose brown fine sand, some silt, trace medium sand, few silty clay seams, many silt seams.			₽
4 1/3/3/3	1047 Shity Oldy Bodding, Maily Shit Souther			<u> </u>
5 13/3				
- 10 - 5				\dashv
2,				.
6 12/2/3				- -
/ 3				_
3,				\exists
7 3/3/3				: :
15 - 3				·-
7,				-
8 7/3/3				
		****		:
9 1/2				
9 1 1/2/5				_
		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
	Medium-dense brown and gray fine to coarse sand,			<u> </u>
	some fine to coarse gravel, little silt.			
			+ + + + + + + + + + + + + + + + + + + +	
- 25 -				-
10 13/13.				$\stackrel{\cdot}{\dashv}$
10 15/13/11				
	-			<u>-</u>
				_
- 30 -				-
11 15/20/13				-
				_
	i de la companya de l			:
				=
35 WATER LEVEL:	G - GRADAT	YMBOLS USED	TO INDICATE TEST RE SEE H - PENET	SULTS ROMETER (tsf)
WATER LEVEL: WATER NOTE:	Q - UNCON	INED COMPRE	SEPARATE W - UNIT	DRY WEIGHT (pcf
DATE: DOB: 011-09323-005	C - CONSOI	IDATION _		PLATE 18
Q JOB: 011-09323-005	-CONTINUED-			I DATE: 10

B	30		1	V	LOG OF BOI EAST BEND V BOONE COUN	VEST I	LANDI	FILL				Page 2 of 5
LOCA	TION		N.	516		ATION:	494		DATE:		6/1/	/05
-	ING M				4-1/4" I.D. Hollow-stem Auger				MPLET	ION DI	зртн:	140.6'
	LER(S)			_	D. Split-barrel Sampler, Shelby Tube			_				
							NATU	JRAL CO	NSISTE	NCY IN	DEX	трет
DEPTH, SEET	SAMPLE NUMBER	T.	SAMPLE	S	DESCRIPTION - CONTINUED			-NATUR	AL MOIS	TURE C →	ONTENT	
E DE	S E	S	SAN	田田			\angle_{PLZ}		imit <		LIMIT	TEST RESULTS ULTS COMMETER (tsf) RY WEIGHT (pcf) VE DENSITY (%)
35	12				Medium-dense brown and gray fine to coarse sand,	,	10	2() 3()4	0	
	12		112	2 _{/15}	some fine to coarse gravel, little silt.	Ī		· · · · :				
				1		ļ		::::		::::		į
				Ì			:					
					Medium-dense brown fine to coarse gravel, some f	ine to		- :			7 1	
- 40 -					coarse sand, trace silt.	-						
	13	3	³ /_	, , 9		ļ			++++	::::	: : : :	
	1		′	'/ ₉			<u> </u>				<u> </u>	
				-				- :	-	 -		
									· · · · ·			
	1				Medium-dense brown fine to coarse sand, little fin	e to						
- 45 -	_				coarse gravel, trace silt.		-	1:::				
	14		10/1	² /16								
			1	² / ₁₆				: :	:::::			1
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1 50	15		10,	9/9								
	-		:	´/ 9								
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	1											
	-			ŀ	Medium-dense brown fine to medium sand, trace of	coarse	:	* : .	· ·			
- 55			5									
	16		1	9,9								
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 	-											
	1											
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	17		1	7/9								
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8/11/05	18		L'	9 / ₁₄							<u> </u>	
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	-									1;	ļ	
B	7	ļ					<u> </u>	:	<u> </u>			
Tab Source 19323005 170 W.A. W.A. W.A. W.A. W.A. W.A. W.A. W.A	י משיר א	DIN.	ـــــاـ ۱ ت	፟ <u>∇</u> .	Ž Ž	S)		SED TO			ST RESUL	
W 1932	ATER I	NOI	re:	_		· UNCONF	INED COMP	MPR :	SEE SEPARAT	e w-	UNIT DR	Y WEIGHT (pcf)
<u>a</u> L		DA'	re:		C -	CONSOL	IDATION		CURVES	D-		ATE 19
g Job:	011-093	323-	005		-CONTINUED-						rL.	M. I.D. 17

BBCM LOG OF BORING NO. B-102 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY											Page 3 of 5
LOCA	TION		N_514	6,040; E-1,464,511	ELEVATION:	494		DATE:		6/1	/05
•	IION: JNG MI			4-1/4" I.D. Hollow-stem Auger				MPLET	ION DE	PTH:	140.6'
1	LER(S):			D.D. Split-barrel Sampler, Shelby Tube	·		-				
						NATU	JRAL COL	NSISTEN	CY IND	EX	TEST
DEPTH, OEPTH, -	SAMPLE NUMBER	MPT.	SAMPLE	DESCRIPTION - CONTINUE	D	_x_	-NATURA	L MOIST	× ×	NI ENT	RESULTS
	SA!	SA	SAL			Z PLP	STIC L	MIT <u></u>	LIQUID 40		10,000,00
70 -	19	3	/ ₄ / ₁₀	Medium-dense brown fine to medium sand sand, trace fine to coarse gravel, trace silt.	, trace coarse			30	4L		
			4/10	sand, trace time to coarse graver, trace sint.							
							-	++++	: : : :		
				Medium-dense becoming dense brown fine	to coarse						
		11		sand, some fine to coarse gravel, trace silt.							
- 75 -		<u>.</u>	7								1
	20	ľ	7/7/9								
	1		′ 9						: -		
	-		'			<u> </u>					
						++++					
	1							 			
- 80			15 _{/20/} 15	·							
	21	ı	20/					.,			
	1	П	15				****		<u> </u>		
									:::		
	-										
	-			Medium-dense becoming dense brown fine sand, trace coarse sand, little fine gravel, to	e to medium			::::		- 	
85	22		13,	sand, trace coarse sand, fittle life gravel, the	ace sitt.						
	1 22		¹³ / _{13/15}								
	-		13								
	7	11						::::			
	1					<u> </u>		•	-		
90	_							: "			
90	23	ı	²⁰ / _{14/31}								
	7	A	1 ⁴ / ₃₁					• • • •			
	1										
	1			Medium-dense brown fine to coarse sand,	little fine						
				gravel, trace silt.					:++:		
- 95	7		1.4			:				<u> </u>	
	24		¹⁴ / _{11.}			-		•		 	
	-		14, 11, 14,	1						1::::	
	7										
						-					
	\exists			Medium-dense becoming dense brown fir	e to medium	T				1	
- 100	-		 14		e gravel, trace		<u> </u>		-:	 • • • •]
8/11/05	25		17 _{13,}	silt.		<u> </u>					1
			14 _{/13/2}	1						 	-
[6]	-						1		: : : :		
	_						1			<u> </u>	
<u> </u>	_						 			<u> </u>	
월- 105	A TENT *	F2 ***	a. ∑. T	<u>Ā</u> Ā	C - CDADA	YMBOLS	_	INDICA SEE		T RESU	LTS METER (tsf)
105 W. V V JOB:	AIERL VATER	r vi	re:		O = UNCON	FINED CO	MPR S	SEPARAT	E W ~	UNIT DR	METER (CSI) RY WEIGHT (pcf WE DENSITY (%)
⊋		DA.	ΓE:		T - TRIAX	LIDATION	<u> </u>	CURVES			ATE 20
໘ JOB:	011-093	323-	005	-CONTINUED-						KL	MARIE AU

BBCM LOG OF BORING NO. B-102 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY									Page 4 of 5	
Y 0 0	mio: *		NY E4		494		DATE:		6/1	/05
LOCA	TION: .ING M	 TETT		6,040; E-1,464,511 ELEVATION: 4-1/4" I.D. Hollow-stem Auger			DATE: OMPLET	TON DI		140.6'
1	LER(S)			D.D. Split-barrel Sampler, Shelby Tube		- ``				
İ	• • •			The second of th	NATU		ONSISTE			TEST
DEPTH	SAMPLE NUMBER	SAMPLE	SAMPLE EFFORT	DESCRIPTION - CONTINUED	_×_	-NATUR	AL MOIS	TURE C	ONTENT	RESULTS
DEPTH,	SA	SA	SA		PLA:	STIC I			LIWIJ C	KINOLIN
100	26		20 _{/18} .	Medium-dense becoming dense brown fine to medium sand, trace coarse sand, trace fine to coarse gravel, trace	10					
		H	²⁰ / ₁₈ / ₂₂	silt.				~ ;		
						- 		::::		
				Dense to very-dense brown fine to coarse gravel, and				1		
				fine to coarse sand, little silt, few cobbles.						
- 110 -			²⁷ / _{28/50}							
	27	ı	'28 _{/50}			· · · · ·				
			50					,		
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	29		15 _{/22/20}			•				
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				Loose to medium-dense brown fine to coarse sand, some fine to coarse gravel, trace silt.						
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၂ 135 - မ	32		13/22			<u></u>	<u> </u>			
3] "		13 _{/20_{/32}}							
GDT 8/11/05	1]			<u>:</u>	1 : : :		[]	
il	1					:::::	 : : : : -			
al	-			Medium-hard brown sandstone.		<u>:</u>			<u> </u>	
140 WA WA JOB:	Ī			S S	YMBOLS US	SED TO	INDICA	ATE TES	T RESUL	TS
WA	TER L	EVE	BL: 🔽	G - GRADAT Q - UNCONF	ION INED COM	- Can	SEE	H - 1 E W - 1	PENETRONUNIT DRI	METER (tsf) Y WEIGHT (pcf)
<u> </u>		DA'	re:	T - TRIAXI	AL COMPR IDATION	<u>َ لِ</u>	CURVES		RELATIV	E DENSITY (%)
☐ JOB:	011-093	123-	005	-CONTINUED-					PL.	ATE 21

BBCM LOG OF BORING NO. B-102 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY											
TOCA	TTON		N.51	6,040; E-1,464,511	ELEVATION:	494.	_	DATE:		6/1/0	05
	TION: LING MI			4-1/4" I.D. Hollow-stem Auger	DDD 7.1110			MPLETIC	ON DE	PTH:	140.6'
	LER(S):	511		D.D. Split-barrel Sampler, Shelby Tube			•				
I		[23]		D. Spit Barrer Sampler, Sales, 2400		NATUE	RAL CO	NSISTENC	Y IND	EX	TEST
таач 140 Напад 140	SAMPLE	SAMPLE	SAMPLE	DESCRIPTION - CONTINUED)	\sim	NATURA	L MOIST	URE CC	NTENT	RESULTS
田田田	SAN PA	S	SAN			PLAS	TIC L	MIT I	IQUID		RESULTS
140	33		50,	Medium-hard brown sandstone.		10	20	30	40		
_ :			50-1"R				 +	- 	: : :		
	_										i
				- Encountered slight seepage at 18.5' to 19.2	•					****	
	1			- Boring grouted at completion 10% Benton	nite/Portland						
- 145	_			- Boring grouted at completion, 10% Benton grout placed via tremie methods.					++++		
143	1								: : :	<u> </u>	
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GDT 8/11/05	_			***					:	 	
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						<u> </u>			<u> </u>		
E 17	5					YMBOLS U	SED TO	INDICA	TE TE	T RESUL	TS
30 N	ATER L	EΥ	ÆL: ⊻	Ā Ā	G - GRADA'	TION FINED COM	IPR ,	SEE	U	DEMETERA	METER (tsf) WEIGHT (pcf
193	WATER	ΝO	TE:		T - TRIAX	IAL COMPR	' ز '	SEPARATE CURVES	D -	RELATIVI	E DENSITY (%)
S TOP	5 ATER L WATER : 011-09	122 122	1-005							PL	ATE 22

BBCM	LOG OF BORING I EAST BEND WEST I BOONE COUNTY, K	LANDFILL		ge 1 of 4
LOCATION: N-513	,685; E-1,464,745 ELEVATION:			/05
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger	COV	MPLETION DEPTH:	131.4'
SAMPLER(S):	2" and 3" O.D. Split-barrel Samplers, Shelby Tube			
· · · · · · · · · · · · · · · · · · ·			SISTENCY INDEX	TEST
PETH, SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION	NATURAL	MOISTURE CONTENT	l l
H		∠ PLASTIC LI	MIT LIQUID LIMIT	RESULTS
0 0 0 0	TOPSOIL - 4 INCHES	10 20	30 40	H=1.7-3.1
1	Very-loose to loose brown silt, some clay "and" fine	•		G
	sand, trace medium to coarse sand.	-::::::::::::::::::::::::::::::::::::		
P				
2				G
- 5 -				
	Loose to very-loose brown fine to medium sand, little			
	silt, trace coarse sand, few silty clay seams.			Į.
3/5/5	Sitt, trace course state, for sitty only sources			
3 3/5.				
5 5 , 4				
- 10 - 4	•			i
4				ļ
₂ 3,			+++	1
5 3/4/4				
2,				
6 2				
15 - 1				
2 ,				
7 2/2/2				
2	The to come or the come of the to			
	Brown fine to coarse sand, some fine to coarse gravel, little silt.			
8 1/2/6	mue sin.			
- 20 - 6				
		11111		
	The state of the s	1 1 1		1
	Very-dense brown and gray fine to coarse gravel, some fine to coarse sand, little silt.			1
	inic to coate said, attic sit.			j
25		. : :	<u> </u>	1
9 40,]
9 40/39/27				-
├]
	Medium-dense brown fine to medium sand, trace coarse	 		j ,
	sand, trace fine to coarse gravel, few silty clay seams.			<u> </u>
	{			<u> </u>
10 8/8/10				1
10 10 10				1
[∞] 10			: : : - - - - - - - - 	1 1
TO.				ļ
	Medium-dense to dense brown fine to coarse sand, some			<u> </u>
a	fine to coarse gravel, trace silt.			-
35 WATER LEVEL: ☑ WATER NOTE:	Y Y G-GPADAT	YMBOLS USED TO	INDICATE TEST RESU	LTS
WATER LEVEL: WATER	G - GRADAT	ION COMPR	SEE H - PENETRO	OMETER (tsf) RY WEIGHT (pcf)
S WATER NOTE: DATE:	T - TRIAXI	AL COMPR	CURVES D - RELATI	VE DENSITY (%)
G JOB: 011-09323-005	-CONTINUED-		P	LATE 23
與すいか、VII-V <i>734</i> 3-VV3				

BE	3C		LOG OF BORING EAST BEND WEST BOONE COUNTY,	LANDI	FILL			Page 2 of 4
LOCATI	ON:	N-513	8,685; E-1,464,745 BLEVATION	:492	2.0	DATE:	6/	1/05
DRILLIN	1G ME	THOD:	4-1/4" I.D. Hollow-stem Auger		_ C	OMPLET	TON DEPTH:	131.4'
SAMPLE	ER(S):	2" a	nd 3" O.D. Split-barrel Samplers, Shelby Tube	,				
Ħ _ E	3 16 2	3 2 2					NCY INDEX TURE CONTENT	TEST
DEPTH, 22 PEET	NUMBER	SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	×	<u> </u>		.×	RESULTS
35	à E	9,	Medium-dense to dense brown fine to coarse sand, some		ASTIC I	отитт <u>~</u> О : 30	LIQUID LIMIT	
	11	9/7/12	fine to coarse gravel, trace silt.	·	: : .			
		12	-			: : : :		
40					,			
- 40 -	12	14 _{/16/16}			::::	- 	+ + + + + + + + + + + + + + + + + + + +	
		16/16						
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	13	15 _{/12_{/11}}						
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	15	10 _{/11/12}			++::			
		112						
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						7 1 1		-
- 60 -]
00	16	11 _{/14/16}						1
		17/16						
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- 65 -		14,				1		-
	17	14 _{/28/18}						1
		18					·	1
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						1 : :		-
70				SYMBOLS II	SED TO	1 -	ATE TEST RESU	LTS
WAT	ER LE	VEL: 💆	<u>▼</u> <u> </u>	TION FINED COM	MPR	SEE	H - PENETRO	OMETER (tsf) RY WEIGHT (pcf
WA'	TER N	OTE:	T - TRIAX	IAL COMPR		SEPARATI CURVES	D - RELATIV	VE DENSITY (%)
JOB: 01	1-0932	3-005	-CONTINUED-				PI	LATE 24

