135235

FINAL
REMEDIAL INVESTIGATION REPORT
VOLUME III OF V

APPENDICES A-J

WHITMOYER LABORATORIES SITE
LEBANON COUNTY, PENNSYLVANIA

NOVEMBER 1989
W.A. NO. 200-3LC9

NOVEMBER 22, 1989

FINAL
REMEDIAL INVESTIGATION REPORT
(VOLUME III OF V)

APPENDICES A-J

WHITMOYER LABORATORIES SITE
LEBANON COUNTY, PENNSYLVANIA

EPA WORK ASSIGNMENT NUMBER 200-3LC9
UNDER
CONTRACT NUMBER 68-01-7250

PREPARED BY:
NUS CORPORATION
PITTSBURGH, PENNSYLVANIA

APPROVED BY:
EBASCO SERVICES INCORPORATED
LANGHORNE, PENNSYLVANIA

PREPARED BY:

JOHN TREPANOWSKI, P E
SITE MANAGER
NUS CORPORATION

APPROVED BY:

JOHN F GORGOL, P E
REGIONAL MANAGER, REGION III
EBASCO SERVICES INCORPORATED

AR300549

APPENDIX A

SOIL BORING LOGS

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-01
PROJECT NO.: 200-3LC9 — DATE: 8/17/88 — DRILLER: HydroGroup - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny, Hot ≈ 95° Humid

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU / Time
—	0-3"	T	3"	6"	Med. St.	Lt. Gray	Silty, Grassy Top Soil	Pt	Silty, Dry	0
S-1	2.5-2	3	2.0	10"					WL-SB0100-1	1216
		2				Lt. Br.	Silty Clay w/4" of	CL		
		3	2.0				well sorted Sand			
S-2	2-4	WH	1.2	2.5	V. Soft	Lt. Gray	Clay Sand w/organic			0
		T				To	Fragments	SC	Moist	1222
		T				Purple				
		T	2.0							0
S-3	4-6	WH	1.5		Loose	Lt. Gr.	4 to 6" Coarse Sand	GC	No Recovery	1255
		WH					w/ Med. Gravel			
		T								
		T	2.0							0
S-4	6-8	WH	1.0		V. Loose	Lt. Gr.	Silty, Sandy Gravel	GM		1307
		WH					w/ Shale fragments			
		2					(Med. To Coarse Grained)			
		3	2.0						WL-SB0100-1	0
S-5	8-9	3	1.0		Soft	Lt. Gr.	Sandy Silt w/ Shale	SM	Wet	1320
		15	1.0			To Gray	fragments		Refusal @ 9'	
									Possible free	
									water at 8 feet	
							Total depth at 9'		BLS. BGH	

REMARKS: Possible free water at 8' BLS.
Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 pound hammer, 18" drop.

BORING SB-01

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* See Legend on Back

AR300551

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-02
PROJECT NO.: 200-3LC9 — DATE: 8/17/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Overcast - Hot, Humid 95°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNu / Time
S-1	0-3 / 0-2	2	1.6		Loose	Lt. Br.	Lt. Brown Top Soil	SM	WL-SB02-00-1	0
		3		1.0		Lt Br	To 8" 1' Silty CLAY	CL	Dry	1545
		5				To Dk Br	To 2.0'			
		6	2.0							C
S-2	2-4	4	1.0	2.5	V. Loose	Dk. Br. To Red	Broken Shale w/ Silt and Fine Sand	SM	Soil on top of spoon	1600
		3								
		3								
		7	2.0							0
S-3	4-6	3	.8	4.5	V. Loose	Lt. Br. To Tan	Silty Shale w/ Manganese coated Shale chips, Wet	GM	Soil on top of spoon, Refusal from New Spoon, Rubbed off sample	1615
		2								
		1								
		1	2.0		V. Soft		Some Clayey Silt			0
S-4	6-7	1	.3		Mud	Lt. Br.	Shale chips in Silt	GM	WL-SB02-06-1	1626
		12	1.0				w/ Limestone Chips to .5 inch Dia.		Refusal @ 7'	
							TOTAL DEPTH 7'			

REMARKS: Left borehole @ 1700. Possible free water at 6" BLS. Samples obtained w/ 3" dia. Split spoon. Driven by a 340 pound hammer, 18" drop.

BORING: SE

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* See Legend on Back

AR300552

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-03
PROJECT NO.: 200-3LC9 — DATE: 8/18/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny, Warm 85° Partly Cloudy

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-3"	2			Loose	Lt Gray	Silty top soil, Dry	ML	WL-SB0330-	0
	3"-2'	3	1.7	9"		Lt Gray	9" Silty Clay	MH		0800
		3								
		5	1.7	2.0						0
S-2	2-4	3	1.9		Loose	Lt. Gray	Silty Clay w/ Sh.	ML	Dry	0808
		4					frag. and Sub. Round			
		3					Qtz. pebbles up to 2 in.			
		3	2.0							0
S-3	4-6	2	1.2		Loose	Lt. Br.	Shale fragments To	GC	WL-SB0304-1	0815
		3					1" dia. Predomin.			
		3					Chips. Some mottled		Moist	
		6	2.0				clayey Silt w/Sh			
S-4	6-8	3	1.1		Loose	Lt. yellow	Chips to 1.5" dia.	SC		0
		3		▽		To			Wet @ 7'	0825
		3				Orange				
		4	2.0							0
S-5	8-9.5'	8	1.5		Loose			SC	WL-SB0308-1	0840
		6								
		18	1.5						Refusal @ 9.5'	
							TOTAL DEPTH 9.5'			

REMARKS: Hole terminated @ 9.5'. Possible free water @ 7' BLS. Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 pound hammer, 18" drop.

BORING SB-03

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* See Legend on Back

AR300553

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BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-04
PROJECT NO.: 200-3LC9 — DATE: 8/18/88 — DRILLER: Hydro Group-Josh Chan
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Warm 85° Pt. Cloudy Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU* Time
0 —	0-3"	4			Loose	Lt. Gray	Silty Top Soil	SM	WL-SB-0400-1	1005
S-1	3" 2	3	1.7	10"			w/ Limestone frag.		Dry	1010
		4								
		3	1.7							
2 S-2	2-4	2	1.2		Loose	Lt. Tan	Silty, Shale Chips	SM	WL-SB0402-1	1015
		2				To	w/ Manganese Stain		Moist	
		3		3.5		Orange	on 40% of Sub Angular	GM		
		4	2.0				grains		Wet @ 4'	
4 S-3	4-6	2	1.0		Med. D.	Br. to	Some Clay plus	GM	Wet.	1020
		3				orange	same as above w/ LS.			
		2					and SS. Chips to 2" dia.			
		3	2.0							
6 S-4	6-7.0	7	.9		Med. Stiff	Red Br.	Silty Sh. w/ LS + SS.		WL-SB0406-1	1024
		20 blows	.9			Dk. Gray	Sandy Clay	SC	Muddy	
									Refusal 6.9	
8							TOTAL DEPTH 6.9'			
10										

REMARKS: * HNU does not work
Samples obtained w/ 3" dia. split spoon, Driven by a 360 pound hammer, 18" drop.

BORING SB-04

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* See Legend on Back

AR300554

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BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-05
PROJECT NO.: 200-3LC9 — DATE: 8/18/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Partly Cloudy, Warm 85° Breeze

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION* SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
—	0-3"	2			Loose	Lt. Gray	Silty top soil		WL-SB0500-1	1120
S-1	3'-2	3	1.7	1.5		Lt. Br. To Gray	Silty, Sandy Clay Loam, Some SS. frag.	SM	Dry	1125
		2								
		3	1.7				fine to Med. gr.			
2										
S-2	2-4	2	1.5							1134
		3		2.6	Loose	Redish Brown	6" of coarse Qtz. Sand w/ Gray Silt To Shale Fragments w/ Clay	GM	Moist	
		3		3.2						
		3	2.0							
4										
S-3	4-6	5	1.6						WL-SB0504-1	1140
		3								
		5								
		4	2.0							
6										
S-4	6-8	3	1.7		Loose	Olive Green	Shale Chips w/ Silty Coarse Sand.	SM	Moist	1145
		3								
		3							Water @ 9'	
		4	2.0							
8										
S-5	8-10	3	1.2						V. Wet	1155
		1								
		WH							Void @ to 12'	
		WH	2.0							
10										
S-6	10-12	9	1.1				Some Lg. Sh. fragments to 1.5" Dia.		WL-SB0506-1	1235
		10								
									No Sample taken	
			2.0						Refusale	
12										
							TOTAL DEPTH 12'			

REMARKS Free water at 9' BLS.
Samples obtained w/ 3" dia. Split Spoon, Driven by a 300 pound hammer, 18" Drop.

BORING SB-05

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* See Legend on Back

AR300555

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BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-06
PROJECT NO.: 200-3LC9 — DATE: 8/18/88 — DRILLER: Hydro Group-Josh Champ
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny - Hot 90° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
	0-3"	3			Loose	Lt.Br	Silty Top Soil		WL-SB0600-1 Dry	1410
S-1	3-2	3	1.6			Lt.Br	Silty Loam w/ Sh.	SM	Dry	1415
		3					frag. Some Manganese			
		4	1.7				Nodules. 3mm. dia.			
2										
S-2	2-4	4		2.3"	Soft	DkBr	Silty Clay w/ LS,	GM	Moist	1425
		4	1.8				Sh. frag. Some fine			
		3		3.5			Sand weathering from			
		7	2.0				L.S. frag. up to 2"		WL-SB0601-1	
4										
S-3	4-6	3	.6		Granular	Red-Brown	dia.	GM	Moist	1430
		20/3"	.8						Refusal @ 5.0'	
							TOTAL DEPTH 5'			
6										
8										
10										
12										

REMARKS: Samples obtained w/ 3" dia. Split Spoon driven by a 360 LB. hammer, 18" drop. Hole terminated @ 5.5' BLS. HNU not working.

BORING SB-06

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* See Legend on Back

AR300556

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-07
PROJECT NO.: 200-32C9 — DATE: 8/18/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny Hot 95° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS UL-SB0700-1	HNU Time
0	0-3"	3		8"	Loose	Lt Br.	Silty Top Soil	SM	Dry	0
S-1	2.5-2	4	13						UL-SB0701-1	1555
		4								
		4	1.7				Sandy Silt w			
2 S-2	2-2.5	3	.5		Loose	Lt Rd To Br.	Shale fragments	SM		0 1600
		14	1.0						Refusal @ 3.0'	
							TOTAL DEPTH 3'			
4										

REMARKS 15 Min. Standby between holes waiting for Sample Acq. Samples obtained w/ 13" dia split spoon driven by 360 lb Hammer, falling 18"

BORING SB-07

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* See Legend on Back

AR300567

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-08
PROJECT NO.: 200-3LC9 — DATE: 8/18/88 — DRILLER: Hydro Group Josh Chan
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny Hot 95° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU / TIME
0										
	0-3"	4			Loose	Lt.Br.	Silty Top Soil	SM	WL-SB0800-1	162:
S-1	3"-2	4	1.5			Redish	Sandy, Silt w/ Sh		Dry	163:
		3				Br.	Frag Some Redish	SM	Dry	
		3	1.7	1.7'			br. clay			
2										
S-2	2-4	3	1.0		Soft	DK.Br	DK. Chocolate Br. Sh	CL		1635
		3				Br.	fragments in Silty		Low Plastic	
		3					clay			
		3	2.0							
4										
S-3	4-6	2	1.0		Soft				WLSB-0804-1	1645
		3							Moist Granular	
		1								
		2	2.0							
6										
S-4	6-8	10	.6	6.2	Mod.St.	Lt.Br. To Chec.	Sandy Silt w/orange	CL	Moist	1700
		6				Br.	mottling			
		3					dolomite fragment			
		3	2.0				2" dia.			
8										
S-5	8-10	6	.6	8.4	Soft	Lt.Gray	Silty Sandy Clay	SM	Moist	1710
		4					w/ LS frag. (1-2" dia)			
		2								
		3	2.0							
10										
S-6	10-12	3	1.2		Soft	Lt.Gray To TAN	Sandy Clay w/LS	SC	WLSB0811-1	1720
		3					and Sh. frag			
		3							Possible void 11-12'	
		4							Free water @ 12'	
12										
	12-12.5	16	.5	.5	Soft	Lt.Gray	LS. frag to 1.5" dia	SC	Mod. Plastic Refusal @ 12.5'	1730

