CALC. BY / DATE	LAK – 608 – 0.75	OHIO
CHKD. BY / DATE		FHWA REGION 5

3/3

TEST BORING LOG

ACT PROJECT NO. 9203.20 BORING NO. B-1 SHEET 1 OF 1
CLIENT: CT CONSULTANTS, INC. DATE DRILLED: 04-22-92
PROJECT: PROPOSED BRIDGE REPLACEMENT OVER BIG CREEK, S.R. 608, CONCORD TWP., OHIO
DRILLING METHOD: ROTARY DRIVE, HOLLOW STEM AUGERS SURFACE ELEVATION: 894.10'

SAMPLE Depth (Ft.)	No.	Type	SYMBOL	SAMPLE IDENTIFICATION	BLOW COUNT ON SS/6"	PROPERTIES W (%)	LL/PI	γd (PCF)	qu (KSF)	qp (TSF)
0				6" Asphalt over 9" concrete						
	1	SS		Brown silt and clay, little sand, trace gravel, cobbles. Fill. Soft. Moist. (A-6a)	1-1-2	23.2	34/15			0.5
5	2	ST		Brown and gray silt and clay, little sand, trace gravel. Very stiff. Moist. (A-6a)	Rec.12"	22.1				
	3	SS			3-8-9	21.4				1.75
	4	SS		Gray sandy silt, trace clay and gravel. Loose. Very moist. (A-4a)	3-3-5	23.0				
10	5	SS		Gravel with sand, trace silt and clay. Medium dense. Saturated. (A-1-b)	6-11-10	10.8				
	6	SS		Gray shale. Moist.	50/4"					
15				Rock Core Data: Recovery: 98% RQD: 96% Longest Piece: 20.5' Shortest Piece: Fragments No. of Fractures: 23 Note: Weathered zone from 19.0' - 19.3'.						
20	7	NX								
25				End of boring @ 25.0'						
30										

GROUNDWATER
ENCOUNTERED AT: 8.0'
ON COMPLETION: 6.0' after coring
AFTER:
REMARKS: Shelby Tube contained cobbles and other large gravel. Unconfined compression tests on this sample was not possible.

AS - Auger Sample
ST - Shelby Tube Sample
SS - 2" O.D. Split Spoon Sample
W - Moisture Content

LL/PI - Liquid Limit/Plasticity Index
γd - Dry Density
qu - Unconfined Strength
qp - Pocket Penetrometer Reading

APPLIED CONSTRUCTION TECHNOLOGIES, INC.

TEST BORING LOG

ACT PROJECT NO. 9203.20 BORING NO. B-2 SHEET 1 OF 1
CLIENT: CT CONSULTANTS, INC. DATE DRILLED: 04-22-92
PROJECT: PROPOSED BRIDGE REPLACEMENT OVER BIG CREEK, S.R. 608, CONCORD TWP., OHIO
DRILLING METHOD: ROTARY DRIVE, HOLLOW STEM AUGERS SURFACE ELEVATION: 884.80'

SAMPLE Depth (Ft.)	No.	Type	SYMBOL	SAMPLE IDENTIFICATION	BLOW COUNT ON SS/6"	PROPERTIES W (%)	LL/PI	γd (PCF)	qu (KSF)	qp (TSF)
0	1	SS		Gray gravel, trace sand, silt and clay sand. Driller noted cobbles. Very dense. Moist. (A-1-b)	30-50/3"	5.0	NP			
	2	SS		Gray gravel with sand and silt, trace clay. Very dense. Wet. (A-2-4)	12-24-50/4"	11.9				
5				Gray weathered shale. Moist.						
	3	NX		Gray shale. Moist. Rock Core Data: Recovery: 100% RQD: 73% Longest Piece: 8.9" Shortest Piece: Fragments No. of Fractures: 31						
10										
15				End of boring @ 15.5'						
20										
25										
30										

GROUNDWATER
ENCOUNTERED AT: 2.5'
ON COMPLETION: 0.5' After coring
AFTER:
REMARKS:

AS - Auger Sample
ST - Shelby Tube Sample
SS - 2" O.D. Split Spoon Sample
W - Moisture Content

LL/PI - Liquid Limit/Plasticity Index
γd - Dry Density
qu - Unconfined Strength
qp - Pocket Penetrometer Reading

APPLIED CONSTRUCTION TECHNOLOGIES, INC.