BI	30)	M	LOG OF BORI EAST BEND WE BOONE COUNT	EST L	ANDI	FILL				Page 3 of 4
LOCAT	TON:		N_513	,685; E-1,464,745 ELEVATI		492	_	DATE:		6/1/	05
DRILL				4-1/4" I.D. Hollow-stem Auger				MPLET	ION DE	PTH:	131.4'
SAMPI				d 3" O.D. Split-barrel Samplers, Shelby Tube			_				
				u 5 O.B. Spine-barrer Samplers, Shead 1 use		NAT	URAL CO	NSISTE	NCY IND	EX	
DEPTH, PEET	SAMPLE NUMBER	PLE	EFFORT	DESCRIPTION - CONTINUED			NATUR	AL MOIS	TURE CO	ONTENT	TEST
DEPTH	A M	\[\frac{1}{2}\]	# H	DESCRIPTION - CONTINUED		Z pr. 7	ASTIC I	TMTTZ	-X -LIOUID	TIMIT	RESULTS
- 70 	o Z	S S	2 111	Medium-dense to dense brown fine to coarse sand, so	ome _	10		30			
	18		/ ₁₃ / ₁₅	fine to coarse gravel, trace silt.	 			:	- :		
			15	•	F				7 1 1 1		Į
			ļ		H		: : : :		* * * : :	-: -: -:	
			F	Loose to medium-dense brown fine to medium sand,	_		- : : :	:		<u></u>	
				trace coarse sand, trace fine gravel, trace silt.							
- 75 -		\sqcup			-		- 	· : : : -	****		
"	19	5	/ _{5/6}		E						
			3/6		H		-:		**::		
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- 80 -		5	/ _{7/7}				· ·	: :	. : :	· ·	
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93]				E						
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8/11/05	24		8 / _{10/12}		}		 	 	<u> </u>	<u> </u>	Į.
8,1	-		¹ 12		ţ		-		1		
8]				}	- 	1 ::::	1::::		 	
.1	-			Medium-dense brown fine to coarse sand "and" fine	e to						
	1			coarse gravel, little silt.		- : - :	1		 	ļ <u></u>	
B 105	1	ļ				HPOT 5	USED TO	OINDIC	Δ ሞΕ ሞሞ	T RESUI	TS
8 ma	TER L	EVE	L: 💆	Ţ Ţ G-G	RADATI	ON	02ED 1	SEE	и-	PENETRO	METER (tsf)
105 105 WA WA JOB:	ATER I	TOP	E:	Q - U	RADATION CONFI	NED CO L COMP	MPR [SEPARAT	E W-	UNIT DR	Y WEIGHT (pcf) E DENSITY (%)
₽]	TAC	B:		ONSOLI	DATION	_ ر :	COKARS	, , ,		ATE 25
፟ JOB:	011-093	23-0	05	-CONTINUED-						PL	MIE 43

BBCM	LOG OF BORING EAST BEND WEST BOONE COUNTY, F	LANDFI	ILL		Page 4 of 4
LOCATION: N-513,	.685; E-1,464,745 ELEVATION:	492.		6/1	
DRILLING METHOD:	4-1/4" I.D. Hollow-stem Auger		COMPLET	ION DEPTH:	131.4'
SAMPLER(S): 2" an	d 3" O.D. Split-barrel Samplers, Shelby Tube				
# . 면質면면 b		NATUR	AL CONSISTEN	CY INDEX	TEST
SAMPLE NUMBER SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	_x_	•	×	RESULTS
	111 111 C	PLAS	TIC LIMIT	LIQUID LIMIT	
25 9/11/12	Medium-dense brown fine to coarse sand "and" fine to coarse gravel, little silt.				
11/12	coalse graver, intre sitt.				
		-			
- 110 -		+++++			
26 10/12/14	•				
14					
	<u> </u>				
	Medium-dense brown fine to medium sand, trace coarse				
	sand, trace fine gravel, trace silt.				
- 115 - 10					
27 10,21					
′24					
120 -					
28 14/ _{20/16}					
			-:		
29 16/20/22					
29 20/22					
	Medium-dense brown fine to coarse sand "and" fine to				
	coarse gravel, trace silt.				
- 130 -	÷ .				
30 16,					
50-5"R	Bedrock	/ <u> </u>			
	to the took many the many of and		1 1		
	- Boring grouted at completion, 10% Bentonite/Portland grout placed via tremie methods.				
- 135 -	Erour Praced via tremite memods.		: 		
8/11/05					
TG.					
` <u> </u>					
E[
g 140 7				ATE TEST RESUL	TS (C)
WATER LEVEL: V WATER NOTE:	Q - UNCON	PION FINED COM [AL COMPR	7 555	E W - UNIT DR	METER (tsf) Y WEIGHT (pcf)
DATE:	C - CONSO	LIDATION	CURVES		ATE 26
☐ JOB: 011-09323-005				ri.	CIE AV

BBCM	LOG OF BORING N EAST BEND WEST BOONE COUNTY, K	LANDFILL		ige 1 of 2
LOCATION: N-517	,405; E-1,465,175 ELEVATION:			- 5/5/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger	co	MPLETION DEPTH:	65.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler			
표 .			NSISTENCY INDEX L MOISTURE CONTENT	TEST
DEPTH, SAMPLE NUMBER SAMPLE SAMPLE SAMPLE EFFORT	DESCRIPTION	×-•	X	RESULTS
	MODGOTI A DIOVERS	PLASTIC L	IMIT—LIQUID LIMIT	
1 1 1 2 3	TOPSOIL - 4 INCHES Very-stiff brown clayey silt, some fine to medium sand,			H=2.1-3.0
2 . 3	trace coarse sand, few roots. Stiff to very-stiff brown silty clay, some to "and" fine to			H=1.5
				11 1.5
2 12, '3	medium sand, trace coarse sand, trace fine graver.	 		H=1.3-1.5
3 12/3/4 4A 22,4				H=0.5-1.1
	Medium-dense to dense brown and gray fine to coarse			11 0.5-1.1
4B 15 / 7	sand, "and" fine to coarse gravel, trace silt.			
5 /16.				
5 15, 7 5 16,				
6 13,				G
10 - ' 20/29	Dent days brown and may fine to coarse	:: -:.] [
0 14,	Dense to very-dense brown and gray fine to coarse gravel, "and" fine to coarse sand, trace to little silt, few			
8 14/29/10	cobbles.			
50-4"R				
9 20/32				
9 20/32/34				1
]
10 19/21/31				G
·]
				-[
11 15/ _{32/45}				1
- 20 - 45				-
			· · · · · · · · · · · · · · · · · · ·	1
	,			
14				1
12				1
12 14 _{/21/28}		: ::::	1 1 1 1	_
	Dense brown fine to coarse sand, some to little fine to coarse gravel, little to trace silt, few cobbles.			-1
				_
13 11 ₁ ₁₆ ₁₂₃	·		· · · · · · · · · · · · · · · · · · ·	<u> </u>
13 16/23				-
S 30]
50/2/3				
				_
23,				4
11,				G
8 35 14 127 77	V V	YMBOLS USED TO		LTS
8 35	49.0 - G - GRADAI	INED COMPRU c	SEPARATE W - UNIT D	OMETER (tsf) RY WEIGHT (pcf)
DATE:	5/6/05 T - TRIAXI	LIDATION	CURVES D - RELATI	VE DENSITY (*)
DATE:	-CONTINUED-		P	LATE 27

BBC	LOG OF BORING N EAST BEND WEST BOONE COUNTY, I	LANDFILL
LOCATION: N-	17,405; E-1,465,175 ELEVATION:	
DRILLING METHOD	4" I.D. Hollow-stem Auger	COMPLETION DEPTH: 65.0'
	O.D. Split-barrel Sampler	
표 . [박 #] []		NATURAL CONSISTENCY INDEX NATURAL MOISTURE CONTENT TEST
PEET AMPL UMBE AMPL AMPL	DESCRIPTION - CONTINUED	X RESULTS
SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE	D 1 C 1 1445 Smo to	PLASTIC LIMIT LIQUID LIMIT
	Dense brown fine to coarse sand, some to little fine to coarse gravel, little to trace silt, few cobbles.	
	Course Branes, miles to make 221, 221	
15 10/22		
- 40 -	23	
	Dense to very-dense brown fine to coarse gravel, "and"	
	fine to coarse sand, trace silt.	
16 19,		
—— 50-5	R	
45 -		
		*
□ □ □ 21 _{/2/}		
	21	
50 -	21	
18 20/1		
18 20 _{/1}	(20)	
	Very-dense brown fine to coarse sand, "and" to some	
19 29/3	, , , , , , , , , , , , , , , , , , ,	G
19 29/3	/32	
22		
20 33/3),	G
20 33/3	(29	
	- Encountered water at 49.0'.	
	- Boring converted to observation well, see well completion diagram, (KY Well No. 8005-1796).	
	completion diagram, (KY Well No. 8005-1796).	
70 WATER LEVEL: WATER NOTE:	\checkmark 49.0 $\overset{\bot}{-}$ $\overset{\bot}{-}$ G - GRADA	SYMBOLS USED TO INDICATE TEST RESULTS TION SEE H - PENETROMETER (tsf)
	Q - UNCON	IFINED COMPR SEPARATE W - UNIT DRY WEIGHT (PC
DATE: JOB: 011-09323-005	5/6/05 C - CONSO	DLIDATION CORVES D-REMAILVE BERGILL (

BBCM	LOG OF BORING N EAST BEND WEST BOONE COUNTY, F	LANDFILL	4	Page 1 of 2
LOCATION: N-515	,425; E-1,464,258 ELEVATION:	482.0	DATE:	5/4/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger		COMPLETION DI	ертн: 40.0'
SAMPLER(S):	2" O.D. Split-barrel Sampler			
			CONSISTENCY IN	
DEPTH, SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION	NATU	JRAL MOISTURE C	
FE FE SAN SAN SAN SAN SAN SAN SAN SAN SAN SAN	DESCRIPTION	∠ PLASTIC	LIMIT LIQUI	RESULTS RESULTS
	TOPSOIL - 2 INCHES	10		H=0.75
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Very-loose brown fine to coarse sand, "and" silt, trace		. :	11-0.75
2 T4, 3	fine gravel, few roots. Stiff brown silty clay, "and" fine to coarse sand, trace fine gravel. Very-loose brown fine to coarse sand, some silty clay,	· · · · · ·	 	H=1.1
2 1/4/	fine grave!			
3 2 1 2 1 4 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Very-loose brown fine to coarse sand, some silty clay,		+	H=0.75
5 4 2/3/3	Loose brown silt, some fine sand, little clay, trace			
3/3	medium to coarse sand.			G
5 2/3/3	Loose brown fine to medium sand, some to little silt, trace coarse sand, trace fine gravel.			
3/3	trace coarse sand, trace line gravel.			'
6 11/3/5				
5/5		<u> </u>		
7A 8/7				1 1 1
7B 4/5	Very-dense brown and gray fine to coarse gravel, "and"	 		
20,	to some fine to coarse sand, little silt.			
8 /23,				
8 2 0/23/24				<u> : </u>
9 13/30.			 	liii g
9 15/ _{30/27}	Medium-dense to dense brown fine to coarse sand,			
10 11/17	mid 10 00m0 mid 10 00m0 p. 10 m,			
10 17/17/16		 		<u> </u>
				
11 5/6				
11 5/6/8				
20				
				+
\Box \Box	Medium-dense brown fine to coarse sand, trace fine	:		
¥	gravel, trace silt.		+ + + + + + + + + + + + + + + + + + + +	
S/Ḥ				1
12		 		
- 25				T
				1
	Very-loose brown fine to coarse sand, trace fine gravel,			+::::
	trace silt.			
	·			1.
13 S/H=12'				
- 30 - 13 4				G
8/5/05	Medium-dense brown fine to coarse sand, little fine to			+
TOD I	coarse gravel, little to trace silt.			
• 11			+++++++++++++++++++++++++++++++++++++++	1:::1
14				
a 14 11/8			- 	
8 35 V	S S C CRADAT		TO INDICATE TE	
8 35	22.6 G - GRADAT	INED COMPR	SEE H - SEPARATE W -	PENETROMETER (tsf) UNIT DRY WEIGHT (pcf
	5/5/05 T - TRIAXI	AL COMPR J	CURVES D-	RELATIVE DENSITY (%)
DATE: Z JOB: 011-09323-005	-CONTINUED-		_	PLATE 29
ਕੋ JOB: 011-09323-005	-CONTINUED-			PLAIR 29

BBC	M	LOG OF BORING N EAST BEND WEST	LANDFILI	ı		Page 2 of 2
	 N-515,425; E-1,464,258	BOONE COUNTY, K ELEVATION:	482.0	DATE:	5/4/	/05
LOCATION: NETHO		BEBYAHOR		COMPLETION		40.0'
	2" O.D. Split-barrel Sampler				_	
			NATURAL	CONSISTENCY	INDEX	
SAMPLE SAMPLE SAMPLE SAMPLE	DESCRIPTION - COI	ATINI IPD	NATE	JRAL MOISTUR	E CONTENT	TEST
SAN EN	E DESCRITION - COL	TINODD	PLASTIC	LIMIT LIG	DUID LIMIT	RESULTS
35 - 35	Medium-dense brown fine to coar	se sand, little fine to	10	20 30	40	
	coarse gravel, little to trace silt.			1		
 						
15	/ ₉ / ₁₁			1 1 1 1		
15	′9/1,					
40	11					
	- Encountered slight seepage from	8.5' to 10.0'.				
	- Encountered water at 23.5'.					
	- Boring converted to observation	well, see well				
- 45 -	completion diagram (KY Well No	o. 8005-1795).				
				: : : : : : : : : : : : : : : : : : :		
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- 55 -				: : : : : : : :		
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60						
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- 65 -						
1						
8/5/02					· : :	
Gent						
~i			<u> </u>			
_,				<u>: </u>		
\$ 70 L		89	YMBOLS USED	TO INDICATE	TEST RESUL	TS
MATER LEVEL	.: ▼ 22.6 ▼ Ψ	G - GRADAT		SEE	H - PENETRON	
WATER NOTE	B:	T - TRIAXI	AL COMPR	SEPARATE CURVES	W - UNIT DES D - RELATIVE	WEIGHT (PCL)
TO WATER LEVEL WATER NOTE DATE Solution of the control of the con	05	1 0 00002			PLA	ATE 30

B	30	>	N	LOG OF BO EAST BEN BOONE CO	D WEST	LAND	FILL			Pa	ge 1 of 2
LOCA	TION:		N-51	2,569; E-1,464,846 EL	EVATION:	48	32.2	DATE:		5/3	3/05
DRILL	ING ME	TH	OD:	4" I.D. Hollow-stem Auger			_ c	OMPLET	TION DE	PTH: _	40.0'
SAMP	LER(S):	_		2" and 2-1/2" O.D. Split-barrel Samplers							
H ()	9 8 6	4	E E			NAT	URAL C	ONSISTE	NCY IND	ONTENT	TEST
DEPTH, FEET	SAMPLE NUMBER		SAMPLE	DESCRIPTION		_×	`• ─		- ×		RESULTS
-0"	S N	-		TODGOT A DIOUES		∠ PL : 1	ASTIC 1		LIQUII		
	1	ľ	/ ₂ / ₃	TOPSOIL - 2 INCHES Very-stiff to hard brown mottled with gray silty	clay,		ļ				H=2.0
	**	4	/ 3	some fine sand, trace medium to coarse sand, tr	ace fine						H=2.1-3.2
	2	ı	6,7	gravel.			****		1111	::::	H-2.1-3.2
	3	2	7. 7				•	 	 ×		H=2.1-3.6
	٠,		4,					<u> </u>			
- 5 -	4	3	/ _{5/7}				1			++++	H=2.7-3.6
	 5 A	4									H=2.7-2.8
	5A 5B		4/2	Loose brown fine to medium sand, some silty c	lav trace			• •			
	6	4	, 17	coarse sand, trace fine gravel.	- 1		::::	-::::	· · · · · ·		
			/ _{5/5}	Loose brown fine to medium sand, trace to little	e silt,						
- 10 -	7	3	1,	trace coarse sand, trace fine gravel.				:			H=0.25
10		4	1 ₄ ,								
	8					 			::::	++	
	0		1/3/3				- : :		- : :		
.,.		╛	•								
	9	3	/,						1		
15 -		4	1/3 _{/3}				: ::				
		┛.						:			
	10	1	/ ₃ /			-,:					
			"/								
]					<u> </u>					:
	11	ĺ	² / _{2/}				·	-			
20 -			′ :				i . ; .		÷	:.: :	
		1									
	V	-						<u> </u>			
	1	-							-	:	
		T	S/H	Very-loose brown fine to coarse sand, "and" sil	ty clay,			 	1 1 1 7	-	
- 25 -	12		′1/	trace fine gravel.						-	
23	2 S		S/H	Very-loose brown fine to coarse gravel, some f	ine to	1 1 1 1		<u> </u>	<u> </u>		
				\coarse sand, little silt.	/		1	<u> </u>			
	1			Loose brown fine to coarse gravel, some fine to sand, little silt.	coarse		1	1	<u> </u>		
	1		_							- 	'
	13	ľ	² / _{4/}				1	ļ	-		
- 30			7/				1	1::::		<u> </u>	
	1			Medium-dense brown fine to coarse sand, som	e to little	!: :	1	<u> </u>	1		
	1			fine to coarse gravel, little silt, trace clay.	o to mino				+	<u> </u>	
	1						1	1	ļ	i	
	1		¹⁰ / ₉ /					 			
i	14	ı	⁹ /1	1		<u> </u>	<u> </u>	<u> </u>	<u> </u>		G
35 WA W.	TER LE	VF.		22.4	S - GRADAT	YMBOLS ION	USED TO	SEE			METER (tsf)
$\mathbf{z} = \mathbf{w}$	ATER N	OT.	E:		Q - UNCONF	INED COME	PR [SEPARAT CURVES	E W-1	JNIT DR	Y WEIGHT (pcf) E DENSITY (%)
<u> </u>	D. 011-0932	AT.	B:	5/5/05	C - CONSOL	IDATION	<u> </u>	CORVED			ATE 31
á JOB: (011-0932	3-0	05	-CONTINUED-							