REMARKS Approx. 600 Lbs of LS. sand was used to backfill the borehole in addition to cuttings.
HNU was Not working. Samples were obtained w/ 3" dia. Split Spoon, Driven by a 340 pound hammer, 18" drop.
TOTAL DEPTH 12.5'

BORING SB

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AR300558

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-09
PROJECT NO.: 200-3LC9 — DATE: 8/23/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Overcast - Cool 72°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TIME
0										
S-1	0-2	3	1.8	.5	Loose	Lt. Br	Silty Top Soil w/ LS + Sh. chips	Pt	WL SB 0900-1 Dry	0 1005
		6			Stiff	Red-Br Brown	Silty Clay	CL	WL-SB 0901-1 Dry	1015
		6					Mod. Plastic w/ Some			
		10	2.0	1.9'			SS. + Sh chips			
2										
S-2	2-4	20	2.0		V. Broken	Lt Gray	Broken LS fill	Bp	Dry	1015
		12					Fine Powder To 2" dia.			
		27					fragments			
		28	2.0							
4										
							augered to 4.5' To over.			
							depth to bedrock		Refusal @ 4.5'	
							TOTAL DEPTH 4.5'			

REMARKS: Samples obtained w/ 3" dia. Split spoon. Driven by a 340 Lb. hammer, 18" drop.

BORING SB-09

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* See Legend on Back

AR300559

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-10
PROJECT NO.: 200-3LC9 — DATE: 8/23/88 — DRILLER: HydroGroup - Joe Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Overcast - Cool 73°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	3	1.9	.5	Broken	Lt. Br	Silt w/ Broken Shale		Shale is fissile	0 1102
		6			V. Stiff	To Lt. Gn.	V. Tight Clay w/ 1-2mm.	CL	WL-SB1002-1	1115
		6				Lt. Br	SS, Sh, LS fragments		Dry	
		6	2.0			To Tan				
2										
S-2	2-4	3	0.5						WL-SB1002-1	0 1121
		17		3.0'	Broken	Lt. Gray	Sandy Limestone		Dry	
		27					fragments To 3" dia			
		30	2.0						Refusal @ 4.5'	
4							augered from 4 to 4.5'			
							To verify bedrock			
							TOTAL DEPTH 4.5'			

REMARKS: Samples obtained w/ 3" dia. Split Spoon driven by a 340 lb. Hammer, 18" drop.

BORING SB-10

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* See Legend on Back

AR300560

PROJECT: Whitmoyer Laboratories BORING NO.: SB-11
PROJECT NO.: 200-3LC9 DATE: 8/23/88 DRILLER: Hydro Group - Josh Chambers
ELEVATION: FIELD GEOLOGIST: W. Downey
WATER LEVEL DATA: (Date, Time & Conditions) Overcast Cool 73°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/Time
0										
S-1	0-2	4	1.2	.5		Dk Br	Organic Rich Top Soil	Pt	WL-SB1100-1 Moist	0 1301
		6			V. Stiff	Red-Br to Orange	Silty Clay w/ fragments of LS, Sh, SS	CL		
		7								
		6	2.0							
2										
S-2	2-4	8	1.4	2.5	M. Stiff	Lt. Gray to Gn.	Silty, Sandy Clay	ML	Dry WL-SB1102-1	
		12		2.8						
		12			Broken	Lt. Gray	Shattered Silty L.S.	GM	Dry	
		12	2.0							
4										
S-3	4-6	11	1.2				w/White to Brown Silty Clay in fracture fillings.			0 1320
		17							Clay is Moist	
		7								
		7	2.0						WL-SB1106-1	0 1327
S-4	6-8	8	1.0							
		5								
		9								
		8	2.0							
8										
S-5	8-8.9	28	.8							0 1345
		36/18	.9						Refusal @ 8.9'	
							Total Depth 8.9'			

REMARKS Samples obtained w/3" dia Split spoon driven by a 340# hammer, 18" drop.

BORING SB-11

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* See Legend on Back

AR300561

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Labs — BORING NO.: SB-12
PROJECT NO.: 2007-3LC9 — DATE: 8/23/88 — DRILLER: Hydro Group - Jost Chamber
ELEVATION: — FIELD GEOLOGIST: W Downey
WATER LEVEL DATA: —
(Date, Time & Conditions) Overcast, Cool 72°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	1	1.7	.7	Loose	Lt Br	Silty Top Soil	SM	WL SB12 00-1	1448
		3			V Stiff	Lt Gray				
		4				Fe	Silty Clay w/	GC		
		4	2.0	2.0		Orange	LS, Sh			
S-2	2-4	3	2.0	2.5						0 1455
		4								
		4								
		6	2.0			Lt Tan	Silty Clay w/QTz.	GC	WL-SB12 04-1 QTz Gray 7-2	
S-3	4-6	2	.5		Loose	Orange				0 1500
		4					Some Sand (Med Gr.)	GC	Mottled Clay	
		4							Red, yellow	
		8	2.0						Gray, Brown	
S-4	6-8	7	1.6		M Stiff					0 1510
		4								
		3							Wet-Muddy	
		3	2.0						Refusal	8.0'
							TOTAL DEPTH 8'			

REMARKS Bare area in Cornfield. Samples obtained w/ 3" dia. Split Spoon driven by a 340 lb. hammer, 18" drop.

BORING SB-12

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* See Legend on Back

AR300562

PROJECT: Wilmoyle Laboratories
PROJECT NO.: 200-36C9 DATE: 8/23/89
ELEVATION:
WATER LEVEL DATA:
(Date, Time & Conditions) Overcast, Drizzle

BORING NO.: SB-13
DRILLER: Hydro Group - Jess Ambers
FIELD GEOLOGIST: W. Downey Jr

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/Time
S-1	0-2	6	1.3	.5	Loose	Lt. Tan	Silty Tan	ML	WLSB1300-1	1652
		10							Dry	
		11			Loose	Lt. Gray To Brown	Silty Clay w/LS. + Silty Sandy Gravel	SM		
		6	2.0						Dry	
S-2	2-4	3	0						No Recovery	1636
		2								
		2								
		2	2.0							
S-3	4-6	5	0						Wet	1642
		4								
		3								
		4	2.0						No Recovery	
S-4	6-8	3	1.2						WL-SB1306-1	1650
		4		7.0						
		3			M.St.	Red-Brown	Silty Clay w/ Plastic	CH	Moist	
		6	2.0							
S-5	8-9.9	5	1.0						WLSB1308-1	1700
		3								
		20							Wet @ 8'	
		20/24	1.7	9.9						
							TOTAL DEPTH 9.9'			

REMARKS Free Water in well @ 4' BLS 10 min. after completion. Samples obtained w/3" dia. Split Spoon. Driven by a 340 Lb. hammer, 18" drop.

* See Legend on Back

BORING SB-13

PAGE 1 OF 1

AR300563

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-14
PROJECT NO.: 200-3LC9 — DATE: 8/24/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W. Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Overcast, Foggy, Cool 65°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0 S-1	0-2	4	1.6		Loose	Lt Br	Sandy Silt w/	SM	WLSB 14 CC-1	0745
		8		1.2	Med St.		LS. fragments .5 dia		Dry	
		13				Lt Gray	Sandy dolomite?			
2 S-2	2-3.5	17	2.0		Broken		w/ Fine to sandy		WLSB 1402-1	0800
		18	1.3				Clay infilling		Dry	
		20								
		24	1.5			Lt Gray	Fractured LS. w/			
4 S-3	3.5-5.5	10	1.8		Broken		Lt Br. sandy Clay		Dry	0815
		21					dispersed through			
		20					Micro fractures			
		20	2.0						Refusal @ 5.5'	
							TOTAL DEPTH 5.5'			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop

BORING SB-14

PAGE 1 OF 1

* See Legend on Back

AR300564

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9 DATE: 8/24/88 BORING NO.: SB-15
ELEVATION: FIELD GEOLOGIST: Wayne Downey DRILLER: Hydrogroup
WATER LEVEL DATA: (Date, Time & Conditions) Partly Sunny 72°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	5 5 4 5	1.4 / 2.0	.8 / 1.8	Loose	DK. Br.	Organic Rich Silty Top Soil w/ Charcoal frag	Pt	WLSB1500-1 Moist LS ante nip 15's of Borehole	0 0900
S-2	2-4	3 4 5 7	1.7 / 2.0	3.5	Soft	Lt. Br. To Yellow	Silty CLAY w/ sub. Rounded Sh. & LS. pebbles	CH	Mottled Moist	0 0910
						Lt. Gray To Orange	Qtz. pebbles in Sandy, Silty Clay			
S-3	4-6	1 3 4 5	1.7 / 2.0		Stiff	Lt. Gr. To Tan	Variegated Sandy, Silty CLAY w/ Red, Orange and Yellow Nodular SS Weathered Areas (<1-3mm)	SC	WLSB1504-1 Moist GWL - 5' 10min after completion	0 0917
S-4	6-8	2 3 4 4	1.0 / 2.0			Yellow To Orange	(Fine-Med.) Sandy, Silty CLAY w/ QTZ. frag. to 1" Dia. Some Red Med. gr. SS. Pebbles from	CH	Moist	0 0125
S-5	8-10	3 4 4 4	1.6 / 2.0						Wet	0 1009
									Free water @ 10.0'	
S-6	10-11.5	4 4 10	1.0 / 1.5						WLSB1510-1	0 1014
							TOTAL DEPTH 11.5		Refusal @ 11.5	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop.

BORING SB-15

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* See Legend on Back

AR300565

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-16
PROJECT NO.: 200-3LC9 — DATE: 8/24/88 — DRILLER: Hydo Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey
WATER LEVEL DATA: —
(Date, Time & Conditions) Fair, Sunny 77°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	[illegible]	3	1.8	.3	Loose	Dk.Br	Silty TopSoil w/	SM	WLS31600-1	0 1130
		4					LS. frag. To 1" dia		Moist	
		6			Mod St.	Lt.Br	Silty Clay w/LS	CH		
		8	2.0				Frag. to 2" dia			
S-2	0-4	4	1.3		[illegible] St				dry.	0 1140
		5								
		6								
		12	2.0							
S-3	4-6	4	1.8		Mod St	Lt Br To TAN			WL-SB1604-1	3 1147
		7								
		8					SAME As Above w/			
		9	2.0				LS Rocks and Sh			
S-4	6-7	12	.8				frag.		Refusal @ 7.0'	0 1155
		12	1.0		Broken				Dry	
							TOTAL DEPTH 7'			

REMARKS Samples obtained w/3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING SB-16

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* See Legend on Back

AR300566

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories
BORING NO.: SB-17
PROJECT NO.: 200-3469
DATE: 8/24/88
DRILLER: Hydro Group - Josh Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: (Date, Time & Conditions) Sunny Hot 88°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	3	1.9	.6	Loose	Lt.Br.	Silty organic Rich Top Soil	Pt	WLSB1700-1 Dry	0 1330
		6								
		7			Med.St.	Lt.Br.	Silty CLAY w/ LS. frag. Fill	CH		
		7	2.0							
S-2	2-4	6	1.8						WLSB1702-1 Dry	0 1345
		7								
		5								
		6	2.0				S.A.A. w/charcoal frag.		coal clinkers	
S-3	4-6	3	.5		Med.St.	Dk.Br.	Silty Clay	CH	< 6" Recovery	0 1400
		7				Dk Br.	6" of tight CLAY 4" of Top Soil		Dry	
		6								
		8	2.0							
S-4	6-8	7	1.6		Med.St.	Lt.Gr. to Orange	Silty Fine gr. SANDy CLAY w/ LS. frag up to 3" dia.	ML	WLSB1706-1 Dry	0 1410
		7								
		5								
		8	2.0	7.9						
S-5	8-9.75	13	.5		Stiff	Orange	Silty CLAY w/	CL	Dry	0 1445
		14/5	.75		Broken		Sandy LS. fragments To 1.5" dia		Refusal @ 9.75'	
							TOTAL DEPTH 9.75'			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop.