TEST BORING LOG

ACT PROJECT NO. 9203.20 BORING NO. B-3 SHEET 1 OF 1
CLIENT: CT CONSULTANTS, INC. DATE DRILLED: 04-22-92
PROJECT: PROPOSED BRIDGE REPLACEMENT OVER BIG CREEK, S.R. 608, CONCORD TWP., OHIO
DRILLING METHOD: ROTARY DRIVE, HOLLOW STEM AUGERS SURFACE ELEVATION: 882.50'

SAMPLE Depth (Ft.)	No.	Type	SYMBOL	SAMPLE IDENTIFICATION	BLOW COUNT ON SS/6"	PROPERTIES W (%)	LL/PI	γd (PCF)	qu (KSF)	qp (TSF)
0	1	SS		Gray gravel, some sand, trace silt and clay. Medium dense. Wet. (A-1-a)	2-4-8	14.0	NP			
				Gray weathered shale, few clay seams. Moist.						
5				Gray shale. Moist.						
	2	NX		Rock Core Data: Recovery: 98% RQD: 90% Longest Piece: 17.3" Shortest Piece: 2.2" No. of Fractures: 16						
10										
15				End of boring @ 13.5'						
20										
25										
30										

GROUNDWATER
ENCOUNTERED AT: SURFACE
ON COMPLETION: SURFACE
AFTER:
REMARKS:

AS - Auger Sample
ST - Shelby Tube Sample
SS - 2" O.D. Split Spoon Sample
W - Moisture Content

LL/PI - Liquid Limit/Plasticity Index
γd - Dry Density
qu - Unconfined Strength
qp - Pocket Penetrometer Reading

APPLIED CONSTRUCTION TECHNOLOGIES, INC.

TEST BORING LOG

ACT PROJECT NO. 9203.20 BORING NO. B-4 SHEET 1 OF 1
CLIENT: CT CONSULTANTS, INC. DATE DRILLED: 04-22-92
PROJECT: PROPOSED BRIDGE REPLACEMENT OVER BIG CREEK, S.R. 608, CONCORD TWP., OHIO
DRILLING METHOD: ROTARY DRIVE, HOLLOW STEM AUGERS SURFACE ELEVATION: 894.50'

SAMPLE Depth (Ft.)	No.	Type	SYMBOL	SAMPLE IDENTIFICATION	BLOW COUNT ON SS/6"	PROPERTIES W (%)	LL/PI	γd (PCF)	qu (KSF)	qp (TSF)
0				5" Asphalt over 8" concrete.						
	1	SS		Brown gravel with sand, trace silt and clay. Driller noted boulders and cobbles. Fill. Loose. Moist. (A-1-b)	3-5-3	7.8				
5	2	SS		Brown clay, trace sand. Stiff to very stiff. Moist. (A-7-6)	4-7-8	23.7 / 13.7	20/4			0.5
	3	ST		Gray sandy silt, little gravel, trace clay. Medium dense. Moist. (A-4a)	Rec.24"	15.1		114.7		
10	4	SS		Brown gravel with sand and silt, trace clay. Medium dense. Wet. (A-2-4)	5-8-7	17.6				
	5	SS		Gray weathered shale. Moist.	50/3"	6.6				
15				Gray shale. Moist. Rock Core Data: Recovery: 100% RQD: 71% Longest Piece: 10.2" Shortest Piece: 1.3" No. of Fractures: 25						
20	6	NX								
25				End of boring @ 25.0'						
30										

GROUNDWATER
ENCOUNTERED AT: 8.8'
ON COMPLETION: 6.5' after coring
AFTER:
REMARKS:

AS - Auger Sample
ST - Shelby Tube Sample
SS - 2" O.D. Split Spoon Sample
W - Moisture Content

LL/PI - Liquid Limit/Plasticity Index
γd - Dry Density
qu - Unconfined Strength
qp - Pocket Penetrometer Reading

APPLIED CONSTRUCTION TECHNOLOGIES, INC.

APPLIED CONSTRUCTION TECHNOLOGIES, INC.
230 HAYES DRIVE • SUITE C • CLEVELAND, OHIO 44131 • (216) 459-TEST

DATE: 11-13-92	APPROVED BY EH	DRAWN BY DB

CT Consultants, Inc.
Engineers • Architects • Planners
Pittsburgh • Mentor • Columbus • North Canton • Youngstown

3/3

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. LAK – 608 – 0075
OVER BIG CREEK
LAKE COUNTY

SCALE: 0 10 20
STA. 21+60.80
STA. 22+59.88

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
R.J.B.	R.L.B.	J.E.A.	R.L.B.	D.J.W.	J.R.R.