BI	30	\ <u>\</u>	N	LOG OF BORING EAST BEND WEST BOONE COUNTY,	Γ LANDFILL
LOCAT	ION.	N-	512.	569; E-1,464,846 ELEVATION	1: 482.2 DATE: 5/3/05
DRILLI				4" I.D. Hollow-stem Auger	COMPLETION DEPTH: 40.0'
SAMPL			_	I 2-1/2" O.D. Split-barrel Samplers	
					NATURAL CONSISTENCY INDEX NATURAL MOTSTURE CONTENT TEST
HLGEDTH, SEET	SAMPLE NUMBER	SAMPLE	ğ	DESCRIPTION - CONTINUED	NATURAL MOISTURE CONTENT TEST RESULTS
	SS ES	SA	岳		✓ PLASTIC LIMIT ✓ LIQUID LIMIT
35			1	Medium-dense brown fine to coarse sand, some to little	10 20 30 40
			1	ine to coarse gravel, little silt, trace clay.	
			ļ		
		2 / ₁₇	- 1		
10	15	117	1/05		G
- 40		П	25		
			-	Encountered slight seepage in sand at 7.0' to 14.8'.	
			-	Encountered water at 23.5'.	
- 45 -				Boring converted to observation well, see well	
43				completion diagram (KY Well No. 8005-1794).	
'					
50 -					
-			ļ		.:: : .:
- 55 -			1		
-					
- 60 -					
	1				
			ļ		
	}		ļ		
	1			1	
- 65 -	1				
8/5/05	j				
LGDT 8	-		-		
Si	1				
	1				
@ 	1				
g 70 ·	TERLI	EVEL:	Δ̈	22.4 - G - GRADI	
86 W	ATER 1	OTE:		Q - UNCON	NFINED COMPR SEPARATE W - UNIT DRY WEIGHT (PORTINE)
<u> </u>	I	OATE:		5/5/05 C - CONSC	OLIDATION CURVES PLATE 32
WATER LEVEL: WATER NOTE: DATE: JOB: 011-09323-005 SYMBOLS USED TO INDICATE TEST RESULTS SYMBOLS USED TO INDICATE TEST RESULTS G - GRADATION Q - UNCONFINED COMPR T - TRIAXIAL COMPR C - CONSOLIDATION C - CONSOLIDATION SEE W - PENETROMETER (tsf) W - UNIT DRY WEIGHT (pcf) D - RELATIVE DENSITY (%) PLATE 32					

BBCM	LOG OF BORING N EAST BEND WEST BOONE COUNTY, I	LAND]	FILL				ge 1 of 2
LOCATION: N-512	428; E-1,466,674 ELEVATION:	50	1.9	DATE:			- 5/2/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger		C	OMPLE:	TION D	EPTH: _	65.0'
SAMPLER(S):	2" and 2-1/2" O.D. Split-barrel Samplers						
# . 박용백박 t		NAT	URAL C	ONSISTE VAL MOIS	NCY IN	DEX	TEST
DEPTH, SAMPLE NUMBER SAMPLE SAMPLE SAMPLE EFFORT	DESCRIPTION	_×-			.×		RESULTS
O A S A B	ADJOURNAL ADJOURNAL	- PL	ASTIC :	LIMIT C		D LIMIT	
	TOPSOIL - 4 INCHES Loose brown silt, "and" fine sand, little clay, trace				· · ·		H=1.4
	medium to coarse sand.		1 1				YT 1 C 1 C
2 2 50, 5	medium to coarse sand. Stiff brown silty clay, "and" to some fine to coarse sand,				; ; ; ; ;	+ : : :	H=1.6-1.7
4 ' 5	some to little fine to coarse gravel.						
3 25 4/6/5							
5 - 4 4 /2 5			++++		+ 1 1 1		H=1.6
	Medium-dense to dense brown fine to coarse sand,						
5 7/11	"and" fine to coarse gravel, trace silt.						
41, 1		<u> </u>	<u> </u>			. :	
6 12/16			, ; ; ;				
6 12/16/16/16							
- 10 - 7 /17,		-					
16	Dense to very-dense brown fine to coarse sand, "and"						
8 11/26/30	fine to coarse gravel, trace silt.				<u> </u>	1 1 1 1	
26/30		\				1 - :	
		: 1				-	
9 13/17/30							
15		-		++++	1	 	
					-	T	
10 17/17/21				<u> </u>			
10 17/21				1::::	+	 	
				1::::	I :		
11 27,		<u> </u>					
- 20 11 27 _{/34/34}				1 : : :		1: _:.	
			 	-	 		
			7				
12 20,			1 : : : :		1		
12 20 _{/40_{/35}}		1	_	+ -	 	· :	}
					-		Į
	Dense to very-dense brown fine to coarse sand, some to			1			
	little fine to coarse gravel, little to trace silt.		-	+	<u> </u>	 	1
	-			1			
13 11/ _{25/₂₅}			<u> </u>		ļ		1
- 30 - 13 - 25/25				+ : : :			1
					ļ		
			\pm				
			1.	 	 - : :-		
"			1::-		1		-
11/21/32		<u> </u>				1	4
35 14 /32		SYMBOLS	USED T	O INDIC	CATE TE	EST RESU	LTS
WATER LEVEL: 💆	42.3	TION		SEE	н-	PENETR	OMETER (tsf) RY WEIGHT (pcf
	5/6/05 T TRIAX.	IAL COM	PR	SEPARA CURVE		- RELATI	VE DENSITY (%)
DATE:	C - COMBO						ATE 33

BBCN	LOG OF BORING EAST BEND WES	FNO. OW-104 TLANDFILL	Page 2 of 2
	BOONE COUNTY		
LOCATION: N-5	12,428; E-1,466,674 ELEVATION		
DRILLING METHOD:	4" I.D. Hollow-stem Auger	COMPLETION DEPTH:	65.0'
SAMPLER(S): 2"	and 2-1/2" O.D. Split-barrel Samplers		
H L 加度回归 Z		NATURAL CONSISTENCY INDEX NATURAL MOISTURE CONTENT	TEST
SAMPLE SAMPLE SAMPLE SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	<u>_</u> X	RESULTS
-35 3 E 3 3 H	Dense to very-dense brown fine to coarse sand, some to	PLASTIC LIMIT—LIQUID LIMIT 10 20 30 40 :	
	little fine to coarse gravel, little to trace silt.		
15 17 _{/26/2}	· ·		
15 26/2	e e		G
40 2	3		
<u> </u>			
16 24 _{/25/2}			
- 45 - 2	1		
50 - 17			
50 - 17	3		
	Medium-dense to dense brown fine to coarse sand, som	ne	
	to little fine to coarse gravel, little to trace silt.		
4,			
- 55 - 18 4 / _{11/}			
55 - /:	2		
19 17/13.			G
19 7 / _{13,}	20		
	Very-dense brown fine to coarse sand, some fine grave	1,	
	little silt.		
20 28/32			
20 28/33/	37		
9			G
COCCE I	- Encountered water at 42.5'.		
	- Boring converted to observation well, see well		
	completion diagram (KY Well No. 8005-1793).		
8			
# 70 WATER LEVEL: ₩ WATER NOTE: DATE: DATE: DOB: 011-09323-005		SYMBOLS USED TO INDICATE TEST RESULTATION SEE H - PENETROM	
WATER NOTE:	Q - UNCO	ONFINED COMPR SEPARATE W - UNIT DRY	WEIGHT (pcf) DENSITY (%)
PATE: _	C - Cons	OULDATION >	TE 34

<u> 3BC</u>		LOG OF BORING N EAST BEND WEST BOONE COUNTY, F	LAND	FILL			Pa	ge 1 of 4
LOCATION:	N-514	,994; E-1,467,434 ELEVATION:	52	29.4	DATE:	4	/25/05	- 4/27/05
DRILLING MET	HOD:	4" I.D. Hollow-stem Auger		_ c	COMPLE	TION D	EPTH: _	115.0'
SAMPLER(S):		2" and 2-1/2" O.D. Split-barrel Samplers						
f . 4 H H	甲虫		NAT		ONSISTE			трет
SAMPLE SAMPLE	SAMPLE	DESCRIPTION	X-	MATU	RAL MOIS	STÜRE (CONTENT	TEST
S E S	SA		/ PL	ASTIC	LIMIT -	-rioni	D LIMIT	RESULT
0 07 2 02		TOPSOIL - 4 INCHES		02	20 3	04	0	
	² / ₂ / ₆	Loose to medium-dense brown fine to medium sand,						
2A	3, 6	little to trace silt, trace coarse sand, trace fine gravel.				:		
2B	3 / 6 3 / 9 / 5	V		-:-: -	 	***		H=2.6
3A	[3, 5]	Very-stiff to hard brown mottled with gray silty clay,				<u> </u>		H=2.3-4.5+
— 3B	4/-	some to little fine to coarse sand, trace fine gravel. Very-loose to loose brown fine to coarse sand, "and" silt, little clay, trace fine gravel.			: · · ·	::		H=3.8-4.5+
5 - 4A	$[1, \frac{7}{7}]$	silt, little clay, trace fine gravel.						H=2.1
4B	3, 1	Vory stiff to hard brown mottled with grow silty clay	++++	***		::::	: : : :	
	2, 4	some fine to coarse sand, trace medium to coarse sand,			· · · · ·			
5	3/1	trace fine gravel.	<u> </u>			. ;	<u> </u>	
6A	$\begin{bmatrix} 3 & 3 \end{bmatrix}$	trace fine gravel. Loose brown fine to coarse sand, some silt, little clay, trace fine gravel. Medium-stiff brown silty clay, "and" fine to coarse sand,			: :	:		H=0.8
6B	13/	trace fine gravel. Medium-stiff brown silty clay, "and" fine to coarse sand,		: : :-:-	 		 • • • •	
	15, 17 21, 25	trace fine gravel.	ļ	-::				
10 - 7	21 _{/-}	Very-stiff to hard brown silty clay, "and" fine to coarse		: :		* :		
	25	sand, trace fine gravel.						
	14 _{/16/23}	Medium-dense to dense brown fine to coarse gravel,	Hiii	1 1 1 1	 	 	1 1 1	
	10/23	"and" fine to coarse sand, little to trace silt.					::	
	i 1		}					
	9,							
9	79,		1		1 1 1 1			
15	9/9/11	D (1 1 C)					• • • •	
1 1		Dense to very-dense brown fine to coarse sand, some fine to coarse gravel, trace silt.						
10	7 / _{22/37}	Thie to coarse graver, trace sitt.			ļ.,			
	37				 	·	 - 	
	1 1							
11	12 _/ 16 _{/37}			1::				
20	16/22		: .		1	:		
20	3/		- :	 . ;	 : i - :	:::::		
	ļ							
					1:::			
			•			: :		
	12				 			
12	17/23			· · · · · · ·				
25 -	12 _{/23/38}		<u> </u>	-::	 ,	1 1	 	
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			:	 	 ;		 	
					 `			
	19,			<u> </u>	<u> </u>			
13	19, 27,		H		+	1	 	
30	50-5"R					1111		
				ļ	-		<u> </u>	
	 	Medium-dense to dense brown fine to coarse sand,						
		"and" fine to coarse gravel, few cobbles.	· · · · ·	 	ļ., .	 	· ·	
	10,	-						
	15,			 	1	ļ .		
35 14	²⁰							
WATER LEVE	3L: \(\sum_{\text{\subset}}\)	67.4 Y Y SY G-GRADATI		JSED TO	O INDICA			
WATER NOT		Q - UNCONF	ENED CO		SEE SEPARAT	E W -	UNIT DR	ÆTER (tsf) / WEIGHT (p
	ΓE:	5/3/05 T TRIAXIA	IDATION	.	CURVES	I n - '	תודיית דיוס	E DENSITY

BBCM	LOG OF BORING EAST BEND WE BOONE COUNTY	ST LAND	FILL			Page 2 of 4
LOCATION: N-514	,994; E-1,467,434 ELEVATIO	ON:52	29.4	DATE:		- 4/27/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger		_	OMPLET	TION DEPTH: _	115.0'
SAMPLER(S): 2" ar	nd 2-1/2" O.D. Split-barrel Samplers					
로 <u> </u>		NA.	PURAL C	ONSISTE	NCY INDEX	TEST
PEPTH, SAMPLE NUMBER SAMPLE SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED		- MATO	- HOLD	×	RESULTS
D S S H			LASTIC	LIMIT C	LIQUID LIMIT	
	Medium-dense to dense brown fine to coarse sand, "and" fine to coarse gravel, few cobbles.		-	1 1		
	and thie to course graver, few cooless.					
			1::-:	1		
15 15/17/12						
40 - 10 11/12				1::::	:::: ::: 	
			1			
		- : : :	<u> </u>			
			 			
			1:::			
11,10,12		<u> </u>	1			
			1 1 1 1		;	
16 9/12			1	1		
16 13/17				- : : : :		
17 17/ _{18/9}			 	 		
50 - 17 18/9			1			
<u> 30 </u>						
		-	 			
			1	ļ		
		 : : : :	+			
11,		<u> </u>		1		
18 11/12/9		-	1::			
- 55 - 9			+	 		
	11)	21-				
	Medium-dense to dense brown fine to coarse sand, lit to trace fine to coarse gravel, little to trace silt, trace	TIE .	•			
	clay		╅┷┷			
19 9 / _{12/10}	olay.					
19 12,						
- 60 - '10			-	1 1 1		
			- 			
		<u> </u>	 	<u> </u>	 	
■ 6		<u> </u>		1.		
20 65 - 20 6 1 _{12/12}		<u> </u>		+		
- 65 - 12			<u> </u>	+		
		1:	- ·	<u> </u>		
<u> </u>				1	1	-
7/14					1	
21 7/14/16			+			
70 ₩ATER LEVEL: \\\ \[\forall \]		SYMBOLS ADATION	USED 5		ATE TEST RESU	
21 14/16 70 WATER LEVEL: \(\frac{\sqrt{\sq}}}}}}}\sqrt{\sqrt{\sq}}\sqrt{\sqrt{\sq}}}}}}\sqrt{\sign}\signititex{\sqrt{\sq}\sqrt{\sqrt{\sq}\sqrt{\sqrt{\sq}}}}\sqrt{\sqrt{\sigm}\sign}\sqrt{\sign}\signgta\sqrt{\sqrt{\sin}\signgta\si	Q - UN'	CONFINED C	IPR [SEE SEPARAT	TE W-UNIT DE	METER (tsf) Y WEIGHT (pcf E DENSITY (%)
DATE:	5/3/05 C - CO	NSOLIDATIO	N	CURVES		
JOB: 011-09323-005	-CONTINUED-				Pi	ATE 36

BBCM	LOG OF BORING EAST BEND WES' BOONE COUNTY,	[LAND]	FILL			Page 3 of 4
LOCATION: N-514	,994; E-1,467,434 ELEVATION	i: 52	9.4	DATE:	4/25/05	- 4/27/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger		_ C	OMPLET	ION DEPTH:	115.0'
SAMPLER(S): 2" an	d 2-1/2" O.D. Split-barrel Samplers					
		NAT	URAL C	ONSISTEN	NCY INDEX TURE CONTENT	TEST
DEPTH, P FEET SAMPLE NUMBER SAMPLE SAMPLE EFFORT	DESCRIPTION - CONTINUED	×			.×	RESULTS
OLDEPTH, OLDEPTH, SAMPLE NUMBER SAMPLE SAMPLE SAMPLE EFFORT		2 444	ASTIC :	LIMIT C	LIQUID LIMIT	
	Medium-dense to dense brown fine to coarse sand, little to trace fine to coarse gravel, little to trace silt, trace		:			
	clay.					
			! ; ; ;			
			- :			
- 75 - 22 3 13 ₁₁₄						
- 75 - 14		+ + + + +	· · · · · ·			
			<u> </u>			
16.						
23 \big 16_{19_{122}}						G
80 - '22		1 1	: :			
		::::				
	•		: .			
24 1 5 / _{12/13}						
85 - 24 12/13						
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90 -		-		1 . 1 .	+ + + + + + + + + + + + + + + + + + +	1
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16,]
95 -						Ţ
						1
25 25 10 10			1			_
	Very-dense brown fine to coarse sand, some to little fin	ie		1::::		-
	to accuse gravel trace gilt			1		-
26 69/22			<u> </u>	1:::	<u> </u>	G
26 69/ _{33/43}		<u> </u>	1			
98			+ -	<u> </u>		
1 8/5/05		i				-
100.			· · · ·			1
<u> </u>		1				1
27				<u> </u>		
01 102	67.4 ¥ C - CPAT	ATTON		O INDIC	ATE TEST RES	OMETER (tsf)
WATER LEVEL: \(\frac{1}{2}\) WATER NOTE: \(\frac{1}{2}\)	Q - UNCC	NFINED COME	?R	SEPARAT	E W - UNIT D	OMETER (USI) RY WEIGHT (pcf) VE DENSITY (%)
DATE:	5/3/05 C - CONS	OLIDATION	<u> </u>	CURVES		LATE 37
☐ JOB: 011-09323-005	-CONTINUED-				r	Marn vi