BORING SB-17

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* See Legend on Back

AR300567

BORING LOG — **NUS CORPORATION**

PROJECT: Whitemoyer Laboratories — BORING NO.: SB-18
PROJECT NO.: 200-36C9 — DATE: 8/24/88 — DRILLER: Hydro Group - Josh Chamberlain
ELEVATION: — FIELD GEOLOGIST: W. Downey Jr.
WATER LEVEL DATA: —
(Date, Time & Conditions) Partly Sunny Warm 85°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	D-2	2	2.0		M. Sort	Dk. Br	Silty Top Soil w/	SM	WL SB 1800-1 Dry	0 1505
		4		.8			LS. frag Tr .75" dia			
		4			M. ST.	Lt. Tan	Silty Clay	CL	WL-SB1801-1	
2		8	2.0	1.9	Gravel	Lt. Gray	Weathered L.S. w/		Dry	
S-2	2-4	14	.4		Broken		White to tan silty			0 1530
		22	1.0				clay infilling		Refusal @ 3.0'	
							TOTAL DEPTH 3'			
4										

REMARKS Samples obtained w/3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop

BORING SB-18

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* See Legend on Back

AR300568

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-19
PROJECT NO.: 200-3LC9 — DATE: 8/24/88 — DRILLER: HydroGroup - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W. Dacney Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Sunny Warm 85°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TMC
0 S-1	0-2	4	1.8	ft	Loose	DK Br	Sandy Silty Top Soil	Pt	WI-531900-1	0 ppm
		11					w/LS. frags.		Dry	
		12								
2		16	2.0		Broken	Lt. Gray	Limestone w/ Sandy		Refusal @ 2.0'	
							clay			
							TOTAL DEPTH 2.0'			

MARKS: Samples were not obtained below 3" of top soil.

BORING SB-19

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* See Legend on Back

AR300569

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-20
PROJECT NO.: 200-3LC9 — DATE: 8/24/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W. Downey
WATER LEVEL DATA: —
(Date, Time & Conditions) Partly Sunny, Warm 85°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	3	1.8		Loose	DK Br.	Organic Rich Top Soil	Pt	WL SB 2000-1 Dry	0 1635
		5								
		4					Fill			
		4	2.0	2.0						
2										
S-2	2-4	2	.2		Loose	DK Gray	LS. w/ Calcite		Moist	0 1645
		3					Veinlets			
		3					Fill			
		6	2.0	4.0						
4										
S-3	4-6	2	.8		Soft	yellow to gray	Silty Sandy Clay w/ LS. frag	CL	WL SB 2004-1 Wet	0 1650
		4								
		3								
		3	2.0							
6										
S-4	6-8	3	1.7						water @ 6.8'	0 0748
		6							Muddy	
		6								
		7	2.0		Md. St.	Lt. Tan to yellow				
8										
S-5	8-9.5	3	1.2				Silty Sandy Clay w/ Sub-Round pebbles of SS, Sh. and LS.	ML	WL SB 2008-1	0 0805
		5								
		20/6	1.5						Refusal @ 9.5'	
							TOTAL DEPTH 9.5'			

REMARKS thunderstorm @ 1650 temporary stop at 6'
Resumed Boring @ 0745 8-25-88 Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING SB-20

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* See Legend on Back

AR300570

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-21
PROJECT NO.: 200-3459 — DATE: 08/25/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W. Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Cool 75° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION: SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0 S-1	0-2	1	1.7		Loose	DKBr	Organic Rich Top Soil	Pt	WL-SB2100-1 Damp	0 0900
		2		1.0						
		3			Mod St.	DKBr	Silty CLAY Mod Plastic	CL	Moist	
		4	2.0							
2 S-2	2-4	1	1.0							0905
		3								
		2								
		4	2.0							
4 S-3	4-6	2	1.4						WL-SB2104-1	0912
		3								
		2								
		3	2.0							
6 S-4	6-8	2	2.0							0920
		3		7.0						
		2			Stiff	Lt.Br. to yellow	Silty, Sandy CLAY w/ Shale frag. to .5 inch Dia	CL	Wet, Muddy disturbed, Possibly FILL	
		3	2.0							
8 S-5	8-10	2	.5							0930
		2								
		2								
		3	2.0							
10 S-6	10-12	2	.4						WL-SB2110-1	0950
		3							Piece of Stainless Steel Well Screen Spoon	
		5								
		5	2.0							2.0 1010 *
12 S-7	12-14	9	0						No recovery	

REMARKS* 2 ppm HNU Reading bottom of S-6 Samples obtained w/ 3" dia Split Spoon, Driven by a 340 Lb hammer 18" drop.

BORING SB-21

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* See Legend on Back

AR300571

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmeyer Laboratories — BORING NO.: SB-21
PROJECT NO.: 200 SLC9 — DATE: 08/25/88 — DRILLER: Hydro Group - Josh Chamber
ELEVATION: — FIELD GEOLOGIST: W. Downey
WATER LEVEL DATA: —
(Date, Time & Conditions) Sunny Cool 75° Slight [illegible]

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/Time
		2.0								
									Voffice	
		6	2.0							
14 S-8	14-14.5						No recovery.		Refusal @ 14.8	0 104
							6" of Clay is from upper section and is			
							not representative of this interval			
							TOTAL DEPTH 14.5'			

REMARKS * See page 1 of SB-21

BORING SB-21

PAGE 2 OF 2

* See Legend on Back

AR300572

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-22
PROJECT NO.: 200-BLC9 — DATE: 08/25/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: —
(Date, Time & Conditions) Sunny, Warm & Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	3	.8		Loose	Lt. Br.	Organic Rich Top	Pt	WL SB-2200-1 Dry	0 1345
		4		.8		Reddish	Soil on Silty			
		5			Mod St.	Brown	CLAY w/ small SS		Moist	
		3	2.0				and Sh frag.			
2										
S-2	2-4	1	1.8	2.4		DK. Gr.	Silty CLAY	CL	Mod Plastic	0 1320
		3		3.0			↓		WL-SB2202-1	
		5				Lt. Tan to Yellow	SANDY, SILTY CLAY			
		4	2.0				↓			
4										
S-3	4-6	2	.5		Stiff		↓			0 1335
		3								
		4								
		4	2.0	▽			↓		V. Wet	
6										
S-4	6-8	3	1.2		Loose	Lt. Tan to Yellow	Sandy, Silty CLAY	SC	Free water @ 6.0' WL-SB2201-1	0 1350
		3					w/ 2 S. frag. to 2" dia.		Muddy	
		1					and Sh. frag. < .5" dia.			
		6	2.0				Variegated, Red, Orange			
8										
S-5	8-8.5	20/6"	.5/.5				w/ 2" dia. Qtz. frag.		Refusal @ 8.5'	0 1405
									Fractured Rock	
			..				TOTAL DEPTH 8.0'		@ 8.0'	

*MARKS Possible freewater @ 6.0' BLS.
Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop.

BORING SB-22

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* See Legend on Back

AR300573

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-23
PROJECT NO.: 200-13LC9 — DATE: 08/25/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W Downey Jr.
WATER LEVEL DATA: —
(Date, Time & Conditions) Partly Cloudy, Warm 80°, Breeze

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION: SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0 S-1	0-2	7	1.7		Loose	DK.Gr	Crushed LS		WL SB2300-1 Dry	3 1440
		8					fill			
		8								
		12	2.0	1.5						
2 S-2	2-4	9	1.4		M.St.	yellow to Lt.Br.	Silty Clay some	CL	Dry	30 1450
		8							WL-SB2302-1	
		8								
		9	2.0	3.8	M.St.	DK.Red	Silty Clay	CL		
4 S-3	4-6	5	1.4						Dry	20 1452
		7							WL-SB2304-1	
		6								
		9	2.0	5.8	Br.	Lt.Gray	Weathered Limestone		Wet	
6 S-4	6-8	8	.8				w/ Silty, white			0 1510
		12					Tetan Clay			
		16					infilling		Dry	
		18	2.0							
8 S-5	8-8.5			10in Brn					Refusal 8.5'	1520
							TOTAL DEPTH 8.5'			

REMARKS Conformed Refusal w/ Auger, Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop

BORING SB-23

PAGE 1 OF 1

* See Legend on Back

AR300574

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-24
PROJECT NO.: 208-3469 — DATE: 08/25/88 — DRILLER: Hydro Group Josh Chambers
ELEVATION: — FIELD GEOLOGIST: W. Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Warm 85° Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0 S-1	0-2	3	2.0		Loose	Dk. Br. To Grey	Silty Top Soil (organ. Rich)	Pt	WL SB 2400-1 Moist	0 1535
		6		1.0			Silty Clay	CL		
		4								
2		6	2.0							
S-2	2-4	3	1.7		Stiff	Lt. Yellow Brown	Silty Clay	CL	Dry	0 1545
		6								
		8				To Redish Brown				
		8	2.0							
4 S-3	4-5	3	1.0						WL-SB2404-1 Dry	0 1555
		4	1.0						Refusal @ 5.0'	
							TOTAL DEPTH 5.0'			

REMARKS: Continued refusal w/ Auger. Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. Hammer, 18" drop

BORING SB-24

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* See Legend on Back

AR300575

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-25
PROJECT NO.: 200-3L69 — DATE: 08/25/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: —
(Date, Time & Conditions) Sunny 85° Breezy

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0 S-1	0-2	1	2.0	.5	Loose	Dk. Br.	Silty Top Soil (organic)	Pt	HLSB2500-1 Dry	0 1640
		3			Stiff	Red-Brn	Silty Clay	CL		0 1640
		5								
		7	2.0						WL-SB2502-1	
2 S-2	2-4	4	1.7	2.5	Broken	Lt. Gr. To Tan	Silty LS. w/white clay infilling (Weathered)		Dry	0 1650
		10								
		16								
		20	2.0							
4 S-3	4-5	9	1.0							0 1650
		30	1.0						Refusal @ 5.0'	
							TOTAL DEPTH 5.0			

REMARKS Confirmed refusal w/Auger. Samples obtained w/3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-25

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* See Legend on Back

AR300576

BORING LOG

NUS CORPORATION

PROJECT: Whitmeyer Laboratories
PROJECT NO.: 200-3LC9 DATE: 08/25/88
BORING NO.: SB-26
DRILLER: Hydro Group - Josh Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA:
(Date, Time & Conditions) Sunny, 85° Breezy

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	1	1.7	.6	Loose	Lt. Br	Top Soil organic Rich	Pt	WLSB2000-1 Dry	0 1718
		4								0 1721
		3			Stiff	Reddish-Br.	Silty Clay	CL		
		7	2.0							
2										
S-2	2-4	6	1.6						WLSB2602-1 Dry	0 1740
		7								
		10		3.4	Broken	Lt. Gr. To TAN	Weathered LS. (Shattered) w/ white clay infilling		Dry	
		9	2.0							
4										
S-3	4-6	8	1.5							0 1748
		7								
		9								
		14	2.0							
6									Moist Refusale 6.5'	
							TOTAL DEPTH 6.5'			

REMARKS Confirmed refusal w/Auger, Samples obtained w/3" dia. Split Spoon, Driven by a 340 Lb. hammer 18" drop.

BORING SB-26

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* See Legend on Back

AR300577

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-27
PROJECT NO.: 200-3LC9 — DATE: 8/26/88 — DRILLER: HydroGroup-Josh Chanber
ELEVATION: — FIELD GEOLOGIST: Wayne Dewney Jr.
WATER LEVEL DATA (Date, Time & Conditions): Clear, Cool 65°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU TIME
S-1	0-2	3	1.5	4	Loose	H.Br.	Top Soil	Pt	WL S827001 Damp	0 0655
		4			Prob.	Lt.Br.	Fill - Limestone			
		6					Dust and Chips		All: H	
		2	2.0							
S-2	2-3	6	1.0		Stiff	Rd.Br.	Silty CLAY w/L.S.	CL	WL S827002-1 Dry	0 0700
		44	1.0				fragments		Refusal @ 3'	
						TAN TO	1" Thick Layer of		Possibly time slide material	
						Gm	Sandy CLAY directly	CL		
							overlying Bedrock			
							interface			
							TOTAL DEPTH 3.0'			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 34 Lb. hammer, 18" drop.

BORING SB-27

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* See Legend on Back

AR300578

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-28
PROJECT NO.: 200-3LC9 — DATE: 8/26/88 — DRILLER: HydroGroup-Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Clear, Cool 70°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS WLSB2800-1D	HNU Time
S-1	0-2	1	2.0	3	Loose	LtBr	V. Stony Organic Silt	GW	WLSB2800-1 FILL material	0 0730
		4					LS, Sh. Shards to			
		4					1.0' dia			
		7	2.0							
S-2	2-3	5	1.0		Broken		LS, Dust and chips		WSLB2802-1 Dry	
		35/6"	1.0				w/ Terracotta Shards		Resample 3.0'	0745
							TOTAL DEPTH 3.0'			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. Filled area surface to 3' # 1.0 ppm at contact between Fill and bedrock

BORING SB-28

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* See Legend on Back

AR300579

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-29
PROJECT NO.: 200-3LC9 — DATE: 08/26/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Cool 70°

Depth (Ft)	Sample No. & Type	Depth (Ft)	Blows 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth Ft)	Soil Density, Consistency or Rock Hardness	Color	Material Classification	USCS	Remarks	HNU / Time
0	S-1	0-2	2, 3, 4, 5	.8 / 2.0		Loose	DK. Br	Silty, Organic Top Soil	Pt	WLSB2900-1 Moist	0830
							DK. Br	Reddish Silty CLAY			
						Stiff	Br.	w/ LS. frag's.		Moist	
2	S-2	2-4	2, 2, 3, 10	1.6 / 2.0	3.5			Poss. Fill		WLSB2902-1 Moist	0821
										wet	
4	S-3	4-6	6, 3, 4, 4	.4 / 2.0	5.5	Loose	Lt. Br to Gray	Silty, Sandy Clay w/ LS. frag. to 1.0" dia.	CL		0840
6	S-4	6-8	4, 5, 6, 7	1.6 / 2.0		Stiff	Lt. Gray to Gray and Reddish Brown	Silty CLAY w/ LS. chips.	CL	Moist	0847
						M. St.	Lt. Br to yellow	Variegated Sandy, Silty CLAY w/ Shale, LS. (Gravel) Chips and Manganese Nodules and Staining	CL	No Recovery Moist	0915
8	S-5	8-10	2, 3, 2, 3	0 / 2.0							
10	S-6	10-11	7, 12	.8 / 1.0		Loose	Lt. Gray Tan Yellow	Sandy Silty CLAY w/ LS chips	CL	Drove Spoon 1.0'	0922
								Augered through 1' Section (No Recovery)		Muddy WSB2912-1	
12	S-7	12-12.5	10	.5 / .5		Med St.	Lt. Red. Br Tan Yellow	Sandy Silty Clay w/ LS frag	CL	Wet Refusal @ 12.5'	0935

TOTAL DEPTH 12.5

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 Lb. hammer, 18" drop. Possible Liner @ 10' BLS, 15 min. Standby for Looking for potential borehole site

BORING SB-29

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* See Legend on Back

AR300580

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-30
PROJECT NO.: 200-3LC9 — DATE: 08/26/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, 80°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TIME
S-1	0-1	2	0.8		Loose	DK Brown	Top Soil (organic rich)	Pt	WL SB 3000-1 Dry	0 1040
		12	1.0				Silt w some clay trace sand & gravel		Refusal @ 1.0'	
							No Recovery			
							Total Depth 1'			

REMARKS: Samples obtained w/3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING: SB-30

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* See Legend on Back

AR300581

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-31
PROJECT NO.: 200-3LC9 — DATE: 08/26/88 — DRILLER: Hydro Group - Josh Chamber
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Warm 85°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	4	1.7	.5	Loose	Lt Br.	Top Soil Silty	Pt	WL SB3100-1 Dry	0 1055
		6					Fill, Broken			
		7					L.S. and soil			
		9	2.0				Mixed.			
S-2	2-4	10	1.9		Broken	Lt Gray To Cream				0 1100
		18					L.S. w/some silty			
		18		3.5			Clay on last 6" in			
		22	2.0				hole.		Refusal @ 4.0' Total Depth	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-3

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* See Legend on Back

AR300582

BORING LOG

NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9
DATE: 08/26/88
BORING NO.: SB-32
ELEVATION:
DRILLER: HydroGroup - Josh Chambers
FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Warm 85° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU TIME
S-1	0-2	3	1.0	.6	Loose	Lt.Br	Top Soil		WL SB 3200-1 Dry	0 1125
		3					Fill w/ LS, Bricks			
		6					and concrete			
		5	2.0	1.6	Lt.Br.	Lt.Br	Silty Clay w/LS chips		Insitu	
S-2	2-4	10	1.6		Stiff	Red-Brown	Silty Clay	CL	WL SB 3202-1 0AMD WL-SB3202-1D	0 1130
		4								
		5								
		5	2.0							
S-3	4-6	6	.5	4.5	Loose	Lt.Gray	Fractured silty LS		Dry	0 1140
		5								
		8								
		7	2.0							
S-4	6-7.5	6	1.2							0 1140
		8								
		12	1.5	7.5					Refusal 7.5' TOTAL DEPTH	

REMARKS Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-32

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* See Legend on Back

AR300583

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-33
PROJECT NO.: 200-3LC9 — DATE: 8/29/88 — DRILLER: Hydrogroup-Josh Champ
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA: —
(Date, Time & Conditions) Overcast Rainy, Cool 75° SL-Breeze

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TIME
S-1	0-2'	2, 6, 6, 16	1.6 / 2.0		loose	DK Gray	LS gravel FILL		WLSB 3302-1	0 09
S-2	2-3'	12, 16	1.0 / 1.0	3.0					WL-SB 3302-1 Wet	0 09
		6, 20		3.6	St. ff	Lt Gray Tan-Brown	Silty Clay L.S.	CL	wet	
S-3	3'-3.8'								Refusal @ 3.8' BOH	0

REMARKS Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop. Minimal sample Recovery, Moved To SB-34 for better sample recovery

BORING SB

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* See Legend on Back

AR300584

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories
BORING NO: SB-34
PROJECT NO.: 200-3LC9
DATE: 8/29/88
DRILLER: Hydro Group - Jack Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Dewiney Jr.
WATER LEVEL DATA (Date, Time & Conditions): Overcast, rain

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	4	1.6			Lt. Gray	Limestone gravel fill		WLSB 3400-1 Wet	0939
		5								
		6		1.8	Stiff	Red	Reddish-brown clay	CL		
		7	2.0			Brown				
S-2	2-4	4	1.8						WLSB 3402-1 Dry	0940
		3								
		11								
		20	2.0							
S-3	4-6	8	1.0		Broken	Lt. Gr.	LS w/ cream colored silty clay infilling highly stained w/ fine powder and frag. To 2.5" dia		Dry	0955
		16								
		16								
		24	2.0						Refusal 6.0'	
									Bottom of hole 6.0'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. Broken bedrock @ 4.0'

BORING: SB-34

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* See Legend on Back

AR300585

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-35
PROJECT NO.: 200-3LC9 — DATE: 8/29/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Overcast - Rain 76°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	2	.7	.7	Loose	Dk. Brn	Silty Organic Top Soil		SB3506-1 wet	0 1105
		2				Reddish Brown	Silt, Clay w/some Sand, mottled	CL		
		2								
		3	2.0							
2										
S-2	2-4	3	1.8		Stiff				moist	0 1110
		4								
		5								
		6	2.0							
4										
S-3	4-6	2	1.1						WL-SB35-1 WL-SB35-2-10 Moist	0 1130
		2								
		4								
		4	2.0							
6										
S-4	6-8	3	2.0						WL-SB3506-10 WL-SB35-26-1 wet	0
		4								
		4								
		3	2.5	▽					Freewater @ 8.0'	
8										
S-5	8-8.5	12	.6							
		50	.6						Refusal @ 8.5' Bottom of hole	
10										
12										

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-35

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* See Legend on Back

AR300586

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-36
PROJECT NO.: 200-3LC9 — DATE: 2/3-/88 — DRILLER: Hydro Group - Jo... Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): [illegible] 10

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	SOIL DENSITY, CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	3	1.4	.8	Loose	Dk. Br.	Silty Brown Top Soil	Pt	WL-SB3630-1 Moist	0800
		3				Lt. Br.	Limestone Chips and			
		3					broken Sh. w/some			
		3	2.0				CLAY			
S-2	2-4	2	2.0		M. Stiff	Lt. Tan	Silty Clay	CL	WL-SB3602-1 Moist	0810
		2				To Brown			Mod Plastic	
		4								
		4	2.0							
S-3	4-6	2	1.7		M. Stiff	Yellow To Tan	SILTY CLAY	CL	Moist	0817
		2					trace sand			
		2								
		2	2.0						Free water @ 6.0'	
S-4	6-8	8	.5						wet	0822
		5								
		4								
		3	2.0							
S-5	8-9	2	0							
		30	1.0						V. Wet	
							LS. 2½" dia.		Refusal @ 9.0	
									Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 34 Lb. hammer, 18" drop.