	<u> </u>	_		LOG OF BORING I EAST BEND WEST BOONE COUNTY,	LAND	FILL			Page 4 of 4
LOCA	TION:		N-514	1,994; E-1,467,434 ELEVATION:	52	29.4	DATE:		[
DRILI	JING M	ETI	HOD:	4" I.D. Hollow-stem Auger		c	OMPLET	TION DEPTH:	115.0'
SAMP	LER(S):	:	2" aı	nd 2-1/2" O.D. Split-barrel Samplers					
H .	田田	щ	円と		NA:			NCY INDEX	TEST
DEPTE	SAMPLE NUMBER	SAMPLE	SAMPLE	DESCRIPTION - CONTINUED	×	- Innie		-×	RESULTS
- DEPTH,	S N	SA	SA	XX 1 1 C / 1 1 made little fine		ASTIC I		-LIQUID LIMIT	
			ļ	Very-dense brown fine to coarse sand, some to little fine to coarse gravel, trace silt.					
-				to course graves, was some					
] [} 		
			.						
	28		16 _{/49,} 50-3"R				<u> </u>		
- 110 -	-	П	50-3"R						
	1								
						ļ			
			32, 0-4-1/5°F					****	
	29 2 S	Р.	U-4-1/5"}			1			
- 115 -	23	1			1	: :	-		
	-			- Encountered slight seepage from 6.0' to 7.5'.					
]			• •		<u> </u>	:		i
	1			- Encountered water at 68.5'.		-	: ::		
	-			- Boring converted to observation well, see well			· · · ·		
100	-			completion diagram (KY Well No. 8005-1791).					
120 -						 			
	1					-			
	-					+ : : :			
					-		. : :		
125	1					-	- :		
123						+ : : : :			
	}								
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	1					1:			
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- 130	7								
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	7				<u> </u>				
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CO/C/S	-					1			
	1	}				+	-		
	_	1					1		
	-					 	1		
÷	7					<u> </u>			
g - 140 w	TER II	EVI	3L: \(\sum_{\text{\subset}}\)	67.4 ¥ Y G - GRĀDA:	YMBOLS	USED TO	SEE	H - PENETRON	ETER (tsf)
- 140 WA W	ATER 1	NO: DA:	TE:	67.4 ± ± G - GRADA: Q - UNCON. 5/3/05 C - CONSO:	FINED COM TAL COM LIDATION	OMPR PR	SEPARAT CURVES	E W - UNIT DRY D - RELATIVE	WEIGHT (pcf) DENSITY (%) TE 38

BBCM	LOG OF BORING N EAST BEND WEST BOONE COUNTY, K	LANDFI	LL		Pa	ge 1 of 3
LOCATION: N-514	,764; E-1,465,562 ELEVATION:	527.	0 DA7	TE:	4/2	8/05
DRILLING METHOD:	4" I.D. Hollow-stem Auger		COMPI	LETION	DEPTH:	85.0'
SAMPLER(S):	2" and 2-1/2" O.D. Split-barrel Samplers					
			AL CONSIS			ADD CATE
	DESCRIPTION		IATURAL M	OISTURE	CONTENT	TEST
DEPTH, FEET SAMPLE NUMBER SAMPLE SAMPLE BFFORT	DESCENT HON	Z DT.AS'	TIC LIMIT	Z _{1,101}	LIWIT OIC	RESULTS
	TOPSOIL - 4 INCHES	10	20	30	40	TT_0 75 0 1
1 1 1 1 1 1	Very-stiff brown silty clay, "and" fine sand, trace					H=0.75-2.1
2, 1	medium to coarse sand, trace fine gravel, silt seams. Medium-dense brown fine to medium sand, some silt,					H=1.6-2.1
	Medium-dense brown fine to medium sand, some siit, little clay, trace coarse sand, trace fine gravel.	: : : 				11 1.0 2.1
3, '5	intile clay, trace coarse sand, trace line graver.					
3 13/5/6			: : : :			
- 5 - 4 - 2 / 3 / 4	Very-loose to loose brown silt, some to little fine to		: : : :	+ + + + + + + + + + + + + + + + + + + +		
- 4 J '3/	coarse sand, little to trace clay, trace fine gravel.					
[3, 4]		 	 		1	
5 7 3 6						G
		 			1 1111	
2,						
10 - 7 12/3						
8A 🖳						
8B 3'8 ₁₅	Very-dense brown fine to coarse gravel, "and" fine to					
15	coarse sand, trace silt.		1 1	: :	1::	
9 22/ _{30/,36}						G
15 - 30/36		+ + + + +		1 :	+ : : : :	J
10 22/27	fine to coarse gravel, trace silt.					
10 22,						
		+ + + + +				
23,				1 : : :	 : ·	
11 23,22,4			11: 2:	: : .].
- 20 - 4		 			- 	
	Very-dense brown fine to coarse gravel, "and" fine to	+]
	coarse sand, trace silt.		: :			-
10						
12 19/ _{33/48}						1
- 25 - 48					<u> </u>	
						
						-
						1
						1
13 22/ _{26/33}						1
- 30 - 13 - 26/33						1
					-	1
3		 			: 	1
]
19/27/37		 		:	<u> </u>	G
8 35 □ □ □ □ □ □ □ □ □ □ □	V	YMBOLS US				
WATER LEVEL: WATER NOTE: W	O - UNCONE	INED COMP	SEPA	RATE W	- UNIT DE	OMETER (tsf) RY WEIGHT (pcf
DATE:	5/2/05 T - TRIAXI C - CONSOL	AL COMPR IDATION	CUR		- RELATI	VE DENSITY (%)
<u> </u>	-CONTINUED-				PI	ATE 39

B	30		M		EAST	OF BORING N BEND WEST I NE COUNTY, K	LAND:	FILL				Page 2 of 3
LOCA	TION:		N_514	,764; E-1,465,562		ELEVATION:			DATE:		4/28	/05
DRILL		ETI		4" I.D. Hollow-st	em Auger			cc	MPLET	ION DE	PTH:	85.0'
	LER(S)			d 2-1/2" O.D. Spli								
							NAT	URAL CO	NSISTEN AL MOIS	ICY INI	EX	TEST
DEPTH	SAMPLE NUMBER	Ŕ	SAMPLE	DESCR	IPTION - CONTINU	ED	×	NATURA	ar worz	τυκε C - Χ	ONTENT	RESULTS
DEPTH, 32	SA EN	SA	SAN EFI				2.77	ASTIC L			LIMIT	- KESOLIO
- 33 -		П		Very-dense brown	fine to coarse gravel,	"and" fine to	الـــــا	0 20	30)4		1
				coarse sand, trace s	ш.				::::			
							÷ ; ; ; ;	-:-:				ļ
		11										
	15		²⁰ / _{35/₂₄}					: : : :			: :	
- 40 -	13		'35 _{/24}									1
40	İ	Ш	24				++++	<u>:::::</u>	::::	+	- ;	
							 					1
								-				ļ
							ļ		<u>;;;</u>	::::	· · · · · · · · · · · · · · · · · · · 	
	16		34 ₄₉							· · · · · · ·		
1-	10		49				-			: :		
- 45	1		50-4"R					: : : :				
	1								++++		- : : :	
				Very-dense brown	fine to coarse sand, "	and" fine to						
	1			coarse gravel, little	to trace silt.					· · · · ·		
	17 28	Н	50-3"R					- : : -	:			
			50-4"R									
50	_									-::		
]									:-		
-	-											
										-! : : :		
	18 2s	T	50-3"R					:	1 1			
	<u>E</u>		50-4"R							: :		
- 55	1						1 1	1		1 1 1		
<u> </u>	1											ļ
	-		li							:::		
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	1		17				: : : :			1		
	19		39									
- 60	1		50				-					
<u> </u>	_							1		i		
	-			Dense to very-dens	se brown fine to coars	se sand, some to	++++		11111			
	1			little fine to coarse	gravei, trace siit.		-		ļ			
	-		19.					1				•
	20		19 _{/32/46}					ļ.: <u></u>	<u> </u>		 	
65		ſ	46					1		1	1	
<u></u>	\exists							<u> </u>				
GDT \$5/03	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\						-	<u> </u>	ļ.,. <u>.</u>	·		
[]	_	1					1	 	 	1::	 	
•	-		²¹ / ₃₄ / ₂₀							ļ		
B	21		³⁴ / ₂₀					1.	1.:.	1:.::	1:::	
ğ 70	TUD I	EV	eī. Ā	67.0	Ā	G - GRADAT	YMBOLS ION		SEE		PENETRO	TS METER (tsf)
- 70 - WA WA JOB:	ATER	NO.	TE:			Q - UNCONF T - TRIAXI	INED CC	MPR S	SEPARAT	E M-	TINTT DR'	Y WEIGHT (pcf) E DENSITY (%)
<u> </u>		DA	TE:	5/2/05		C - CONSOL	IDATION	<u> </u>	CURVES	_ ט _		
B JOB;	011-09	323	-005		-CONTINUED-						PL	ATE 40

BI	<u>30</u>	2	M	LOG OF BORING N EAST BEND WEST BOONE COUNTY, I	LAND	FILL				Page 3 of 3
LOCAT	rioni.		N-514	5,764; E-1,465,562 ELEVATION:			DATE:		4/28	/05
DRILL		_		4" I.D. Hollow-stem Auger		CC	OMPLET	ION DE	PTH:	85.0'
SAMPI				nd 2-1/2" O.D. Split-barrel Samplers						
		<u>-</u>			NAT	URAL CO	NSISTEM AL MOIS	CY IN	EX	TEST
DEPTH, FEET	ABE		SAMPLE	DESCRIPTION - CONTINUED	×.	-NATUR	AL MOIS	X	ONIENI	RESULTS
日 - 70 +	SAMPLE NUMBER	SAI	EE		∠ _{PL}	ASTIC L			LIMIT	
[/0]				Dense to very-dense brown fine to coarse sand, some to little fine to coarse gravel, trace silt.		J : _2	:			
				Intie fine to coarse graver, trace site.						
							++++	: : : :	1	
		Ш	}	Medium-dense brown fine to coarse sand, some fine to						
	22	1	0 _{/15/14}	coarse gravel, trace silt.						
- 75 -			13/14		1 1 1				-:	[
			ļ					<u> </u>		l
]	Ì	Very-dense brown fine to coarse sand, little silt, trace		: : :				
		╽.	,	fine gravel.	++++				+ + + +	
	23	1	1 _{/23_{/50}}							G
- 80 -		H	50							
		11								
				Medium-dense brown fine to coarse sand, little silt, trace	<u> </u>					
-				fine gravel.						
		.	.a							
t	24		14,		-					G
85 -			13 _{/14_/16}			1				
	-			- Encountered slight seepage from 8.3' to 9.0'.						
	1									
				- Encountered water at 68.5'.			: : : :		 	
 	1			- Boring converted to observation well, see well						
	1			completion diagram (KY Well No. 8005-1792).			. : : :			
- 90 -	1									·
	-									
]									
	1					 				
	-						+ + + + + +		T:-:-	
0.7	1					1		ļ <u></u>		
- 95	1				<u> </u>	+ :-			<u> </u>	
	1					 		<u> </u>	<u> </u>	
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	7					1	1 :			
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- 100	1						1-1:	1	 	
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8/2/02	1								<u> </u>	
[8]	_					 	+	1:	1	
٦١	-					1::::			1]
	1					<u> </u>		1:::	1:]
ଞ୍ଚି <u> </u>		\bot	<u> </u>		YMBOLS	USED T	O INDIC	ATE TE	ST RESU	LTS
ξ W.A	TER L			67.0 G - GRADA Q - UNCON	TION	2000	SEE		DENEMBE	METER (tsf) Y WEIGHT (pcf
Si W	ATER			5/2/05 T TRIAX C - CONSO	IAL COM	PR	SEPARAT CURVES		RELATIV	E DENSITY (%)
JOB:	011-093	323-	005						PI	ATE 41

B		3	C	1 :					LOG OF TEST PIT NO. TP- EAST BEND WEST LANDFI	LL	Page 1 of 1
									BOONE COUNTY, KENTUC	KY	
	ō.	S	<u>ن</u> , <u>و</u>	ہ ما	TER		8 H	2	TYPE: Rubber-Tired Backhoe 24-Inch Bucket	_ LOCATION: 	N-517,671 E-1,468,396
DEPTH, FEET	SAMPLE NO.	SAMPLES	SAMPLING EFFORT	HAND	SOME	TSIO	LIQUID	LIM		_ _	
	SAM	SA	SAN		F	ΣO			COMPLETION DEPTH: 6.3' ELEVATION: 578.0	DATE:	10/21/03
0		Ļ		ts	f	ક્ષ	ક	ક	DESCRIPTION TOPSOIL: Medium-dense dark grayish-brown silt	. some fine sa	nd, many roots.
									Very-stiff to hard brown mottled with gray sifty cla	y, trace fine to	coarse sand, trace
		J		2	4				fine to coarse gravel, few roots.		
	1			4	.5+	21					,
- 2 -	1			"	.5,						
	4*			4.	.5+	24	73	27			
	7										
- 4 -	2			4.	.5÷		80	27			
					,5+	1					ļ
				"	,ς,				Very-soft to soft brown shale, fragmental structure	, similar to ha	rd silty clay, few
								ļ	layers of hard gray and brown limestone.		
- 6 -	3										
- 8 -											
	-								,		
	-	Ì									
	-										
- 10	-			-					* Sample No. 4 is bag sample obtained between 0.	3' to 5.3'.	
	-								- Walls of test pit did not cave.		
	-								- No seepage noted.		
									- 140 scepage noted.		
- 12	-										
	1										
1.4		j					Ì				
- 14											
				ļ							
16			<u>. L , </u>					<u>_</u>		·	Ā
₫ · WA	TER I	LEV		<u>Ā</u>	"Dry			<u>Ā</u>	Ā Ā		
3	011-0	DA	TE:		10/21	/03					PLATE 42

B		3			V	1				EA	ST BEI	TEST PIT VD WEST DUNTY, F	NO. TP-13 LANDFIL ŒNTUCK	L	Page 1 of 1
f _E	ENO.	LES	LING	HAND	INE- METER	MOISTURE	LIQUID	PLASTIC	TYPE:	Rubber-Tired Bac 24-Inch Bucket	khoe			LOCATION:	N-517,065 E-1,468,025
FEET	SAMPLE NO	SAMPLES	SAMPLING EFFORT	H	E SE	MOS	E I		COMPI	ETION DEPTH:	10.7'	ELEVATIO	N: 560.0	DATE: _	10/16/03
	SA		Ś	H.	sf	8	8	8				DESCRI	PTION		
0 +		H		 '	.31	+-			TOPS	OIL: Medium-o	dense da	rk-brown si	lt, some fin	e sand, man	y roots, few
4 -	2	CONTRACTOR CONTRACTOR		THE PARTY OF THE P		A CONTRACTOR OF THE CONTRACTOR	A CONTRACT C		7 a a b b l a	s and boulders and boulders and boulders and brown	at currfac	<u> </u>			
8 -	4*				4.5+	2	1 54		Hard coarse	um-dense to den brown mottled v					e sand, some silty
12 -		and a security of the security		and the state of t			the state of the s		- Wal	nple No. 4 is ba lls of test pit did seepage noted.			etween 8.8	to 10.7'.	
16 - WAT				포	"Dı	ry"_		Ţ		Ā		Ā	<u>Ā</u>		Ā
	TER	NO'			10/1	6/03		_							
ÖB: (11-09														PLAT