BORING: SB-36

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* See Legend on Back

AR300587

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-37
PROJECT NO.: 200-3LC9 — DATE: 8/30/88 — DRILLER: HydroGroup-Josh Chamber
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Cool 73°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" 6" 6" (ft)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	2	2.0		Loose	Lt Br.	Silty organic Top Soil	Pt	WLSB-3700-1 Damp	0935
		2		-.2-						
		3			M. Stiff	Lt Red to Brown	Silty Clay w/ Sh.	CL	WLSB-3701-1 Moist	0952
		4	2.0				and LS frag.		Probably	
S-2	2-4	3	0				No Recovery		FILL	0955
		2								
		2								
		2	2.0							
S-3	4-6	3	0				No Recovery			0957
		4								
		6								
		15	2.0							
S-4	6-8	3	1.4		Broken	Lt Br To Cream	LS. w/ Silty Clay infilling		WLSB3707-1 Damp	1000
		4								
		6								
		15	2.0						Refusal @ 8.0'	
									Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING: SB-37

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* See Legend on Back

AR300588

BORING LOG — NUS CORPORATION

PROJECT: Witmoyer Laboratories — BORING NO.: SB-38
PROJECT NO.: 200-3LC9 — DATE: 8/30/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy 75°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	2	.7			Dk. Br	Organic Top Soil	Pt	WCSB3800-1 damp	1103
		4		1.0	Loose		LS. Gravel fill			
		5			Stiff	Cream to Light Br.	Silty Clay	CL		
		7	2.0							
S-2	2-3	8	.7						WCSB3802-1 Damp	0 1123
		26	1.0	3.0	Broken	Lt. Gray	Dolomite w/ reddish-Brown silty clay infilling		highly fractured Dry Bedrock @ 3.0'	
S-3	3-3.5	12 20	.4 / .6						Bottom of Hole 3.5'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop. First spoon hit LS. Fill at 2'. Moved hole 6' toward Lagoon. Sample discarded. Time started 1056

BORING SB-38 PAGE 1 OF 1

* See Legend on Back

AR300589

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-39
PROJECT NO.: 200-3LC9 — DATE: 8/30/88 — DRILLER: Hydro Group - Josh Chamber
ELEVATION: — FIELD GEOLOGIST: Wayne Dewberry Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, 80°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	6	1.4		Loose	Lt Gray	LS. Fill gravel		No Sample	0 1313
		8					w/some Silty Clay		Too Rocky	
		5								
		5	2.0							
S-2	2-4	4	1.2						WLSB-3903-1 Dry	0 1320
		4								
		3								
		4	2.0	4.0	Fractured	Lt. Gray	LS. fill on Rock			
S-3	4-4.6	7	.6	4.6						
		12/3	.7			Br. To Black	Clinker w/ white to clear secondary crystals To 1mm. long mix		indurated @ 4.6' Dry	0 1330
							LS Rock		Refusal @ 4.6' Bottom of Hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop. Moved hole 4' North after sample to verify refusal. Bentonited

BORING SB-39

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* See Legend on Back

AR300590

BORING LOG — **NUS CORPORATION**

PROJECT: Wintrecyer Laboratories — BORING NO.: SB-40 R*
PROJECT NO.: 200-3LC9 — DATE: 9/13/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: WAYNE Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Rain, Fog, Cool 64°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" 6" 6" (N)	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	1-3	2, 4, 3, 5	1.4 / 2.0		M. Stiff	H. Brown	Silty Clay w/ Rounded Iron gravel, Quartz, and Limestone, some brick fragments		Dry; WL-SB4001-2	0830
S-2	3-5	1, 2, 3, 1	.2 / 2.0		Loose		FILL		Dry; WL-SB4003-2; Sheen water; moist	0840
S-3	5-7	3, 2, 1, 2	.3 / 2.0						Wet Mud; water has sheen, strong odor	160 0842
S-4	7-9	1, 1, 1, 2	1.4 / 2.0	2.0					DK. Organic	4 0848 BZ=0; 150 0850
S-5	9-11.5	2, 4, 5, 7	1.0 / 2.0		Soft / V. Soft	DK Gray to Green w/some yellow	Sandy Silty Clay w/ Stringers organic material and Med. grained sand; Brown Silty Clay and Silty Clay w/ LS fragments to ½" dia.		Material in stringers highest HNU readings wet; WL-SB4008-2; Bottom of hole @ 11.0'	0905

REMARKS: SAMPLES obtained w/ 3" dia. Split Spoon Driven by a 340 lb. hammer, 18" drop.

BORING: SB-40 R

* See Legend on Back

* R = Replecate hole, for re-sampling of 1-3, 3-5, 8-9 foot intervals

AR300591

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-40
PROJECT NO.: 200-3LC9 — DATE: 8/30/88 — DRILLER: HydroGroup-Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Partly Sunny 81°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU / TIME
0										
S-1	0-2	3	1.4	.2			asphalt (Drive)			0 1453
		4							WLSB 4000-1	
		3			Packed	Lt Br. To	FILL w/LS, Brick			
		4	2.0			Black and	and Coal Clinker			
2										
S-2	2-4	3	1.0			Grey	FILL			1.0 1503
		3								
		3								
		3	2.0							
4										
S-3	4-6	1 3	1.0						WLSB 4004-1 Dry	0 1511
		2								
		2								
			2.0							
6										
S-4	6-8	1	6							0 1520
		4								
		2								
		1	2.0	8.0						
8										
S-5	8-10	3	1.2		In Stiff	DK Gray To Green	Sandy, Silty Clay w/stringy		WLSB 4008-1 wet	0 1523
		4					organic material and medium			
		4					sprouted sand			
		4	2.0							
10										
S-6	10-11'	2	.6			Gray Green To	Silty Clay w/LS	CL	Strong odor @	0 1530
		15/6	1.0			yellow	frag.		well opening	
									Refusal at 11.0'	
12										

REMARKS: Samples obtained w/3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop. 1.0 HNU Reading in borehole @ 2.0, 52 ppm at the hole

BORING SB-40

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* See Legend on Back

AR300592

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories
BORING NO.: SB-41
PROJECT NO.: 200-3LC9
DATE: 8/30/88
DRILLER: HydroGroup - Josh Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny 80°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU / TIME
S-1	0-2	8	1.6	.2	Loose	---	2.5" F.2.L Asphalt (Driveway)		0.2 to 0.4 sample	0 1600
		5							wx SB-4100-1 Dry	
		5								
		6	2.0							
S-2	2-4	3	.8	2.6	cemented					0 1635
		23					concrete uneven cont-		Moved hole 2.5'	
		40	1.5	3.6			act between Loose		Twice Augered to Refusal	
							gravel and concrete			
S-3	4-6	3	1.0			DKBr	SILTY CLAY w/ LS. fragments	CL	wx SB-4108-1	0 1700
		2							—	
		2								
		1	2.0						wet	
S-4	6-8	1	1.8							20* 1730
		1		6.9	M. Stiff	Lt. Br.	Silty Clay	CL	Free water @ 6.5'	
		1				To greenish yellow				50
		2	2.0							
S-5	8-10	2	2.0						wx SB-4108-1 Strong odor	80 1740
		2							Surface	
		2		9.2					Possibly Gasoline Hydrocarbon	
		1	2.0						w/degreaser	
S-6	10-11.8	1	1.7							200 1750
		2							Water draining	
		3							from spoon has visible sheen	
		70	1.8'						Refusal @ 11.8'	
									Total Depth 11.8'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. Moved hole twice after 2' intervals drilled. HNU tip sheared off by Auger 20 ppm at hole, 200 ppm in CLAY in Spoons from 8-12" BLS. 1 ppm in Ambient Air. Total Length for 3 seperate attempts is 16.8'

BORING SB-41

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* See Legend on Back

AR300593

BORING LOG — **NUS CORPORATION**

PROJECT: Winthrop Laboratories — BORING NO.: SB-41R
PROJECT NO.: 200-3LC9 — DATE: 7/13/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Cloudy 65°

SAMPLE NO. & TYPE	DEPTH (FT)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
						Light	Light Brown			
S-1	6"-2.5	7	.6		Granular		Fill, Limestone		Dry	0900
		8				Lt. Br.	Sand Gravel & Silty		WL-SB-100-2	
		4					Clay			
		4	2.0							
S-2	2.5-4.5	2	.5		Loose	Lt. Br.	Limestone and Silty		Dry	0945
		4					Clay Fill			
		2								
		2	2.0	50						
S-3	4.5-6.5	1	.6		Soft	Lt. Yellow Tan	(Slough) Silty Clay		Wet	0952
		3					No Recovery		Could Not Sample	
		2								
		2	2.0							
S-4	6.5-8.5	2	1.2		M. Stiff to Loose	Lt. Tan	Sandy Silty Clay w/ fine Sandy Limestone fragments		Moist WL-SB-100-2	1007
		3								
		3								
		3	2.0						Bottom of Hole 8.5'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING: SB-41R

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* See Legend on Back

AR300594

BORING LOG

NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9
DATE: 9/1/88
BORING NO.: SB-42
DRILLER: HydroGroup-Josh
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA
(Date, Time & Conditions) Clear, Sunny 58°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU TIME
S-1	0-3"		3"		Broken	Lt. Gray	Chips Lo. LS. Fill		SB-42DD-1 Dry	0935
							on LS. Bedrock		outcrop @	
						Lt. Gray	w/ silty clay inclusion		surface	
									Bottom of hole 3" LS	

REMARKS Samples obtained w/3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-42

* See Legend on Back

PAGE 1 OF 1

AR300595

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-43
PROJECT NO.: 200-3LC9 — DATE: 9/1/88 — DRILLER: HydroGroup - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, 62°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-4	3	1.0	.5		Black	Asphalt mix LS.		Asphalt Driveway w/SB-43	0929
	0-2'	5			Loose	Lt Gr.	gravel To 1' BLS.		Dry	
		7				Lt Br.	Fill w/ Silty Clay			
		3	2.0	1.8						
S-2	2-4	4	2.0		M. Stiff	Lt Br To yellow	Silty Clay	CL	Moist	0934
		2								
		2								
		3	2.0						Hydrocarbon [illegible]	
S-3	4-6	2	2.0						Auger [illegible] w/SB-43 [illegible]	0945
		2								
		3							V. Wet	
		3	2.0	▽					Water has seen on surface	
S-4	6-8	10	1.2			yellow green	Silty Clay	CL	Water @ 5.8' w/SB-43 [illegible] wet	30 0901
		9		6.7		green	Sandy, Silty Clay w/ SS fragments to 1" dia. and LS frag to 2.3" dia.	SC		200 0905
		16								
		8	2.0	8.2						
S-5	8-10								Augered to 10'	30 0915
					Broken		LS. & Silty Sandy Clay		Bottom of hole @ 10' Into highly [illegible] LS.	
									Wisps of white smoke emanating from hole after	
							TD = 10'		Auger stopped,	
									Continued for 5 min.	
									Josh Pulled of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 34 lb. hammer, 18" drop. HNU reading 30 ppm @ the hole, 200 ppm in clay in split spoon, Odor smells like State diesel fuel and gasoline mixture.

BORING: SB-43

LC: 1

* See Legend on Back

AR300596

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-44
PROJECT NO.: 200-3LC9 — DATE: 9/1/88 — DRILLER: HydroGroup-Josh Chamberlain
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Warm 72°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TIME
0										
S-1	0-2	2	1.0	.6	Loose	DK.Br.	Organic Rich Top Soil	Pt	WLSB-4400-Dry	0 1028
		3			M. Stiff	Lt. Br.	Silty Sandy Clay	ML		
		4								
		5	2.0							
2										
S-2	2-4	3	.3		M. Stiff	DK.Br.	Fill LS. w/clay		Moist	7 1030
		5								
		7								
		5	2.0	▽?						
4										
S-3	4-6	2	2.0		Med Stiff	Yellowish Brown	Silty Clay w/ LS+Sh frag. to .5" dia	CL	Moist WLSB-4404-1	0 1037
		1								
		3								
		4	2.0							
6										
S-4	6-8	4	2.0	▽					wet	70 1043
		4							Water @ 6.5 WLSB-4406-1	
		4								
		4	2.0							
8										
S-5	8-8.8	2	.4				Broken Rock, LS.?		No relevant recovery	0 1051
		11/4	.8							
									Refusal @ 8.5	
									Bottom of hole	
10										
12										

REMARKS: Samples obtained w/3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop. HNU 70ppm from clay in Spoon to 70ppm.

BORING SB-44

E 1 C: 1

* See Legend on Back

AR300597

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-45
PROJECT NO.: 200-3LC9 — DATE: 9/1/88 — DRILLER: HydroGroup-Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Dewey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny Hot 86°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR ROD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (DEPTH FT.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU TIME
S-1	0-2	7	.5	-34-			asphalt		Dry	0 1346
		8			Loose	Dk Gray	FILL LS. and		WLS134800-1	
		9			V. Broken	Red + Black	Coal Clinker		Clinker is	
		8	2.0						Granular	
S-2	2-4	6	1.6							0 1350
		6								
		6								
		6	2.0							
S-3	4-6	4	1.6						Moist	0 1401
		3							WLS134804-1	
		3								
		8	2.0	5.7						
S-4	6-8	3	2.0		M. Stiff	Lt. Br. orange	To Silty Clay w/	CL	Moist	0 1408
		1					LS + Sh. frag. to		Wet	
		2					.5" dia		Probably Fill	
		3	2.0							
S-5	8-10	5	1.4		V. Brittle	Red-Brown	Silty Clay w/	CL	Damp	0 1421
		9					LS. frag. .25"-2.5"		WLS134808-1	
		13					Dia.			
		14	2.0						Refusal @ 10.0'	
									Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop.

BORING SB-45

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* See Legend on Back

AR300598

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-46
PROJECT NO.: 200-3LC9 — DATE: 9/1/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Hot 90°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0		8				Black	Asphalt Driveway		Dry	0 1525
		22					LS Fill w/ Silty			
S-1	1-3'	8	.6		Loose	Lt. Gray To Brown	Clay			
2		7								
			2.0							
S-2	3-5'	5	.6						WCSB4603-1 Dry	0 1530
4		2								
		2								
		2	2.0							
S-3	5-7	8	.6						Dry	0 1544
6		12			Broken		Concrete			
		14								
		10	2.0				Fill			
S-4	7-9'	2	.6						Moist	0 1550
8		2								
		3								
		2	2.0							
S-5	9-10	9	.4						WCSB4609-1 Moist	0 1559
10		22/6	1.0			Lt. Grey	Fractured Silty LS w/ Silty Creamcolored Clay Infilling		Refusal @ 10'	
12										

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING SB-46

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* See Legend on Back

AR300599

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-47
PROJECT NO.: 200-3LC9 — DATE: 9/2/88 — DRILLER: Hydrotechnic Test
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Hammers
WATER LEVEL DATA (Date, Time & Conditions): Clear Sunny 55°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	1	.2	.4	[illegible]	DK. Br.	Organic Rich Top Soil	Pt	WLSB4700-1 Moist	0 0720
		3				DK. Red Brown			Fill	
		4		1.5			Silty Clay [illegible]	CL	WLSB4701-1 Dry	
		5	2.0	2.0	Mst.		[illegible] to 1.0" DIA		possible Excavated	
S-2	2-4	7	1.2			Lt Tan to Yellow	Silty Slayey [illegible]		lagoon sludge by	
		7		3.0						
		3		3.7	Mo Stiff	Brown w/Red	Silty [illegible] Top	ML CL	Fill	
		4	2.0				Soil			
S-3	4-6	7	1.6							
		5								
		8								
		6	2.0	6.0					WLSB 4707-1 Fill	
S-4	6-8	4	2.0		Stiff	Tan	Sandy Silty [illegible]	ML CL	Dry	
		7				[illegible]	[illegible]			
		8		7.5						
		18	2.0		V. Stiff	Red Brown	Silty Clay	CL	Refusal	
									Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. Possible Excavated lagoon sludge .4' → 8.0

BORING: SB-47

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* See Legend on Back

AR300600

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9 DATE: 09/2/88
ELEVATION:
WATER LEVEL DATA
(Date, Time & Conditions) Sunny 65°

BORING NO.: SB-48
DRILLER: Hydro-Group
FIELD GEOLOGIST: Wayne Dewiney Jr.

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR ROD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0 2	2	1.6	.5	Loose	Dk. Br.	Organic Rich Top Soil	Pt	WLSB4800-1 Dry	0842
		2				Lt. Tan To Yellow	Silty Clay Mixed w/ Top Soil & LS. frags		Fine Moist	
		4								
		2	2.0							
2										
S-2	2-4	1	1.0	2.5		Bright Red Orange	Silty CLAY-SILT	CL	WLSB4802-1 Moist	
		Wh		3.0	Soft					
							Possible EXCAVATED Lagoon sludge			
			2.0						Free water @ 4'	
4										
S-3	4-6	2	.5	4.5		H. Br.	Silty Clay w/ LS	CL	Moist	0 0857
		1		5.5	M. Stif		Soft		Sticky	
		2								
		Wh	2.0							
6										
S-4	6-8	Wh	2.0		Soft	Red-Orange	SILTY CLAY	CL	Wet ub-2	0 0952
		Wh						CL	V. Sticky	
		Wh		7.5			Possible sludge			
		1	2.0	?						
8										
S-5	8-10	Wh	2.0						WLSB4808-1 Wet	
		1		9.2						0913
		2					Silty TOPSOIL		4"	
		18	2.0		V. Broken	Light To Creamy	LS. w/ CREAM Silty Clay Infilling		Refusal @ 10.0	
10									Bottom of hole	
12										

REMARKS Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop. Second hole Moved 2' to drive shelby tubes, at 5-2.5, 6-8.8' (SB-49)

BORING SB-48

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* See Legend on Back

AR300601

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3L C9. DATE: 09/2/88
ELEVATION:
WATER LEVEL DATA
(Date, Time & Conditions) Sunny, 80°

BORING NO: SB-49
DRILLER: Hydro Group - Josh
FIELD GEOLOGIST: Wayne Downey Jr.

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
							Augered 6":		Cleaned out hole
							Pushed Shelby from 10" to		2.5'
							Augered To 6 foot.		Second Shelby tube
							Pushed Shelby 1.5' to		Pushed Through Sludge bedrock contact.
							7.5 foot and encountered bedrock		
							refusal. (Limestone)		
									Shelby tubes
									are 2.5'
							TOTAL DEPTH 7.5'		

REMARKS Shelby was pushed w/ Auger bell coupler
refer to SB 48 for lithology

BORING SB

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* See Legend on Back

AR300602

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-50
PROJECT NO.: 200-3LC9 — DATE: 09/2/88 — DRILLER: Hydro Group-Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Warm 82°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU/TIME
S-1	1-2	3	1.5	.6	Loose	Lt. Br.	Silty Top Soil	Pt	WLSB5000-1 Dry	1350
		3					Mixed fill			
		3								1356
		3	2.0							
S-2	2-4	1	2.0		M. Stiff				WLSB5002-1 Dry	1359
		1		3.0						
		1				Dk. Red and Orange	Silty Clay Sludge		contaminated MAT.	
		1	2.0				w/ Layers of White to		WLSB5005-1 Moist	
S-3	4-6	2	1.8		M. Soft		clear acicular crystals		Fill	1405
		1					in Layers < 1mm thick			
		1					alternating w/ layers			
		9	2.0	6.0	Broken		of black organic		Refusal 6.0'	
							layers of similar			
							thickness			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING: SB-50

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* See Legend on Back

AR300603

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-51
PROJECT NO.: 200-3LC9 — DATE: 09/7/88 — DRILLER: Hydro Group - Josh Chamber
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Clear, Cool 43°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" 6" 6" (N)	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	3, 15	1.7	.5	Loose	Dk. Br.	Organic Rich Top Soil	Pt	WLSB-5100-1 Moist	0750
		4, 3	2.0	1.8, 2.3		Lt. Br.	1" Broken L.S. and Silty Clay Fill		WLSB-5102-1 Dry	
S-2	2-4	2, 2, 1, 1	1.7			Orange Red	Disturbed Silty filter cake Sludge		Dry	0800
S-3	4-6	4, 1, 1, 1	2.0 / .4		Loose	Orange Red	Silty Clay Fill w/ LS. frag. to .6" dia.		Moist	0805
S-4	6-8	1, Wh, Wh, Wh	2.0 / 1.0		Soft		Fill SAA Sludge GOOY		wet Free water in borehole @ 6.-' BLS	0810
				8.0			SAA			0820
S-5	8-10	1, 4, 6, 11	2.0 / 1.4		Soft	Orange	Sludge Sludge		WLSB-5108-1	0820
S-6	10-12	4, 15, 17, 22	2.0 / 2.0	10? 11.0	V. Soft / Fractured	Red-orange / Lt. Gr.	LS. w/ cream to yellow Clay infilling Refusal @ 12.0'	ML	wet Fractures are filled w/ clay Sludge has not diffused into frac.	0830

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 34 lb. hammer, 18" drop.

BORING SB-51

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* See Legend on Back

AR300604

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9
DATE: 09/7/88
BORING NO.: SB-52
DRILLER: HydroGroup-Josh Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): CLEAR, Cool 52°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (Ft.)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	3	1.5	.5	loose	DK.Br.	Organic rich Top Soil	Pt	WLSB5200-1 Dry	0 1015
		5								1101
		7			Loose		Chunched LS. Fill		Excavated Lagoon sludge	
		4	2.0				w/some Silty Clay			
S-2	2-4	2	1.9			Red-Orange			Dry	0 1105
		1		2.7			SLUDGE		Fill	
		1			Mod. Stiff					
		1	2.0							
S-3	4-6	3	1.2				SAA		Moist	0 1110
		1					Silty CLAY w/LS.			
		1					frag w/clear to			
		2	2.0				white acicular crystals			
S-4	6-8	1	1.4				(sludge)		WLSB5206-1 Moist	0 1115
		1							Fill	
		1								
		1	2.0							
S-5	8-9.5	2	1.2				Some white crystals		WLSB5208-1	0 1132
		17					of Clay ↓ L.S. interface			
		26/6	1.5	9.3					Refusal 9.5	
									Bottom of hole @ 9.	

REMARKS: Samples obtained w/3" dia. Split Spoon, Driven by a 34 Lb. hammer, 18" drop. Downtime 10:30-10:55 HNU problems

BORING: SB-52

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* See Legend on Back

AR300605

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-53
PROJECT NO.: 200-3LC9 — DATE: 9-7-89 — DRILLER: HydroGroup-Josh Chambli
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Warm 72°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	1, 4, 4, 2	1.8 / 2.0	0.4	Loose	DK Br	Organic Rich TopSoil	Pt	WLSB5300-1	0 1335
							LS. + Redish Br.		Dry	
							CLAY FILL			
S-2	2-4	1, 2, 2, 3	1.4 / 2.0		M. Soft		Possible Excavated lagoon sludge		Moist	0 1392
S-3	4-6	1, 2, 2, 3	1.0 / 2.0		M. Stiff				Moist WLSB5305-1 WLSB5305-1D	0 1348
						Red to Lt. Br.	CLAY FILL w/ LS Sh and Qtz. frag. to .75" dia.			
S-4	6-8	1, 2, 2, 1	1.2 / 2.0		M. Soft		Possible Excavated lagoon sludge		wet.	0 1402
S-5	8-10	1, 1, 2, 4	2.0 / 2.0	9.3	M. Soft	Lt Brown To Red Br.	Red. orange Sludge (as ")		moist	0 1412
S-6	10-12	2, 3, 4, 5	1.5 / 2.0	11.5			FILL SAA		WLSB5310-1 WLSB5310-1D	0 1420
						Lt. Br.	LS. w/ silty clay infilling	CL ML		
S-7	12-13	6, 20							Refusal at 13.0 ft	0 1424

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340 lb. hammer, 18" drop. Base of TCL, VOA, BNA, aniline, TAL metals. / Lower As, Fe, Aniline

BORING SB-53

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AR300606

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-54
PROJECT NO.: 200-3LC9 — DATE: 09/7/88 — DRILLER: HydroGroup-Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 75°

Depth (ft.)	Sample No. & Type	Blows 6" on Rod (#)	Sample Recovery Sample Length	Lithology Change (Depth ft.)	Soil Density Consistency or Rock Hardness	Color	Material Classification	USCS	Remarks	HNU Time
0	S-1	0-2	1, 4, 3, 2 / .5, 2.0	.5		DKBr.	Organic Rich Top Soil FILL	Pt	WLSB5400-1 Dry; 3" LS Rock Jammed in Shoe 6" Recovery	0 1535
2	S-2	2-4	3, 3, 4, 3 / 1.4, 2.0		M. Stiff	Lt. Br. To Red	Silty Clay w/LS. Sh. + Rtz. frag. FILL Possible Excavated lagoon sludge		Moist	0 1610
4	S-3	4-6	4, 3, 3, 3 / .4, 2.0	?					LS. frag. Jammed in Shoe 4.5" Recovery	0 1620
6	S-4	6-8	3, 2, 2, 1 / 2.0, 2.0		M. Stiff	Red. Orange	Sludge w/ v. fine crystals disseminated through Material	white to clear	Moist	0 1630
8	S-5	8-10	4, 3, 3, 2 / 2.0, 2.0	9.5	Soft	Bright Red.	Sandy Silty Clay possible lime MAT.	CL	WLSB5400-1 Moist	0 1645
10	S-6	10-11.5	6, 9, 22 / 1.3, 1.5	10.5	M. Stiff / Broken	Br. Brown Tan / Lt. Gr.	Silty Clay / Fractured LS. w/ silty cream colored infilling	CL	WLSB5410-1 / Refusal 11.5' BOH	0 1655
12										

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 34 lb. hammer, 18" drop.