.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DATE:	10/15/	/03			PLATI
WATER	LEVEL: R NOTE: DATE: 09323-001	<u> </u>	y ¹¹		<u>Ā</u>	<u>Ā</u> <u>Ā</u> <u>Ā</u>
10 -			222	27	20	* Sample No. 5 is bag sample obtained between 1.0' to 3.3'. - Walls of test pit did not cave. - No seepage noted.
6 -			ALAGON THE TOTAL T	TOTAL TOTAL		Medium-dense brown and gray fine sand, "and" silty clay, few lenses of silt.
4 - 3		4.5+	A CONTRACTOR OF THE CONTRACTOR			Medium-dense brown and gray fine sand, some silt, trace clay.
2 5*		4.5+ 4.5+	20	38 37	21 21	
1		4,31				Hard brown silty clay, little fine sand, trace medium to coarse sand, few seams of silt and fine sand.
) 		4,5+			-	TOPSOIL: Loose to medium-dense dark-brown silt, some fine sand, little clay.
SAM	SAM	tsf	žo *		¥	COMPLETION DEPTH: 11.5' ELEVATION: 474.0 DATE: 10/15/03 DESCRIPTION
FEET SAMPLE NO.	SAMPLES SAMPLING EFFORT	HAND PENE- TROMETER	DISTURE	LIMIT	LASHIC	TYPE: Rubber-Tired Backhoe LOCATION: N-516,900 E-1,464,108
)	<u>3C</u>	/V				LOG OF TEST PIT NO. TP-26 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY

B		3	<u>C</u>	<u>八</u>	<u> </u>	1			LOG OF TEST PIT NO. TP-27 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
T T	NO.	ES	ING RT	ON IN	ÆTER	MOISTURE	CIQUID	LASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-515,692 24-Inch Bucket E-1,463,662
DEPTH, FEET	SAMPLE NO.	SAMPLES	SAMPLING EFFORT			ļ		ч	COMPLETION DEPTH: 10.7' ELEVATION: 472.0 DATE: 10/15/03
- 0				ts	£	8	£	8	DESCRIPTION TOPSOIL: Stiff dark grayish-brown organic clayey silt, some fine sand.
		- Anti-Control		1	.3				Stiff to hard brown mottled with gray silty clay, some fine sand, trace medium to coarse sand, trace fine to coarse gravel, few silt and fine sand seams.
- 2 -	1 4*			4.	5+	20	37 28	23 18	
	ı	1	-	3	.7				Very-stiff brown clayey silt, some fine sand, trace medium to coarse sand, few silt
- 4 -	2			4	.2		28	21	seams.
	5*					16	. 27	17	
- 6 -									
									Medium-dense brown fine sand, some silt, little clay.
- 8 -									
- 10 -	3								
12 -								James de la constant	* Samples No. 4 and 5 are bag samples obtained between 1.1' to 3.5' and 3.5' to 7.5'.
	en-reco	B-D-B-reset							- Walls of test pit did not cave No seepage noted.
14 -									
"	1						- Anna		
	ER L	NO			'Dry 0/15/			¥	<u>Ā</u> <u>Ā</u> <u>Ā</u>
IOB:									PLATE 4

B	E	30		1		1			LOG OF TEST PIT NO. TP-28 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
DEPTH, FEET	SAMPLE NO.	SAMPLES	EFFORT	HAND	METER	MOISTURE	LIQUID	LASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-513,648 24-Inch Bucket E-1,463,780
	AMP	SAM	EFF		I X	28	ם ר	д ^Г	COMPLETION DEPTH: 11.3' ELEVATION: 470.0 DATE: 10/15/03
	ιχί		•	ts	f	8	g.	8	DESCRIPTION
- 0									TOPSOIL - 10 INCHES
				1	.8	***************************************			Stiff to hard brown mottled with gray silty clay, some fine sand, trace medium to coarse sand, trace fine to coarse gravel, few seams of silt, "and' fine sand with depth.
- 2 -	1			4.	.5+	19	35	21	
									,
· 4 -	4*				.5+	16			
	2			4.	.5+		29	20	
- 6 -				-					
- 8 -	_								
									Medium-dense brown fine sand, some silt, trace clay, trace medium sand.
	1								
- 10 -									
	3								
	- Andrews								
12	-								
									* Sample No. 4 is bag sample obtained between 0.8' to 7.5'.
- 14	1								- Walls of test pit did not cave.
14									- No seepage noted.
16									
WA:	TER L				"Dr			<u> </u>	<u>Λ</u> <u>Λ</u> <u>Λ</u> <u>Λ</u>
JOB:		DATE	i.	1	0/15	/03			PLATE

B	B	3	<u> </u>		1				EA	ST BE	TEST PIT NO ND WEST LA OUNTY, KE	NDFIL	Ĺ		Page 1 of 1
				æ	ш			TYPE:	Rubber-Tired Bac	khoe			LOCATION:	N-517,238	
این نظا	NO.	S S	κr	HAND PENE- TROMETER		LIMIT	LASTIC		24-Inch Bucket					E-1,464,87	<u>''</u>
DEPTH, FEET	SAMPLE NO	SAMPLES SAMPLING	EFFORT	HA B E N	MOIST		PLA						- L m22		102
ו" מ	SAM	SAI	ם	F				COMPI	LETION DEPTH:	10.1'			DATE: _	10/15	/03
- 0 -				tsf	*	ě	8	TODG	OIL: Loose to n	- a disam	DESCRIPTION dans dark bro	ON www.eilt	"and" fine s	and trace	clay.
								Mediu	um-dense brown	mottled	d with gray silt,	"and" fi	ne sand, litt	le clay.	
- 2 -															
	1														
4 -				ļ											
							ļ.		um-dense brown	-114	mo fine cand tr	ace clay	few seams	of fine sa	nd
- 6 -								Medii	um-dense brown	SHT, SO	me ime sand, u	ace cray	, iew seams	or mo sa	ina.
L															
- 8	-														
															,
10	2														
10					-										
- 12	-						-		alls of test pit did	not cav	<i>r</i> e.				
-								- No	seepage noted.						
n 14	1														
GN/S/8 LOE	-														
							- Language								
16 WA WA JOB:	TEPT	EVEL	<u> </u>	<u> </u> ⊈" ∑	ry"_		Ā		Ā		<u>Ā</u>	<u>Ā</u>		<u> Ā</u>	
W. W.	ATER N	OTE TOP	• ; • ;	10/1								_			
E JOB:	011-093	323-00	<u>.</u> 1	10/1										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PLATE 47

	3 [3	C		1			LOG OF TEST PIT NO. TP-30 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
DEPTH,	SAMPLE NO.	SAMPLES	SAMPLING EFFORT	HAND PENE- TROMETER	MOISTURE	LIQUID	PLASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-516,144 24-Inch Bucket E-1,464,573 COMPLETION DEPTH: 11.0' ELEVATION: 494.0 DATE: 10/13/03
	\ \sigma			tsf.	8	F	B	DESCRIPTION
- 0		\top						TOPSOIL: Loose to medium-dense dark-brown silt, "and" fine sand, trace clay.
				3.3	A CA LONG ENVIRONMENT			Stiff to very-stiff brown silty clay, some fine sand, trace medium sand, few seams of fine sand, little silt.
- 2	1			2.4				
	_							
	3*			1.3	20	29	20 19	
L] ~	*	
				3.2				
F 4				3.2				
								Medium-dense brown and light-brown fine sand, little silt, trace clay.
	_							<u></u>
- 6	-							
L	_							
	4							
	1							
- 8	_							
			ļ					
		Ì						
10)							
	2							
	\dashv							
-	\dashv	1						
- 12	2 -							
-	_							
	_							* Sample No. 3 is bag sample obtained between 0.8' to 4.7'.
ջ- 14	<u>.</u>]							- Walls of test pit did not cave.
50/5/8 TOE								- No seepage noted.
DE L								
_					Menson	1		
a								
16323001.GP	ATER I	i EVI	EL:	∑ "Dr	y"		<u>Ā</u>	Ā Ā Ā
61 V	VATER	NOT	re:	10/13	/03			
E JOB	3: 011-0	323-	001		-			PLATE 48

B		3	C		V					LOG OF TEST PIT NO. TP-31 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
E H	E NO.	LES	LING		HAND PENE-	TROMETER	THENT	LINGT	PLASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-515,959
DEPTH, FEET	SAMPLE NO.	SAMP	SAMPLING EFFORT	;	五 匠		8		PL L	COMPLETION DEPTH: 10.0' ELEVATION: 502.0 DATE: 10/15/03
	S			F	tsf	1	용	8	¥	DESCRIPTION
- 0 +		+		7						TOPSOIL: Loose to medium-dense dark-brown fine sand, some silt, trace clay.
										Loose to medium-dense brown silt, some fine sand, some clay.
- 2 -	1				1.3					
	2			1	2.5					Medium-dense brown fine to coarse sand, some fine to coarse gravel, some silty clay.
- 4 -									Table 1	Medium-dense brown and gray fine to coarse gravel, "and" fine to coarse sand, trace silt.
- 6 -										
8 -										
	3								- Luciana	,
- 10										
- 12										- Walls of test pit caved between depths of 5.0' and 10.0'. - No seepage noted.
					1					
14										
16 WA WA JOB:	TER I	E	EL:	<u>Ā</u>	2 "	Dry			Ā	<u> </u>
JOB:	011-0	D/ 932	TE: 3-001	_	10	/15/	03			PLATE

B		3	<u>(</u>			1			LOG OF TEST PIT NO. TP-32 Page 1 of EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
TH, ET	SAMPLE NO.	PLES	SAMPLING	EFFORT	HAND PENE- TROMETER	ISTURE	QUID IMIT	PLASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-514,940 24-Inch Bucket E-1,464,726
DEPTH, FEET	AMPI	SAMPLES	SAME	EFF	H P TRC	<u>∑</u>	O T	<u>4</u>	COMPLETION DEPTH: 10.5' ELEVATION: 492.0 DATE: 10/14/03
	ν,		٦		tsf	8	g.	8	DESCRIPTION
- 0 -		T							TOPSOIL: Medium-dense dark-brown silt, "and" fine sand, trace clay.
					1.8				Loose to medium-dense brown fine sand, some silt, little clay.
- 2 -	4* 1				4.5+	18	24 28		
	2					15			Medium-dense brown and gray fine sand, some silt, little clay, trace medium sand.
- 4 -									Medium-dense brown and gray fine sand, little silt, trace medium to coarse sand, few lenses of silty clay.
- 6 -									
1									
8 -									
	-								
10	3								
			- Proced				***************************************		
- 12	- - - -								* Sample No. 4 is bag sample obtained between 0.9' to 2.8'.
		- Lucius				LANGER			- Walls of test pit did not cave.
-	-							-	- No seepage noted.
- 14 - 14									
	-							- Laboure and	
5 16 WA	TERI	.EV	EI.		☑ "Dr	y"		¥	Ā Ā Ā Ā
16 WA WA JOB:	011-09	NO DA	TE TE	ι .	10/14				PLATE

B	E	3(\ /	V	/					EAS	ST BE	TEST PIT NO ND WEST LA OUNTY, KEI	NDFIL	${f L}$	Page 1 of
					ę	ž u) j.,			TYPE:	Rubber-Tired Bac	khoe			LOCATION:	N-514,249 E-1,464,277
H _	Ñ.	ES	S E	;]	294		EN		STIC		24-Inch Bucket		-14			E-1,404,277
PEET FEET	SAMPLE NO.	SAMPLES	SAMPLING		HAND PENE-		8		A II	COM	LETION DEPTH:	10.5'	ELEVATION:	488.0	DATE:	10/15/03
1]	SA	S	SA	'						COMP	LETION DEFTH:	10.5	DESCRIPTI			
0				\dashv	tsf	+	8	*	ક	TOPS	SOIL: Loose to n	nedium	-dense dark-bro	own fine	sand, "and	' silt, trace clay.
	1									Medi	um-dense brown	fine sa	nd, "and" silt, li	ittle clay	, few seams	of fine sand, some
				. !						silty o	clay.					
2 -		ı														
4				Ì												
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	2					İ										
								ļ	İ							
4 -																
										ļ						
	-					į										
6 -	-									ļ						
	-]						ium-dense brown	11!	1.4 1 Sugar	and litt	tla to come s	vilt trace clay
										Med	ium-dense brown	and H	dur-prown mie	sana, m	ite to some s	in, mass only.
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n			•													
8																
	1				1											
	-	1														
10	3															
	-	ļ	•													
		İ														
	_															
12										77.7	-11 C44 mi4 did	not on	10			
14											alls of test pit did	not ca	y U.			
										- No	seepage noted.					
 -	1	İ														
	4															
- 14	4															
	-															
- 14	4															
	_															
- 16	TER ATER						<u>L</u> .			<u> </u>			1 7	Ā		Ă
WA	TER	LEV	EL:		<u>Ų "]</u>	Dry	11		₹_		<u> </u>		<u>Ā</u>	<u> </u>		
. w	ATER	DA <u>A</u> D	TE:		10.	/15/	03									PLATI
JOB:	011-0	9323	-001							_						

B	E	30		V	1			LOG OF TEST PIT NO. TP-34 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
рерти, Реет	SAMPLE NO.	SAMPLES SAMPI ING	EFFORT	HAND PENE- TROMETER	MOISTURE	LIMIT	PLASTIC	TYPE: Rubber-Tired Backhoe LOCATION: N-513,623 24-Inch Bucket E-1,464,978 COMPLETION DEPTH: 11.7' ELEVATION: 492.5 DATE: 10/15/03
	Š		,	tsf	8	8	8	DESCRIPTION
- 0 -		H			-			TOPSOIL: Loose to medium-dense brown silt, some fine sand, little clay.
				3.0	T. A. L. L. L. L. L. L. L. L. L. L. L. L. L.			Very-stiff brown clayey silt, some fine sand, trace medium to coarse sand, few seams of silt.
- 2 -	1 4*			3.0 3.6	21	26 29	18 20	
- 4 -				2.3			and stated and stated	Medium-dense brown fine sand, some silt, trace clay, trace medium sand, becoming
	2			3.4				little silt with depth.
- 6		- Level				Market and the second s		
- 8								
							- Andrews	
- 10								
	3			-		and the second s		
- 12					ration			* Sample No. 4 is bag sample obtained between 0.8' to 4.2'.
_	_							
g 14	-							- Walls of test pit did not cave.
\$0/\$/8 LIGE								- No seepage noted.
E .				Ì				
16 WA WA WA	TER I	EVE	L:	<u>∇</u> "D:	ry"		▼.	<u>Ā</u> <u>Ā</u> <u>Ā</u>
	ATER	NOT	E:	10/1	5/03			
JOB:	011-0	9323-0	01					PLATE

B		3						LOG OF TEST PIT NO. TP-35 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY	-	Page 1 of 1
DEPTH, FEET	SAMPLE NO.	SAMPLES SAMPL DICE		HAND PENE-		IQUID	ASTIC		OCATION:	N-512,642 E-1,465,402
DEPTH, FEET	4MPi	SAM	EFF	1 1 1 1		311	H H	COMPLETION DEPTH: 10.0' ELEVATION: 492.0	DATE: _	10/13/03
	Š	"	2	tsf	- 8	8	96	DESCRIPTION		
- 0 🕇		$\dagger \dagger$			†			TOPSOIL: Loose to medium-dense dark-brown fine sa	and, some	silt.
								Medium-dense brown fine sand, some silt, trace clay.		
- 2 -	1			The same of the sa	- Harter - H	- VII-NI	a control of the cont			
- 4 -	2				The state of the s	- Tricky .		Medium-dense brown and gray fine sand, little silt, trasome silt.	ce clay, fe	w pockets with
6 -					- Constitution of the Cons	771677	Linear Control			
8 -		111111111111111111111111111111111111111					101,0			
- 10 -	3									
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				, , , , , , , , , , , , , , , , , , , ,					
12 -								- Walls of test pit did not cave.		•
								- No seepage noted.		
	-						ļ	140 goobago woong		
co/cs 14 -		19.0				Section 1.	- PARTY			
16 WAT WAT	TER I	EVE	L:	☑ "	Dry"		<u>*</u>	<u>Λ</u> <u>Λ</u> <u>Σ</u>		₹
WA JOB:	TER	NO I	E:		/13/03					PLATE 5

13	BE	3	C		1			LOG OF TEST PIT NO. TP-3 EAST BEND WEST LANDFIL BOONE COUNTY, KENTUCK	L .
	NO.	ES	ING RT	HAND PENE- TROMETER	MOISTURE	LIQUID	LASTIC	TYPE: Rubber-Tired Backhoe 24-Inch Bucket	LOCATION: N-512,661 E-1,466,301
DEPTH, FEET	SAMPLE NO	SAMPLES	SAMPLING EFFORT	HA E	MOIS	23	\ \ \	COMPLETION DEPTH: 10.5' ELEVATION: 500.5	DATE: 10/15/03
	SA	S	SA	<u> </u>	<u> </u>			COMPLETION DEPTH: 10.5' ELEVATION: 500.5 DESCRIPTION	DATE: 10.100
- 0 -	<u> </u>	_		tsf	8	8	8	TOPSOIL: Loose to medium-dense dark-brown silt	, "and" fine sand, little clay.
	1						ĺ	101501111 2000 10 1111111111111111111111	
			J-000-0	.8				Medium-dense brown fine to coarse sand, little fine clay, few cobbles.	to coarse gravel, some silty
- 2	-								
	4*			2.6-4.5+	- 15	41 48	17 26		
				4.5÷					
<u> </u>		4			1				
- 4	 				-			Medium-dense to dense brown fine to coarse gravel sand, little silt, few cobbles.	, some to "and" fine to coarse
	7	ļ							
	1								
<u> </u>	_								
6	+								
L	-	١							
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	4								
- 8	_								
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	7.					ļ			
- 10	3					İ			
	-								
-	-								
	-	أ							
- 12	4							* Sample No. 4 is bag sample obtained between 1.0)' to 3.8'.
-	_							- Walls of test pit caved slightly between 3.8' and 1	
-	_						İ		
	_							- No seepage noted.	
₅ - 14	1								
0/5/8									
E									
Tage .								·	
16323001.GP	5 	ÆV	/EL:	<u>Ф</u> "О	ry"		Ā	<u> </u>	<u>Ā</u>
E A	VATER	NO	TE:	10/1	5/03				DT 4 000 C4
FIOB	011-0	932	3-001						PLATE 54

B		3		\ _	N	1			LOG OF TEST PIT NO. TP-37 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY	of 1
рертн, геет	SAMPLE NO.	SAMPLES	SAMPLING	EFFORI	HAND PENE- TROMETER	MOISTURE	LIQUID	PLASTIC LIMIT	TYPE: Rubber-Tired Backhoe LOCATION: N-511,385 24-Inch Bucket E-i,466,129 COMPLETION DEPTH: 10.2' ELEVATION: 480.0 DATE: 10/15/03	
	SA	S	Š	•	tsf	8	8	-B	DESCRIPTION	= $ $
10 +					CSI	+	l"	-	TOPSOIL: Loose to medium-dense dark-brown fine sand, "and" silt, trace clay.	
										\dashv
	1				2.8				Very-stiff brown clayey silt, "and" fine sand, few silt seams.	
										-
- 2 -	4*				3.8	17	28	20		
	1				5.0	"	27	1		
					3.8					
		Ţ					}]
- 4 -	1						-		Medium-dense brown fine sand, some silt, trace clay.	
							Ì			
	2					-				
	. !	7								
6 -										
					1				Medium-dense brown fine sand, little silt, trace medium sand.	
		١								
8 -		-				1				
						-				
	3	ı	Ì							
- 10 -										
	-	1								
-										
- 12	-								* Sample No. 4 is bag sample obtained between 0.3' to 3.7'.	
		-							- Walls of test pit did not cave.	
		ļ							- No seepage noted.	
1.4										
sol- 14										
14 14 14 14 14 14 14 14 14 14 14 14 14 1										
	1									
a l	-									
- 16 WA'	TER I	EV	EL:	<u>_</u>	↓ "Dr	<u>i_</u> y"		<u>¥</u>	Ā Ā Ā	
86 W	TER	NO		-	10/1:					_
F JOB:	011-09	323	-001		20.20				PLAT	LE 55

3	E	30			1			EAST I	OF TEST PIT NO. TP-3 BEND WEST LANDFII E COUNTY, KENTUC	L	Page 1 of
DEPTH, FEET	NO.	ES	ST ST	HAND PENE-	TORE	LIQUID	LASTIC	TYPE: Rubber-Tired Backhoo 24-Inch Bucket		LOCATION:	N-517,893 E-1,466,136
FEET	SAMPLE NO	SAMPLES	SAMPLING	HA	MOIS		LIT	COMPLETION DEPTH: _10		DATE:	10/16/03
0				tsf	*	8	8	1°	DESCRIPTION	como fina s	and little clay
١ '								TOPSOIL: Loose to medi	um-dense dark-brown siii	, some ime s	and, in the day.
	1							Medium-dense brown silt,	some fine sand, little clay	7.	
2 -	•							Medium-dense brown silt,	"and" fine sand, trace cla	y.	
4 -	2			booker .		industrial indexes					
6 -				is the soun.							
				10.3.0						····	
8 -				- T-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-A-	- Linear - L			Medium-dense to dense b sand, trace silt, few cobbl	rown and gray fine to coa	rse gravel, so	me fine to coarse
10	3						- Control				
12								- Walls of test pit did not	cave.		
								- No seepage noted.			
14	_										
- 16 WA	TER I	EVE	L:	_	'_ Dry''		Ā	Ã	<u>x</u>		<u>*</u>
W	ATER	ron	E:								
OF:	011-09	DAT		10/	16/03						PLAT
JD:	ULL"U	ノムン"	UUL								

B	B	C		1			LOG OF TEST PIT NO. TP-3 EAST BEND WEST LANDFIL BOONE COUNTY, KENTUCI	L	Page 1 of 1
			EX .			U.	TYPE: Rubber-Tired Backhoe 24-Inch Bucket	LOCATION:	N-517,555 E-1,466,545
Ħ E	ENC	LES	S S S	EÉ	MAT	CASTI	24-Inch Bucket	- -	
DEPTH, FEET	SAMPLENO	SAMPLES SAMPLING EFFORT	HAND PENE- TROMETER	200	E E	글그	COMPLETION DEPTH: 10.0' ELEVATION: 525.5	DATE:	10/16/03
	SAJ	S.A.		<u> </u>	_		DESCRIPTION		
- 0 -			tsf	8	*	ક	TOPSOIL: Loose to medium-dense dark-brown silt	, some fine s	and, trace clay.
	1						TO BOIL. House to intertain double that the plant	, · · · ·	,
							Medium-dense brown silt, "and" fine sand, trace cla	y.	
	2								
	2								
- 2 -		Π	ļ				*1, , 1	. 4	to coarge sand
							Medium-dense brown fine sand, some silt, trace cla	y, trace medi	um to coarse sand.
	3								,
- 4 -									
							Medium-dense brown silt, some fine sand, trace cla		
							Medium-dense to dense brown and gray fine to coar	rse gravel, so	me fine to coarse
							sand, trace silt, few cobbles.		
- 6 -									
·									
L									
- 8 -									
ľ									
	4								
- 10		F							
<u> </u>									
			ļ						
12	1		ļ				- Walls of test pit caved slightly from 4.8' to 10.0'.		
ļ	-{						- No seepage noted.		
<u> </u>	-						110 Soopugo notodi		•
_ 14									
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50/5/8 LGE	7		Ì						
	-								
<u></u>	-		ļ						
16 WA WA	<u> </u>					<u> </u>	<u>Λ</u> <u>Λ</u> <u>Λ</u>		Ā
MA W	TER LI ATER N		<u>⊽</u> "Dr			<u> </u>	<u>*</u> * *		
JOB:			10/16	5/03					PLATE 57
⊭ JOB:	011-093	323-001							

B	E	3C						EAS	ST BEI	TEST PIT NO ND WEST LAI OUNTY, KEN	NDFIL	Ĺ	Page 1 of 1
EÉ L	ENO.	LES ING RT	HAND PENE- TROMETER	STORE TENT	LIQUID	MIT	TYPE:	Rubber-Tired Bac 24-Inch Bucket	khoe			LOCATION:	N-517,046 E-1,466,456
DEPTH, FEET	SAMPLENO	SAMPLES SAMPLING EFFORT	H/ H/ TROP	o V V V	LIC	* PL	COMPL	ETION DEPTH:	10.5'	ELEVATION: DESCRIPTION		DATE: _	10/16/03
- 0 -			CSI	15		*	TOPSO	OIL: Loose to n	nedium	-dense dark-bro	wn silt,	some fine s	and, trace clay.
- 2 -	1			Taranta and the same of the sa			Mediu	m-dense brown	silt, "ar	nd" fine sand, tr	ace to li	ttle clay.	
- 4 -	2				The state of the s		Mediu	m-dense brown	silt, so	me fine sand, tr	ace clay		
8				AND THE PROPERTY OF THE PROPER	THE PROPERTY OF THE PROPERTY O	1000007	Mediu sand, t	nm-dense to dens trace silt, few co	se brow bbles.	n and gray fine	to coars	se gravel, so	me fine to coarse
- 10 - 12	3			- Andreas - Andr	. Langer	1 market 1 m		ls of test pit cav	ed sligl	ntly from 6.7' to) 10.5'.		
1.GEJ 14				TATAL TATAL	The state of the s	To the state of th							
16 WA WA	TER ATER	LEVEL: NOTE: DATE: 9323-001	<u> </u>			<u>¥</u>		<u> </u>		<u>V</u>	<u> </u>		PLATE 58
E JOB:	011-0	9323-001											PLAIL 30

T			T		[BOONE COUNTY, KENTUCKY TYPE: Rubber-Tired Backhoe LOCATION: N-516,425
	Õ.	8 g .	HAND PENE-		A H	25	TYPE: Rubber-Tired Backhoe LOCATION: N-516,425 24-Inch Bucket E-1,465,777
FEET	SAMPLE NO.	SAMPLES SAMPLING FFFORT	E AN	MOISTUR	LINGT	LIMIT	
	AMP	SAM		3 × 3		P.	COMPLETION DEPTH: 11.0' ELEVATION: 526.0 DATE: 10/16/03
	S		tsf	8	8	9,	DESCRIPTION
							TOPSOIL: Loose to medium-dense dark-brown silt, "and" fine sand, trace clay.
					***************************************		Medium-dense brown silt, "and" fine sand, little clay.
_							
	1						,
\dashv							
4							
							Medium-dense brown silt, some fine sand, trace medium to coarse sand, trace fine
	2						gravel, trace clay.
٦							
				-			
							Medium-dense to dense brown and gray fine to coarse gravel, some fine to coars and, trace silt, few cobbles.
							Said, frace sit, few cooles.
-							
) -							
	3						
				Lauren			
	1			ĺ			
2 -					ļ		
	1						- Walls of test pit caved slightly from 7.5' to 11.0'.
	1			-			- No seepage noted.
4	+						
	-						
	-						
	-	EVEL: NOTE: DATE: 323-001					
		1.1	1	1	- 1	1	A Ā Ā

3 [:	<u>3C</u>	M		EA	OG OF TEST PIT NO ST BEND WEST LA ONE COUNTY, KE	NDFILL	Page 1 of
		# B E		TYPE: Rubber-Tired Bac	khoe	LOCATION	: N-516,221 E-1,467,664
FEET SAMPLE NO.	SAMPLES SAMPLING EFFORT	HAND PENE- TROMETER MOISTURE	LIQUID LIMIT PLASTIC LIMIT	24-Inch Bucket			E-1,467,064
FEET	SAMPLES AMPLING EFFORT	HA EN EN EN EN EN EN EN EN EN EN EN EN EN	Raga		11 OL PATRAZIONI.	FARA DATE.	10/13/03
SA	S.A.			COMPLETION DEPTH:			10/13/03
0		tsf %	8 8	_TOPSOIL: Medium-d	DESCRIPTI lense dark-brown fine		
2 - 1 4 - 6 - 8 -				Medium-dense to dens gravel, trace silt, few s	se brown and gray fine	ace medium to coar	
10 - 2	2			- Walls of test pit cave	ed from 5.3' to 11.0'.		
16 — WATER	LEVEL:	☑ "Dry"	¥	Ā	<u>¥</u> .	Ā	¥
	R NOTE:						
	DATE: 09323-001	10/13/03				· · · · · · · · · · · · · · · · · · ·	PLAT

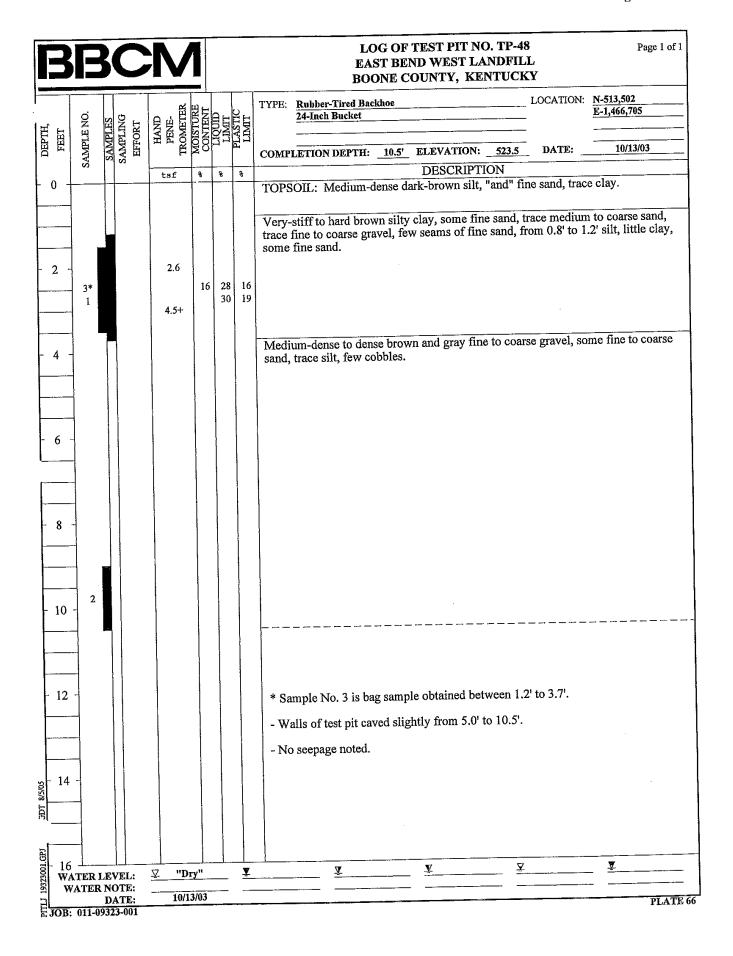
B	E	3(C	八:					LOG OF TEST PIT NO. TP-43 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
DEPTH, FEET	SAMPLE NO.	SAMPLES	SAMPLING EFFORT	HAND PENE-	ROMETER	CONTENT	LIMIT	PLASTIC	TYPE: Rubber-Tired Backhoe LOCATION: N-515,411 24-Inch Bucket COMPLETION DEPTH: 10.0' ELEVATION: 525.0 DATE: 10/13/03
А	SAN	SA	SA E						COMPLETION DEPTH: 10.0' ELEVATION: 525.0 DATE: 10/13/03 DESCRIPTION
- 0 -		+		tsf		ક	8	8	TOPSOU · Medium-dense dark-brown silt, "and" fine sand.
									Medium-dense brown silt, "and" fine sand, little clay.
- 2 -	3*			2.:	5	21	43 37	19 20	Stiff to very-stiff brown silty clay, some fine to coarse sand, trace fine to coarse gravel, few silt lenses.
	1						31	20	
- 4 -				1.9-	3.2	· · · · · · · · · · · · · · · · · · ·	Transfer of the Control of the Contr		Medium-dense to dense brown and gray fine to coarse gravel, "and" fine to coarse sand, little silt, few cobbles.
- 8 -	2						and the state of t	distance in the second	
- 10 - 12 - 14		en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de				Consider the control of the control	The state of the s	The state of the s	* Sample No. 3 is bag sample obtained between 0.9' to 3.1'. - Walls of test pit caved from 3.1' to 10.0'. - No seepage noted.
<u></u>	_								
16 WA WA	<u></u>			<u> </u>	"Dry			Ā	Δ Ā Ā Ā
	TER I	NO'	TE:				_	<u>+</u>	
JOB:	011-0	DA 9323	TE: -001	1	0/13	/03			PLATE 6

	BE	30	>	N	1		-	LOG OF TEST PIT NO. TP-44 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY	Page 1 of 1
1 5-5	NO.	ES	<u>-</u>	AD ATER			TIC	TYPE: Rubber-Tired Backhoe LOCATION 24-Inch Bucket	N-515,299 E-1,465,800
DEPTH	SAMPLE NO.	SAMPLES SAMPLING	EFFORT	HAND PENE- TROMETER	ļ	ļ	1	COMPLETION DEPTH: 10.0' ELEVATION: 523.0 DATE: DESCRIPTION	10/13/03
- 0				tsf	8	-8-	용	TOPSOIL: Medium-dense dark-brown silt, "and" fine sand, tra	ce clay.
						- Control of the Cont		Medium-dense brown silt, some fine sand, little clay.	
- 2	1					A CONTRACTOR OF THE CONTRACTOR			
- 4		100000		ANALY TO THE PROPERTY OF THE P		- Lotte - Lott		Medium-dense brown and gray fine to coarse sand, some fine to some silty clay.	o coarse gravel,
- 6		Control		e de la companya de l		The state of the s		Medium-dense to dense brown and gray fine to coarse gravel, 's sand, trace silt.	and" fine to coarse
- 8							T TOO		
- 10	2						The Party of the P		
				- Andrews - Andr					
- 12	2 -			****				- Walls of test pit caved from 5.2' to 10.0' No seepage noted.	
12 12 12 12 12 12 12 12 12 12 12 12 12 1	4 -						1000		
19323001.GP	6 VATER WATER B: 011-0	LEVEL NOTE	 : :	<u>Δ</u> "D			<u>Ā</u>	Ā Ā Ā	<u> </u>
JOE	3: 0 11-0	DATE 9323-00	1	10/1	3/03				PLATE 62