BORING SB-54

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* See Legend on Back

AR300607

BORING LOG — **NUS CORPORATION**

PROJECT: Witmoyer Laboratories — BORING NO.: SB-55
PROJECT NO.: 200-3LC9 — DATE: 09/7/88 — DRILLER: Hydro Group-Josh Chambe
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 75°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" CO. ROD (ft)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* FOR DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	2	1.2	.5	Loose	Dk.Br	Organic Rich Soil	Pt	WLSB5500-1 Dry	1745
		3			Soft	Red-Orange	Filter cake mixed w/ Clay and Top Soil			
		3								
		2	2.0							
S-2	2-4	1	.8						WLSB5502-1 Dry	1800
		1								
		2					Possible ERRATED LAGOON SLUDGE			
		2	2.0							
S-3	4-6	2	2.0		M.Stiff				WLSB5504-1 Dry	1810
		2								
		3								
		2	2.0							
S-4	6-8	3	.4		Loose				Dry	1815
		8		CB	Broken	Lt.Gr	LS w/ creamy to tan silty clay infilling	CL		
		20/6	1.5						Refusal @ 7.5' BLS. Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop. 15 min. Down time Rig Broke, second Rig D-Corcoh + used instead

BORING SB-55

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* See Legend on back

AR300608

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-56
PROJECT NO.: 200-3LC9 — DATE: 09/8/88 — DRILLER: Hydro Group - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jim
WATER LEVEL DATA (Date, Time & Conditions): Clear, Sunny 60°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNu Time
0										
S-1	0-2	4	1.4		Loose	H.Br.	Limestone fill w/ Silty	ML CL	WLSB5600-1 Gravel fill	0 0925
		4				To Lt. Gray	Top Soil		along fence line	
		7								
		8	2.0						WXSB5601-1	
2										
S-2	2-4	6	1.6				Limestone fill w/ Silty			.5 0930
		9					clay			
		10								
		12	2.0							
4										
S-3	4-6	11	0.0				No Recovery			0 0948
		3					Rocky			
		3								
		4	2.0							
6										
S-4	6-7.0	7	.5		Broken		Limestone w/ Chunky	CL		0 0954
		27	1.0				Silty Clay		Refusal @ 7.0'	
									Bottom of hole	
8										
10										
12										

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop.

BORING SB-56

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* See Legend on Back

AR300609

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-57
PROJECT NO.: 200-3LC9 — DATE: 09/8/88 — DRILLER: Hydro Group - Joe Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Deerney Jr.
WATER LEVEL DATA (Date, Time & Conditions): Clear, Sunny 72°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (Ft.)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION: SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNu Time
S-1	0-2	4	1.0	.5-.3	Loose	Black	asphalt pavement		WLSB5700-1 Pavement + 2" Thick	10 1027
		7		.3		Lt Gr.	Limestone cobble Fill		6" of gravel	
		6					w/some wood Chips		Dry	
		8	2.0				small amt of Silty, Sandy, Clay			
S-2	2-4	5	0.0						No Recovery	— 1035
		5								
		5								
		5	2.0							
S-3	4-6	3	.4			DK.Gray	Wood debris w/Limestone		WLSB5704-1 Dry	0 43
		4				Tr Brown	fragments			
		3								
		4	2.0	6.0						
S-4	6-8'	4	2.0		M. Stiff	Reddish Br.	Silty CLAY	CL	WLSB5706-1 Moist	3 1044
		8		6.7		Lt. Grey	fractured Limestone w/			
		16			Broken		yellow To TAN silty			
		17	2.0				clay infilling		Refusal 8.0'	
									Bottom of hole	

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340lb. hammer, 18" drop. Drillers need To fuel

BORING SB-57

* See Legend on Back

B 1 C: 1

AR300610

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-58
PROJECT NO.: 200-3LC9 — DATE: 09/8/88 — DRILLER: HydroGroup - Josh Chambers
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 80°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	32	1.8	0.2		BL.	Asphalt Pavement		HNU approx 6" BLS Dry	2 1351
		4			Loose	Lt. Gray	Crushed Limestone		WL3135800-1	
		4		1.5			fill			
		6	2.0		Loose	Lt. Br.	Silty CLAY w/50% gravel			
S-2	2-4	3	.5				Limestone fragments			1402
		4					Some SAND (Fill)			
		3							Free water @ 3.5'	10 1400
		5	2.0							
S-3	4-6	2	0				No Recovery		V. Muddy	0 1416
		4					Rocky			
		3							Possibly fill	
		3	2.0						To 7.5'	
S-4	6-7	8	.4		Loose	Lt. Tan To Brown	Silty CLAY w/Limestone chips	CL	WL SB5807-1 Muddy Water w/ sheen Strong hydrocarbon odor	0 1427
		8	1.0							
			augered	7.5						
S-5	7.5-9.5	3	2.0		M. Stiff	Lt. Gray	Silty CLAY w/few Limestone fragments	CL	Augered 6" Wet. Stem caught in Auger.	7* 1531
		6								
		7								
		12	2.0							
S-6	9.5-11.5	2	2.0		Broken	Lt. Gray	Limestone w/ TAN to Cream Silty Clay	CL	Bedrock/Clay Interface	10* 1540
		8								
		20		10.7	Soft		in filling			
		22	2.0	11.2			Silty CLAY from 10.7' to 11.2		Refusal @ 11.5' Bottom of hole	

REMARKS: SAMPLES obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. Drillers (1423) To (1430) obtained Spoon basket to try to retain Loose mud from 4-6' interval left against. 1440 To 1520 To offload Truck

* 7 ppm at Top of Auger, 0 in breathing Area
* 10 ppm at Top of Auger, 0 in breathing Area

BORING SB-58

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* See Legend on Back

AR300611

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-59
PROJECT NO.: 200-3LC9 — DATE: 09/8/88 — DRILLER: HydroGroup-Jos Chamb
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr.
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 75° Breezy

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (Ft.)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
				.4		Dk. Gray	asphalt pavement			0 1730
					Broken	Lt. Gray	Limestone Fill			
							Large Cobbles To 3" dia.		No spoon driven	
							TRACE SILTY CLAY		Rocks too Large	
S-1	3.-5	3 2 1 1	1.2	3.5						0 1740
			2.0		Loose	Reddish Brown w/yellow & BLACK	Variegated, granular Coal Clinker			
S-2	5-7	2 4 24 24	2.0	5.3						1747
				6.3	M. Stiff	Red-Brown	Silty Clay	CL	WLSB 5905-1 Moist	
			2.0		Fracture	Lt Gray	Limestone w/ creamy Silty Clay matrix			

REMARKS: Samples obtained w/ 3" dia. Split Spoon, Driven by a 340 lb. hammer, 18" drop. HNU reading in hole

BORING: SB-59

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AR300612

BORING LOG — **NUS CORPORATION**

PROJECT: Witmoyer Laboratories — BORING NO.: SB-60
PROJECT NO.: 200-3LC9 — DATE: 09/9/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 56°. Low humidity. Calm.

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
	0			.2		Dk Gray	Asphalt Driveway		WL SB 60DD-1 auger first	0 0915
						Lt Gray	Limestone fill		1 foot interval	
S-1	1-3	1	1.0		Granular	Dk Gray To Black	Coal Clinker w/ with some greenish gravel			0 0925
	2	1								
		3		2.3	M. Stiff	Lt. Gray To Red Br.	Silty CLAY	CL	WL SB 60DD-1	
		2	2.0	2.9					Strong decaying organic odor	0 0922
S-2	3-5	1	1.4		Granular		Coal Clinker fill		Possibly old septic system	
	4	1				Lt. yellow	w/ organic material		Started @ 08:52	
		1		4.5		To Olive green	and fibrous material		To [illegible]	8
		10	2.0				Fill to 4.5		Started @ 0925	
S-3	5-7	7	1.2		Soft	Yellowish Green to Dk. Gray	Silty, Clayey w/ Some Sandy Material	CL	V. Wet	
	6	7								
		13								
		13	2.0	7.0						
S-4	7-9	3	1.2		Med.	Dk. Gray To Lt. Yellow	Silty, Sandy Clayey Gravel, (Limestone)	CL	Smr 2-25-89 ~~WL SB 60DD-1~~ V. Wet	0 0928
	8	4								
		10								
		8	2.0							
S-5	9-11	4	D				No Recovery ? Rocky			0 0940
	10	6								
		4								
		3	2.0						WL SB 60DD-1 Changed Air Bottles	
S-6	11-13	4	1.6			Dk. Gray To Greenish Blue	Clayey Silt w/ fine sand	ML		0 0950
	12	3								
		5								

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340 lb. hammer, 18" drop.

BORING SB-60

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* See Legend on Back

AR300613

BORING LOG — **NUS CORPORATION**

PROJECT: Wintrayer Laboratories — BORING NO: SB-60
PROJECT NO.: 200-3LC9 — DATE: 09/9/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Warm 75° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
		7	2.0						ON SCBAD 1122	
S-7	13-15	2					No Recovery		Wet	1120
		4					Rocky!			
		4								
		2	2.0	15		Lt. Olive Green to Grey	Silty, Sandy, Gravelly	ML		
S-8	15-17	WH	2.0		V. Soft		Clay		Oozey mud.	1140
		1								
		1								
		2	2.0							
S-9	17-19	1	1.6						Installed slapper in Spoon	120
		1								
		2								
		18	2.0	19.0					Refusal @ 19.0'	
									off holes	1230
									Bottom of hole 19.0'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop.

BORING SB-60

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* See Legend on Back

AR300614

BORING LOG — **NUS CORPORATION**

PROJECT: Witmoyer Laboratories — BORING NO.: SB-61
PROJECT NO.: 200-3LC9 — DATE: 09/9/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Sunny, Clear 80° Slight Breeze — Soil Centering Rig

SAMPLE NO. & TYPE	DEPTH (Ft)	BLOWS 6" 6" 6"	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	H/N'd Time
S-1	0-2	15	1.6	-.2-	Broken	Lt. Grey	Asphalt Paving			1319
		4			Loose	Lt. Gray	Limestone Fill			
		4								
		4	2.0	-1.8-						
S-2	2-3.5	8	1.0		M. Stiff	Lt. Brown	Silty Clay w/		WLSB61 02-1 Dry	1329
		3					Limestone fragments		Slightly Sticky	
		20	1.5				and		Auger Refusal @ 4.0'	
							possibly fill ?		Hole terminated	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop.