R	F	3			1			LOG OF TEST PIT NO. TP-45 EAST BEND WEST LANDFILL Page 1 of 1
ائس ا ا	/ -					—-т		BOONE COUNTY, KENTUCKY
	Ö		b	l E	E E	8-1	2.	TYPE: Rubber-Tired Backhoe LOCATION: N-514,986 24-Inch Bucket E-1,466,628
DEPIH, FEET	SAMPLE NO.	SAMPLES	SAMPLING EFFORT	HAND PENE- TROMETER	OIST	DWI I	LASI	
	AME	SAN	SAM	£	ğö		~	COMPLETION DEPTH: 10.2' ELEVATION: 543.0 DATE: 10/13/03
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		L						Medium-dense brown silt, some clay, some fine sand, trace medium sand.
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2 -		ł		Ę				
	1							Medium-dense brown fine to medium sand, little silt, trace clay.
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10	4		ŀ					
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- 12	-							- Walls of test pit did not cave.
	\dashv							- No seepage noted.
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JOB	. 011	0033	3.001			-		

B	E	3	C		1			LOG OF TEST PIT NO. TP-46 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY	Page 1 of 1
DEPTH, FEET	SAMPLE NO.	SAMPLES	SAMPLING EFFORT	HAND PENE- ROMETER	MOISTURE	LIQUID	LASTIC	TYPE: Rubber-Tired Backhoe LOCATION: N-514 24-Inch Bucket E-1,44	56,094
	3AMB	SAN	SAM	Į Ę	žζ		٩		10/13/03
_ ი -				tsf	용	용	8	DESCRIPTION TODGOU - Modium dones dark brown silt "and" fine sand trace clay	
- 0 - - 2 - - 4 - - 6 - 8 - 10	3* 1			3.5 4.5+	17		20 20	Medium-dense brown silt, some fine sand, little clay. Very-stiff to hard brown silty clay, some fine sand, trace medium to co trace fine to coarse gravel, few lenses and seams of silt. Medium-dense to dense brown and gray fine to coarse gravel, "and" fin sand, little silt, few cobbles, from 3.1' to 4.1' little silty clay.	arse sand,
12	1							* Sample No. 3 is bag sample obtained between 1.9' to 3.1'.	
								- Walls of test pit caved slightly from 4.1' to 10.0'.	
								- No seepage noted.	
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W 13	ATER	NO		10/13	3/03				PLATE 6
E JOB:	011-09								LTWIR

B	BE	3	C		V	1				EAS	ST BE	TEST PIT NO ND WEST LA OUNTY, KEN	NDFIL	L	Page 1 of 1
TH, ET	SAMPLE NO.	PLES	SAMPLING EFFORT	AND	PENE- TROMETER	ISTURE	LIQUID	LASTIC	TYPE:	Rubber-Tired Bac 24-Inch Bucket	khoe			LOCATION:	N-514,104 E-1,467,069
DEPTH, FEET	4MPI	SAM	AMP EFF(H	TRO P.		I	PL 1	COMP	LETION DEPTH:	9.8'	ELEVATION:	541.0	DATE:	10/13/03
	S		01	-	tsf	- Pe	8	8				DESCRIPTION			
- 0 -		1		T					TOPS	OIL: Medium-d	ense da	ark-brown fine s	and, so	me silt.	
- 2 - 4 - 6	1			A THE THE THE THE THE THE THE THE THE THE		The state of the s	The state of the s	- Company - Comp		to medium-dens				·	
- 10 - 12 - 14		the state of the s		And the second s		The state of the s		and the second s		lls of test pit cav seepage noted.	ed fron	1 2.5' to 9.8'.			
165 W.A. JOB:	ATER		ÆT ·	Ā	"Dr	<u> </u>		<u>¥</u>	_l	Ä		<u>Ā</u>	<u>Ā</u>		₹
SE W	ALER	NO.	TE:	<u>+</u>			_								
JOB:	011-0	DA 932	TE: 3-001		10/13	3/03							<u></u> , -	<u>.</u>	PLATE 6



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l# L	NO.	ES	RT	HAND PENE-	ÆTER STURE	MIT	PLASTIC LIMIT	TYPE: Rubl	ber-Tired Bacl 1ch Bucket	khoe			LOCATION:	N-514,472 E-1,467,662
DEPTH, FEET	SAMPLE NO.	SAMPI ING	EFFORT	田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田田		_	-	COMPLETI	ON DEPTH:	10.2'	ELEVATION		DATE: _	10/13/03
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								Modium-d	ense hrown	silt sor	ne fine sand,	some silty	clay.	
	1				-									
2 -				-		P description		Loose to m	nedium-dens d.	e brow	n fine sand, s	some silt, t	race clay, tra	ace medium to
	2					- Parket Market								
- 4 -												e.		
- 6 -							- Anna Anna Anna Anna Anna Anna Anna Ann							
											1	- to post	o graval "a	nd" fine to coarse
- 8 -		1444		in truly in	A STATE OF THE STA	en et en en en en en en en en en en en en en		Medium-c	dense to dense silt, trace c	se brow lay, fev	n and gray if	me to coars w silt lense	se graver, a	nd" fine to coarse
- 10 -	3				,,,,		Line of the last o			- 				
- 12									f test pit cave age noted.	ed sligl	ntly from 7.5'	to 10.2'.		
								110 2000	-0- 110,000					
50/5/8 LOS						- Andrews		Transfer of the state of the st						
- 16 WA WA JOB:	TER L	EVE	Ĺ: բ.	<u>Ā</u> "	Dry"		¥		Ā		<u>¥</u>	<u> </u>		<u>\\</u>
JOB:	011-09	DAT 323-(E: 01	10	/13/03	} "					······································			PLATE 67

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FEET SAMPLE NO.	of ES	SAMPLING EFFORT	1	MOISTURE CONTENT	CIQUID LIMIT	LASTIC	TYPE: Rubber-Tired Backhoe 24-Inch Bucket		ON: N-513,982 E-1,468,515
FEET	SAMPLES	AMP	TRO H	88		됩니	COMPLETION DEPTH: 10.0' ELEVA	ATION: 528.0 DATE	E: 10/13/03
\\ \Z	i	S	tsf	g.	8	9:	DES	CRIPTION	
)							TOPSOIL: Medium-dense dark-brov	vn fine sand, "and" silt.	
2 -			- Control of the Cont	18	AND AND AND AND AND AND AND AND AND AND		Medium-dense brown silt, "and" fine	to medium sand, little o	clay, trace coarse sand
4 -	and the state of t			10	and the state of t		Medium-dense to dense brown and g sand, little silt, few cobbles, few poc	ray fine to coarse grave kets of silty clay.	l, some fine to coarse
8 -	3	To the second se		- Parkers	A TOTAL CONTRACTOR OF THE PROPERTY OF THE PROP	- Laboratory			
12 -				A STATE OF THE STA		- Control Cont	- Walls of test pit caved slightly from	n 5.0' to 10.0'.	
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		ATE:	10/13	3/03					PLAT

B	B	<u>SC</u>		1			LOG OF TEST PIT NO. TP-101 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
DEPTH, FEET	SAMPLE NO.	SAMPLES SAMPLING EFFORT	HAND PENE- TROMETER	ISTORE	IQUID IMIT	ASTIC	TYPE: Backhoe LOCATION: N 516,217 24-Inch Bucket E 1,465,255
DEPTH	AMP	SAMPLES SAMPLINC EFFORT	H. G.	88		됩	COMPLETION DEPTH: 11.0' ELEVATION: 510.0 DATE: 6/28/05
0 +	· · · · · · · · · · · · · · · · · · ·		tsf	8	8	ક	DESCRIPTION
- 2 -	1		3.6-4.5+				TOPSOIL - 2 INCHES Medium-dense (est.) brown silt, little fine sand, little clay, trace medium to coarse sand, trace fine gravel.
- 4 -	2			15	30	18	Medium-dense (est.) brown fine to coarse sand, "and" fine to coarse gravel, trace silt, trace clay.
- 10 -				- Charles - Char	The state of the s	The statement of the st	
- 14 ·	Account to the contract of the			inconstruction in the state of	And Andrews Committee of the Committee o	The state of the s	- No water encountered. - Bag samples were obtained from 2.0' to 2.5' and 8.0' to 11.0'.
- 16 WAT WA	ER LE	VEL:		y"	_l	<u>¥</u>	ā ā ā
WA	TER N	OTE:	6/28				
TORU	1 011-093	ATE:	0/20/	103			PLATE 6

SAMPLE NO.	EFFORT 1 HAND 1 TROMETER 1 TROMETER	UTSIOM # 15	II/OUT # 30	TIMIT * 23	DESCRIPTION Medium-dense (est.) orange brown silt, some fine sand, little clay, trace medium sand.
1	tsf	G	8	oto .	DESCRIPTION Medium-dense (est.) orange brown silt, some fine sand, little clay, trace medium sand. Medium-dense (est.) brown fine to coarse sand, little fine to coarse gravel, containing the sand of the sand
1	tsf	G	8		DESCRIPTION Medium-dense (est.) orange brown silt, some fine sand, little clay, trace medium sand. Medium-dense (est.) brown fine to coarse sand, little fine to coarse gravel, containing the sand of the sand
1					Medium-dense (est.) orange brown silt, some fine sand, little clay, trace medium sand. Medium-dense (est.) brown fine to coarse sand, little fine to coarse gravel, containing the sand.
	3		Livery		
16 WATER LEVEL: WATER NOTE: DATE: DB: 011-09323-005		The state of the s			- No water encountered Bag samples were obtained from 1.0' to 3.0' and 6.0' to 11.0'.

5			/\\ 							ND WEST L COUNTY, KI	ENTUCKY	<u> </u>	
H	E NO.	LES LING RT	HAND PENE	TROMETER	THENT	MIT	MIT	TYPE: Backhoe 24-Inch Bucket			I	OCATION:	N 514,324 E 1,465,532
FEET	SAMPLE NO.	SAMPLES SAMPLING EFFORT	田田田	TRO!	Ś	I		COMPLETION DEPTH:	11.0'	ELEVATION	: 503.5	DATE:	6/28/05
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	1		2.9-	4.5+	1		İ						
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							ļ	Medium-dense (est.)	orown f	ine to coarse a	gravei, som	e iine to co	arse sand, trace
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4/ A T	ER L	EVEL:	∇	Dry"		_	<u> </u>						

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\ -			Ť			2	ם ב			TYPE: Bac	khoe				LOCATION:	N 512,996
hf .		Š.	Sign	ב	HAND PENE-	TROMETER	EZ	LIMIT	SE F	24-	Inch Bucket					E 1,466,319
рерти	ਜੂ ਜੂ	SAMPLE NO.	SAMPLES SAMPLING	BFFORT	HA	Q S		25							70 1 PP 7	C/20/05
<u> </u>	-	SAM	SA			F	≱∪			COMPLET	ION DEPTH:	11.01	ELEVATION:		DATE: _	6/28/05
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["										Medium-	dense (est.) h	rown si	TOPSOIL - 2 lt. little fine sa	nd, little	clay, trace i	medium to coarse
										sand, trac	e fine gravel.	•	,		·	
	-	1			3.9-4.	5+										
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2	4															
	_	_	-							Medium	dense (est) h	rown fi	ne to coarse sa	nd. "and	" fine to coa	arse gravel, trace
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B	E	3	C		1			LOG OF TEST PIT NO. TP-105 EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY
		\prod		Ħ	E L			TYPE: Backhoe LOCATION: N 513,768 24-Inch Bucket E 1,467,076
Ħ L	E NO.	LES	NG RT	OS PER PER PER PER PER PER PER PER PER PER		LIQUID	PLASTIC LIMIT	24-Inch Bucket E 1,467,076
рертн, ғеет	SAMPLENO	SAMPLES	SAMPLING EFFORT	HAND PENE- TROMETER		H	Z I	COMPLETION DEPTH: 11.0' ELEVATION: 531.0 DATE: 6/28/05
	SA	S	S	tsf	8	8	g.	DESCRIPTION
- 0 -					+	Ť		TOPSOIL - 2 INCHES
	1							Medium-dense (est.) brown and gray fine sand, trace medium sand, trace fine to coarse gravel, little silt, trace clay.
- 2 -						NP	NP	
			~		100	- Landers		Medium-dense (est.) brown silt, little fine sand, little clay, trace medium to coarse sand, trace fine gravel.
	2							
- 4 -								
	1							
		-	,					Medium-dense (est.) brown fine to coarse sand, some fine to coarse gravel, trace silt, trace clay.
								sin, trace clay.
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- 12								
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<u> </u>								- No water encountered.
	4				ļ			- Bag samples were obtained from 1.0' to 2.5', 3.0' to 5.0', and 8.0' to 11.0'.
թ <mark>- 14</mark>	-							- Dag samples were obtained from 1.0 to 2.5, 5.0 to 510, and 51
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12 -					15	22	144	- Encountered slight seepage at 4.0' to 4.5'. - 0.24.0 sand is moist not wet. - Bag samples were obtained from 1.0' to 2.5', 4.0' to 6.0', 6.0' to 8.0', and 10.0' to 12.0'.
10 - 4			ANYTH TO STATE OF THE STATE OF		1.5		14	
8 -		_		, 1.5				Medium-dense (est.) brown fine to coarse sand, little fine to coarse gravel, some clayey silt.
6 - 3		<u>.</u>		7-1.3	1997-1			Medium-stiff to stiff gray clayey silt, trace fine to coarse sand, trace fine to coarse gravel, many organics present.
1 -	11						to an analysis of the second s	Medium-dense (est.) gray fine sand, trace medium to coarse sand, trace fine to coarse gravel.
1						NP	NP	
			ts	f	ક	8	8	DESCRIPTION TOPSOIL - 2 INCHES Medium-dense (est.) brown fine to medium sand, trace coarse sand, trace fine gravel, trace silt, trace clay, few roots.
FEET SAMPLE NO	SAMPLES	SAMPLING	HAND	TROMETER	MOISTU		LIMIT	COMPLETION DEPTH: 12.0' ELEVATION: 531.0 DATE: 6/28/05
								TYPE: Backhoe LOCATION: N 514,959
5 1:	3(C	1	V				EAST BEND WEST LANDFILL BOONE COUNTY, KENTUCKY

APPENDIX 8

REPORTING AND NOTIFICATION REQUIREMENTS

EAST BEND STATION
WEST LANDFILL

ATTACHMENT 42

Recordkeeping and Reporting System

West Special Waste Landfill East Bend Station Boone County, Kentucky

GROUNDWATER MONITORING

Submittals

The Owner will submit following documents to the Cabinet:

- Monitoring Well Installation Reports;
- Monitoring Well Abandonment Reports (if required);
- Sampling Event Reports for Baseline Groundwater Quality Determination;
- Sampling Event Reports for Detection Monitoring;
- Groundwater Assessment Plan (if required);
- Groundwater Assessment Report (if required);
- Remedial Action Plan (if required); and,
- Remedial Action Reports (if required).

Details regarding the content and submittal schedule for these items are described in Attachment 44. The owner will maintain copies of these documents throughout the life of the landfill including the closure and post-closure care periods.

Notifications

The Owner will notify the cabinet of the following occurrences:

- installation of groundwater monitoring wells (at least 5 days prior to installation);
- abandonment of groundwater monitoring wells (at least 5 days prior to abandonment); and,
- statistically significant increase at a down-gradient sampling point during detection monitoring (not more than 48-hours after receipt of statistical analysis).

SURFACE WATER MONITORING

The Owner will submit following documents to the Cabinet:

- Sampling Event Reports for Baseline Surface Water Quality Determination; and,
- Sampling Event Reports for Detection Monitoring.

Record Keeping and Reporting System West Special Waste Landfill BBC&M Engineering, Inc., March 2007 Details regarding the content and submittal schedule for these items are described in Attachment 43. The owner will maintain copies of these documents throughout the life of the landfill including the closure and post-closure care periods.

LANDFILL CONSTRUCTION

Submittals

The Owner will submit following documents to the Cabinet:

- Subgrade Preparation Certification Reports;
- Geocomposite Liner System Certification Reports;
- Leachate Collection System and Drainage Layer Certification Reports; and,
- Final Cap Certification Reports.

Details of the contents of these reports are included in Attachment 41. The owner will maintain copies of these documents throughout the life of the landfill including the closure and post-closure care periods.

Notifications

The Owner will notify the cabinet of the following occurrences:

- Pre-Construction Meeting (1 week prior to meeting);
- proofrolling of subgrade foundation soils (not less than 48-hours prior to proofroll)
- proofrolling of structural fill beneath prepared subgrade (not less than 48-hours prior to proofroll);
- geocomposite liner system installation (not less than 48-hours prior to initiation of installation);
- leachate collection system installation (not less than 48-hours prior to initiation of installation;
- drainage layer installation (not less than 48-hours prior to initiation of installation);
 and,
- design or specification changes (prior to implementation of change).

Other Construction Documents

Other documents which will be made available to the cabinet upon request include:

- Daily Summary Reports;
- Observation Logs and Test Data Sheets;
- Construction Problem and Solution Report (if required); and,
- Progress Reports.

APPENDIX 9

UNANTICIPATED ARCHAEOLOGICAL DISCOVERY PLAN

EAST BEND STATION
WEST LANDFILL

ATTACHMENT 16

Archaeological Sites

West Special Waste Landfill East Bend Station Boone County, Kentucky

Commonwealth Cultural Resources Group, Inc. (CCRG), in coordination with the Kentucky State Historic Preservation Office (KSHPO), performed a Phase I Survey and Phase II Evaluation for the East Bend Station proposed west landfill property located in Boone County, Kentucky. Archaeological investigations had also been performed during the 1970's for portions of the site. The CCRG Phase II Evaluation Report (rev. August 2007), which incorporates the data from the prior investigations, is included as part of this Attachment. Kentucky Heritage Council concurrence with the CCRG findings is also included as part of this Attachment. Additionally, a map depicting the locations of identified archeological sites and the landfill cut/fill limits is included in this Attachment.

Landfill construction will impact ten identified archaeological sites. The CCRG archeological work and report concluded that none of these sites are eligible for listing in the National Register of Historic Places. Sites 15BE86 and 15BE87, which are among the group of sites to be impacted and were believed to have the highest potential for eligibility, were investigated during the Phase II work; lack of eligibility for the National Register of Historic Places was confirmed. The locations and identifications of the sites to be impacted are depicted on the enclosed map and details of the nature of the sites are included in the attached CCRG report.

Based on the anticipated nature of the sites to be impacted, further investigation and/or preservation of these sites will not be performed. However, because of the presence of these sites and other nearby sites, special archeological considerations will be made during landfill construction. An Unanticipated Discoveries Plan has been prepared and will be implemented during landfill earthwork operations. The Unanticipated Discoveries Plan is included as part of this Attachment. One of the key elements of the Unanticipated Discoveries Plan includes site monitoring during topsoil stripping by a qualified archaeologist whose credentials will be approved by the Kentucky Heritage Council

Site 15BE200 is beyond the landfill cut/fill limits. This site is believed to be eligible for listing on the National Register of Historic Places under Criterion D (potential to yield information important in prehistory). Because of this site, the landfill design was altered so as not to disturb this area. Additionally, because of the close proximity of this site to

the landfill, this area will be fenced to prevent unintended disturbance during landfill construction and operation.

Archeological Site 15BE560 (formerly known as site CCRG4) and Site 15BE259 (which has been enlarged to encompass former sites 15BE78, 15BE258, 15BE279, and the areas between) are beyond the landfill cut/fill limits. These two areas were concluded to be significant and eligible for listing on the National Register of Historic Places. Initial landfill plans included excavation within portions of these areas for borrow material; however, because of the presence of these archeological sites, borrow excavations will not be permitted in these areas. Borrow for the landfill will be obtained from within the cut/fill limits depicted on the map included in this Attachment. Additionally, other excavation, fill placement, construction/operations traffic, and stockpiling of materials will not be permitted in these areas. These two areas are currently farmed and farming practices will continue.



UNANTICIPATD DISCOVERY PLAN

For

Historic Properties or Human Remains Discovered During Construction

I. INTRODUCTION

Duke Energy, in coordination with Commonwealth Cultural Resources Group Inc. (CCRG) has established the following procedures to be used in the event that previously unreported and unanticipated historic properties or human remains are found during construction of the proposed West Special Waste Landfill at the East Bend Station in Boone County, Kentucky. In the event such discoveries are made, investigation, characterization, and treatment of the discoveries will be in accordance with this document and applicable local, state, and federal regulations.

II. AVOIDANCE OF ARCHAEOLOGICAL SITES

Area of Potential Effects

The area of potential effects (APE) is defined as the area within which the proposed landfill will be constructed, as well as all associated areas of disturbance, such as access roads and borrow areas.

Known Archaeological Resources

Duke Energy, with the assistance of CCRG, has identified the boundaries of archaeological sites 15BE200 (multi-component Late Archaic to historic Euro-American), 15BE259 (Late Archaic), and 15BE560 (Middle to Late Archaic) and will avoid these sites during construction. Because of the close proximity to construction, Site 15BE200 will protected by fencing during construction, the other areas will be identified as off-limits to construction activities.

Site Monitoring

To ensure that archaeological resources are not impacted by the proposed project during construction, a Secretary of Interior-qualified archaeologist (Archaeological Monitor) will conduct on-site monitoring during the stripping of topsoil within the proposed landfill project site. Geo-archaeological investigations of the project have determined that the construction area exhibits only low potential for buried archaeological remains. Consequently, monitoring for buried deposits will not be completed.

To further ensure that no known or unknown cultural materials are disturbed, the Archaeological Monitor will review, on at least a monthly basis, the construction site to ensure that construction crews are aware of the potential presence of, and are actively monitoring for archaeological resources, including both artifacts and features. CCRG, or an equivalent approved firm, will

provide construction supervisors with training in the identification of these resources prior to initiation of construction activities.

Individual artifacts are not to be considered significant finds and will not be grounds for stopping construction.

III. DISCOVERY OF UNANTICIPATED CULTURAL MATERIALS

In the event of discovery of unanticipated cultural materials during construction, Duke Energy will adhere to the following requirements:

- 1. Duke Energy and Duke Energy's contractors (hereafter referred to as Contractor) will stop work immediately in the area of the archaeological find to protect the integrity of the site location. The term "archaeological find" is defined as undisturbed sub-plowzone features and not as individual artifacts found in the disturbed plowzone.
- 2. Duke Energy's on-site Project Site Manager will immediately notify the Cultural Resource Specialist at CCRG, or equivalent approved firm, and an Archaeological Monitor, if not already on-site, will travel to the site area within 48 hours to inspect the location of the find and evaluate its significance. The CCRG contact is:

Cultural Resource Specialist, CCRG Contact: Donald J. Weir, RPA

Office Telephone: (517) 788-3550 Cell Phone: (517) 262-3871

Fax: (517) 788-6594

Address: CCRG

2530 Spring Arbor Road Jackson, MI 49203-3602

- 3. The Archaeological Monitor will evaluate the find and immediately notify Duke Energy's on-site Project Site Manager of the potential of National Register of Historic Places (NRHP) significance of the find.
- 4. The Contractor will not resume work in the area (as specified below) of the find until clearance is granted by the Archaeological Monitor, in consultation with the Kentucky Heritage Council (State Historic Preservation Office [SHPO]).
- 5. If the archaeological site is determined to be significant, Duke Energy will follow the procedures outlined in Section III A of this plan. If the materials are human remains, the procedures described in Section III B of this plan will be followed.

A. Discovery of Possibly Significant Cultural Materials

In the event of unanticipated discovery during construction of cultural materials, not including human remains, Duke Energy will adhere to the following requirements:

- 1. Duke Energy's on-site Project Site Manager, with assistance from the Archaeological Monitor, will fence the archaeological find spot to protect the find from further construction-related impacts and will direct construction personnel to move to another location, a minimum of 200 feet from the find spot.
- 2. The Archaeological Monitor will initiate studies to fully assess the find's NRHP significance and the potential effect of construction.
- 3. After completing the initial assessment of the find, Archaeological Monitor will report to Duke Energy's on-site Project Site Manager.
- 4. Duke Energy's Cultural Resource Specialist will promptly notify the Kentucky SHPO of the find and its significance. The SHPO contact is:

Kentucky Heritage Council (SHPO)

Contact:

Telephone: 502-564-7005

Fax: 502-564-5820

Address: 300 Washington Street

Frankfort, KY 40601

- 5a. If it is determined by the Kentucky SHPO that the find is possibly NRHP eligible, and therefore deemed significant, and that other materials or features may be damaged by continued construction, Duke Energy's Cultural Resource Specialist will request recommendations from SHPO regarding appropriate measures to avoid damage. These measures may include:
 - i) formal archaeological evaluation of the site
 - ii) on-site visits by the SHPO
 - iii) preparation and implementation of a Mitigation Plan by Duke Energy, as approved by the SHPO
 - iv) approval by the SHPO to resume construction following completion of the field work component of the evaluation or mitigation plan
- 5b. If the find is determined to be isolated or completely disturbed by construction activities, Duke Energy's Cultural Resource Specialist will consult with SHPO and will request approval to resume construction.

B. Discovery of Human Remains

The property within the boundaries of the East Bend Proposed Landfill Project APE does not contain federal or tribal land; therefore, the regulations of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001 et seq. [Nov. 16, 1990]) do not apply to project activities. Rather, Duke Energy will comply with KRS 164.705, et seq., Archaeology, and all other federal, state, and local laws regarding human burials. At a minimum, Duke Energy will implement the following procedures:

- 1. Duke Energy's on-site Project Site Manager, with assistance from the on-site Archaeological Monitor, will flag or fence the suspected human remains to protect the find from further construction-related impacts and will direct construction personnel to move to another location, a minimum of 200 ft from the find spot.
- 2. Duke Energy's on-site Project Site Manager will promptly notify Duke Energy's Cultural Resource Specialist and the appropriate agencies as required by state law.
- 3. Duke Energy's Cultural Resource Specialist will immediately notify the Kentucky SHPO. The SHPO contact is:

Kentucky Heritage Council (SHPO) Contact:

Telephone: 502-564-7005

Fax: 502-564-5820

Address: 300 Washington Street

Frankfort, KY 40601

- 4. At the direction of the SHPO, the Archaeological Monitor will begin a detailed assessment of the find's significance and the potential effect of construction.
- 5a. If it is determined that intact interments are present and may be damaged by continued construction, Duke Energy's Cultural Resource Specialist will consult with the SHPO regarding additional measures to avoid or mitigate further impacts to the interments. These measures may include:
 - i) on-site visits by the SHPO and other interested parties
 - ii) preparation and implementation of a mitigation plan by Duke Energy, including procedures for disinterment and analysis, as approved by the SHPO
 - iii) SHPO approval to resume construction following completion of the field work component of the mitigation plan.
- 5b. If the find is determined to be isolated or completely disturbed by construction activities, Duke Energy's Cultural Resource Specialist will consult with the SHPO and will request approval to resume construction.

APPENDIX 10

INSPECTION AND TEST PLAN

EAST BEND STATION
WEST LANDFILL

			Inspec	tion and Test Pla	an					P
	Customer:		шэрес				l r	Document #		
		East Bend Station, West Land	fill Cell 2 Construction	in .				Issue Date:	4/13/2	2018
	Customer PO#:	Last bena station, West Land	m, cen z constructio				1	Issued By:		
		Drawing Set Titled: Cell 2 Co	nstruction and Opera	ntion			A	oproved by:		
		Construction of Landfill Cell 2					'	Rev #:		
	Work Activity:						1	Rev Date:		
	Work Area	East Bend Station, West Land	fill							
Ref no	Operation or Stage of Work		Stage / Frequency	Records / Verifying	Requirement/	Acceptance Criteria	Inspection/test	Inspec	tion Respons	ibilties
	Description	Characteristics		Documents	Standard/		Procedure	Engineer	Contractor	Owner
		C 1: 1 P			Specification	AH - 2				
2.4	T 110.1 1 0.0 1 11	Cultural Resource		5115	Unanticipated	All topsoil removed	VC 100 6 11			
3.1	Topsoil Stripping & Stockpiling	Monitoring/Subgrade	all	Field Report	Discoveries Plan	and minimal proofroll	Visual & Proofroll	W		S
		Preparation	Not less than 1 per		and Article 3	deflection				
3.2	Structural Fill	Source of Fill Material	soil type	Lab Report	Article 3	NA	ASTM D698	D		W
			son type			98% Compaction,				
3.2	Structural Fill	Everything except Prepared	1 per each 2,000 c.y	Field Report	Article 3	Moisture from -2% to	Nuclear Densitometer	W, D		S
3.2	Structural I III	Subgrade	2 pc. cdc.: 2,000 c.y	ricia report	7 ii dele 5	+2% of optimum	reacied Bensionieter	,5		,
						98% Compaction,				
3.2	Structural Fill	Prepared Subgrade	9 tests per acre per	Field Report	Article 3	Moisture from -2% to	Nuclear Densitometer	W, D		S
		.,	lift			+2% of optimum		,		
			Not less than 1 per			•		_		
3.3	Perimeter Berm Soil	Source of Fill Material	soil type	Lab Report	Article 3	NA	ASTM D698	D		W
			, , , , , , , , , , , , , , , , , , ,			98% Compaction,				
3.3	Perimeter Berm Soil	Source of Fill Material	1 per each 2,000 c.y	Field Report	Article 3	Moisture from -2% to	Nuclear Densitometer	W, D		S
						+2% of optimum				
3.2, 3.3	Structural Fill, Perimeter Berm Soil	Fill Material from Stockpile	1 test per lift per	Lab and Field	Article 3	LOI ≤ 3%	ASTM D2974	W, D		S
3.2, 3.3	Structural Fill, Perimeter Beriii Soli	Area	acre	Reports	Article 5	LOI ≤ 5%	A31WI D2974	W, D		3
3.4	Ditch Cover (Topsoil Replaced)	Fill Material	1 per each 200	Field Report	Article 3	Adequate thickness	Test Holes			w
3.4	Diter Cover (Topson Replaced)	i ili iviateriai	Linear feet	riela Report		·				**
4.1	Geocomposite Liner, Geosynthetic Clay Liner	Bentonite Filled Geotextile	See Specifications	Lab & Field Reports	Article 4 and CQC	See Specifications and		W, D		S
	dedecomposite ziner, dedosynareae eray ziner	Deritorinte i inica deditextire	and CQC Plan	zab a riela neports	Plan Section 3	CQC Plan	Testing	, 5		J
							Visual, Conformance			
			See Specifications		Article 4 and CQC	See Specifications and	Testing, Installation			
4.2	Geocomposite Liner, Textured Geomembrane Liner	HDPE Liner	and CQC Plan	Lab & Field Reports	Plan Section 3	CQC Plan	Testing, and Electronic	W, D		S
			una eqe man		rian section s	eqe i ian	Leak Detection (ASTM			
							D7007)			
4.3	Geocomposite Liner, Nonwoven Geotextile	HDPE Liner cushion layer	See Specifications	Lab & Field Reports	Article 4 and CQC	· ·	Visual and Conformance	W, D		S
			and CQC Plan		Plan Section 3	CQC Plan	Testing	,-		
5.1, 5.2,				Supplier Info and	Article 5 and CQC	See Specifications and	Visual and Contractor			
	Leachate Collection Piping System	Pipe Installation	Continuous	Field Reports	Plan Section 4	CQC Plan	Data Review	W	D	S
5.5, 5.6										
5.1, 5.2	Leachate Collection Piping System	Aggregate Backfill	Continuous	Supplier Info and	Article 5 and CQC	See Specifications and	Visual	W, D		S
	1 7 7	*		Field Reports Supplier Info, Lab &	Plan Section 4 Article 5 and CQC	CQC Plan See Specifications and				-
6.1	Drainage Layer	Sand Placement	Continuous	Field Reports	Plan Section 4	· ·	Visual	W, D		S
		Reinforcement for Road Sub-		Supplier Info and	rian section 4	CQC Plan				1
7.1	Biaxial Geogrid, US Fabric Base Grid 12	Grade	all	Field Reports	Article 7	Overlap	Visual	W, D		S
				Supplier Info and		Minimal proofroll		 		
7.2	Granular Base, KYTC 805, No. 2 Stone	Roadway Stone, buried	Periodic	Field Report	Article 7	deflection	Proofroll	W		D
				·		98% Compaction,				1
7.3	Granular Wearing Surface, KYTC 805.06	Roadway Stone, exposed	1 per each 2,000 c.y	Supplier Info and	Article 7	Moisture from -2% to	nuclear densometer	w		D
	3	.,, . , . ,		Field Report		+2% of optimum				
				Supplier Mix						1
0.4	Concrete Run-Off Channel Outlet Apron and Splash	2.4		Design, Shop		Per Shop Drawing and	Visual for Steel, Testing			_
X I	Board	Reinforced Concrete	Periodic	Drawings and Field	Article 8	Mix Design	for Concrete	W, D		S
				Reports				1		
0.0	T	Din a Tantallatian	Davidadia	Supplier Info and	A 0	See Specifications and	Marra	147		
8.2	Temporary Pipe Culverts, 24" Concrete Pipes	Pipe Installation	Periodic	Field Report	Article 8	CQC Plan	Visual	W	<u> </u>	S
12.1	Vogetative Cover	Grass sowing	6 and 12 months		Article 12		Viewal		D	S
12.1	Vegetative Cover	Grass sowing	after sowing	Supplier Info		> 40% coverage	Visual			
15.1	Erosion and Sedimentation Control	SWPPP Implementation	Periodic	Inspection Report S=Surveillance, D=Do	Article 15	See SWPPP	Visual		D	S