BORING SB-61

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* See Legend on Back

AR300615

PROJECT: WHitmoyer Laboratories BORING NO: SB62
PROJECT NO.: 200-3LC9 DATE: 9-12-88 DRILLER: Josh [illegible] - Hydro [illegible]
ELEVATION: FIELD GEOLOGIST: TREPANOWSKI
WATER LEVEL DATA:
(Date, Time & Conditions) 9/12/88 0830 SUNNY 65'

SAMPLE NO & TYPE OR RQD	DEPTH (ft) OR RUN NO	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Elevation) OR SCREENED INTERVAL	MATERIAL DESCRIPTION: SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU
0 S-1	0-2'	2	2.0		STIFF	BRN RED	SILTY CLAY w/ Some Gravel	CL	WL-SB6201-1 0827	0 0827
		4					FILL		Flecks of Brick	
		5							MOIST	
		7	2.0	2.0						
2 S-2	2'-3'	7	0.5	2.5	STIFF		3" LAYER OF WHITE CLAY, w/rust stained soil below	CL	WL-SB6202-1 2-2.5' 0850	0 0850
		37	1.0			GRAY	WEATHERED LIMESTONE			
							Bottom of hole at 3'			
4										

REMARKS: Samples obtained w 3" Diameter Split spoon, driven by A 340 lb Hammer, 18" Drop

BORING SB62

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AR300616

BORING LOG

NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9
DATE: 9/12/88
BORING NO SB63
DRILLER: CHAMBERS, HYDROGEO
ELEVATION:
FIELD GEOLOGIST: TREPANOWSKI
WATER LEVEL DATA
(Date, Time & Conditions) 9/12/88 0900 SUNNY 70°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HN
S-1	(0'-2')	2			STIFF	GREYISH BROWN	GRAVELLY CLAY / SILT	CL	MOIST	0
	1	4								0
		3		1.5					WL-SB6302-1 0910	0
9/12/88 JT	2	4	2'/2.0		STIFF	YELLOWISH BROWN	YELLOWISH BROWN GRAVELLY CLAY W/WOOD CHIPS. FILL		SANDY YELLOW PRECIPITATE FULL-SCAN ANALYSIS	0
SB	(2-3')	6		2.5		REDDISH BROWN	GRAVELLY CLAY		FROM 1.5'-2.5'	0
	3	18				GREY	WEATHERED LIMESTONE			0
	3.5	16/6	0.75/15							0
							BOTTOM OF HOLE AT 3.5 FT			

REMARKS SAMPLES OBTAINED W/ 3" DIA SPLIT SPOON DRIVEN BY A 340 LB HAMMER

BORING SB63

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* See Legend on Back

AR300617

BORING LOG

NUS CORPORATIO

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9 DATE: 9/12/88
ELEVATION:
WATER LEVEL DATA
(Date, Time & Conditions) 9/12/88 930

BORING NO SB64
DRILLER: JOSH CHAMBERS, HYDR GEO
FIELD GEOLOGIST: TREPANOWSKI

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
S-1	0'-2'	15			STIFF	BROWN	GRAVELLY CLAY/SILT	CL	MOIST. FILL
	1	4					FILL		
		4	9/12/88						
	2	4	2/2	2.0					WL-SB6402-1 0925
S-2	2'-3'	8		2.5	STIFF	BROWN WITH STRAW	CLAYEY GRAVEL	CL	SAMPLED FROM 2-2.5
	3	3				GREY	WEATHERED LIMESTONE		
	3.5	20	0.75/1.5						
							BOTTOM OF HOLE AT 3.5 FEET		BOH AT 3.5

REMARKS SAMPLES OBTAINED W/ 3" DIA. SPLIT SPOON DRIVEN BY A 340 LB HAMMER

BORING SB

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* See Legend on Back

AR300618

PROJECT: WHit Moyer Laboratories BORING NO: SB 65
PROJECT NO.: 200-3LC9 DATE: 9-12-88 DRILLER: JOSH CHAMBERS, HYDROGEO
ELEVATION: FIELD GEOLOGIST: TREPANOWSKI
WATER LEVEL DATA:
(Date, Time & Conditions) 9-12-88

SAMPLE NO & TYPE OR RQD	DEPTH (ft) OR RUN NO	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft) OR SCREENED INTERVAL	MATERIAL DESCRIPTION: SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS 1034
						BRN RED	Silty clay w Root material	CL	WL-SB6500-1 1034

REMARKS NO SUBSURFACE SAMPLES OBTAINED DUE TO KNOWN SHALLOW DEPTH OF BEDROCK Actual Depth to Bedrock is unknown but should be ~3.0

BORING SB 65

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AR300619

BORING LOG — NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9
ELEVATION:
WATER LEVEL DATA (Date, Time & Conditions): 9/12/88 1045 SUNNY 70°
BORING NO. SB66
DATE: 9/12/88
DRILLER: JOSH CHAMBERS, HYDRO
FIELD GEOLOGIST: TREPANOWSKI

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR ROD (Ft.)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
S-1	0-2	3			STIFF	GREY BRN	WEATHERED LIMESTONE W/SOME SILT	CL/GC	MOIST
		3							
1		2							
		3	1/2						
2									
S-2	2-4	1		2.5					1055 WL-SB66-1 SAMPLED FOR 4M/FE WPT
		1				RED BRN	CLAY	CL	
3		2							
		3	15/2		STIFF		GREY WEATHERED LIMESTONE MIXED W BROWN SILTY CLAY AND TREE ROOTS (FILL)	GC	MOIST
4									
S-3	4-6	2							
		2							
5		3	0.6/1.0				AUGERED TO 5 FEET AND HIT REFUSAL		BOH at 6'
		4	0.6/8						
6									

REMARKS: ONLY SURFACE SOIL COLLECTED AT SB65. SAMPLES OBTAINED W/ 3" DIA SPLITSPOON, DRIVEN BY A 340 LB HAMMER. BOH = Bottom of Hole

BORING SB66

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* See Legend on Back

AR300620

BORING LOG — NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES — BORING NO: SB67
PROJECT NO.: 200-3LC9 — DATE: 9/12/88 — DRILLER: ~~GEOLOGIST~~ JT 9/12/88 CHAMBE HYDROGE
ELEVATION: — FIELD GEOLOGIST: TREPANOWSKI
WATER LEVEL DATA (Date, Time & Conditions): 9/12/88 1130 SUNNY 75°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
0									WL-SB6700-1 1110 H
S-1		3			STIFF	GREY/BROWN	GREY LIMESTONE GRAVEL	GC	SAMPLED 0-8" FOR AS-FE. MOIST
		5					WITH BROWN CLAY		
1		5					TRACE SILT		
		7	1/2						
2		7							
S-2		4							
		4		3.0					WL-SB6703-1 1155
3		4				BROWN	GRAVELLY CLAY W/	CL	COMPOSITE SAMPLE FROM 3-4.5 FT
		4	1.75/2				SPOTS OF APPARENT RED		FOR FULL-SCAN ANAL
4		2							
S-3		2		4.5	MEDIUM STIFF		FERRIC ARSENATE AND BLACK TREE ROOTS		
		3	0.5/1.0	5.0			CLAYEY GRAVEL	GC	
5		10					REFUSAL AT 5.0 FEET		DRY
							TOTAL DEPTH 5'		

REMARKS: SAMPLES OBTAINED W/A 3" DIA. SPLIT SPOON, DRIVEN BY A 340 LB HAMMER

BORING SB67

PAGE 1 OF 1

* See Legend on Back

AR300621

BORING LOG

NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9
DATE: 9/12/88
BORING NO. SB 68
DRILLER: JOSH CHAMBERS HYDROG
ELEVATION:
FIELD GEOLOGIST: FREPANOWSKI
WATER LEVEL DATA
(Date, Time & Conditions) 9/12/88 1250 SUNNY 80°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
0					HARD	GREY	2" ASPHALT, FOLLOWED	GM	NO SAMPLE
							BY 1'-3 OF GRAVEL		TAKEN DUE
1.3				1.3			FILL		TO BEDROCK CLOSE
							REFUSAL AT 1'-3"		TO SURFACE
							NO SPLIT SPOONS TAKEN		

REMARKS NO SAMPLE TAKEN, NO SPLIT SPOONS TAKEN.

BORING SB

PAGE 1 OF 1

* See Legend on Back

AR300622

BORING LOG — NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES — BORING NO. SB69
PROJECT NO.: 200-3LC9 — DATE: 9/12/88 — DRILLER: JOSH CHAMBERS, HYDROGROUP
ELEVATION: — FIELD GEOLOGIST: T. REPANOWSKI
WATER LEVEL DATA (Date, Time & Conditions): 9/12/88 1400 SUNNY 80°

SAMPLE NO. & TYPE	DEPTH (Ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
S-1	0-2	2	1.5	6"	SOFT	DK BRN	LOAMY TOPSOIL W/ ROOTS	SM	WL-SB6900-SAMPLE COLLECTED 1420 H
		3		1.0	STIFF	REDBRN	CLAYEY SILT	ML	SLIGHTLY MOIST
		4	2	1.5			CLAYEY SILT W/LIMESTONE		FRAGMENTS
		6					CLAYEY SILT		
S-2	2-4	3	1.25						
		3							
		4	2						
		4							
S-3	4-6	4	1.5						JT 9/12/88 WL-SB6903-03 WL-SB6900-1 COLLECTED
		4		5.0					
		6	2			GREY	WEATHERED LIMESTONE		DRY. AUGER
		8					CLAY IN FRACTURES		TO FIVE FEET
S-4	6-8	6	1.5				IS FE-STAINED		ONLY
		7							
		10	2						
		10					8' BOTTOM OF HOLE		BOH

REMARKS: SAMPLES OBTAINED W/ 3" DIA SPLIT SPOON, DRIVEN BY A 340 LB HAMMER, 18" DROP.
FE = IRON

BORING SB69
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* See Legend on Back

AR300623

BORING LOG — NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9
DATE: 9/12/88
BORING NO. SB-70
DRILLER: ~~TREPANOWSKI~~ CHAN JT 9/12/88 HYDROGROUP
ELEVATION:
FIELD GEOLOGIST: TREPANOWSKI
WATER LEVEL DATA (Date, Time & Conditions) 9/12/88 1500 SUNNY 80°

SAMPLE NO. & TYPE	DEPTH (FT.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
S-1	0-2	1	0.75	.5	SOFT	DK BRN	DK BRN LOAMY TOPSOIL W/ROOTS	SM	MOIST WL-SB 7000-1 1500 TA
		4			STIFF	RED BRN	CLAYEY SILT	ML	DRY
		5							
		5	2						
S-2	2-4	6	1.5						1522 WL-SB 7002-1 TA
		6		3.0					FULL SCAN
		9	1.5			GRAY	WEATHERED LIMESTONE		DRY
		30/10					REFUSAL AT 3.5 FT.		BOH. BOTTOM OF
							CLAY IN FRACTURES IS		HOLE 3.5
							FE-STAINED		

REMARKS: SAMPLES COLLECTED WITH A 3 IN. DIA. SPLIT SPOON DRIVEN BY A 340 LB HAMMER, 18" DROP
FE = IRON

BORING SB

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* See Legend on Back

AR300624

BORING LOG

NUS CORPORATION

PROJECT: WHITMOYER LABORATORIES
PROJECT NO.: 200-3LC9 DATE: 9/12/88 BORING NO. SB71
ELEVATION: DRILLER: CHAMBERS HYDROGEO
WATER LEVEL DATA FIELD GEOLOGIST: TREPANOWSKI
(Date, Time & Conditions) 9/12/88 1600 SUNNY 80°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft.)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
S-1	0-2	1	1.25		MEDIUM	BRN	FILL MATERIAL, INC	GC	WL SB7100 1645 TAKEN
		2			STIFF		SHALE FRAGMENTS		FILL
		2					AND RED-STAINED WOOD		
		2	2				FRAGMENTS, W/A		
S-2	2-4	3	0.5				BRN SILT/CLAY MATRIX		JT 9/12/88 WL SB7100 1600 TAKEN
		2							
		2	2						
		2							
S-3	4-6	2	1.5						WL SB7104 1640 TAKEN
		3							
		1							
		2	2						
S-4	6-7.5	3	1	6.5					
		16					FRACTURED LIMESTONE		BOH. Refusal. 6.5
		24	1.5						

REMARKS SAMPLE COLLECTED W/ A 3" Ø SPLIT SPOON, DRIVEN BY A 340 LB HAMMER, 18" FALL.
BOH = Bottom of Hole

JT 9/12/88
BORING SB71
PAGE 1 of 1

* See Legend on Back

AR300625

BORING LOG — **NUS CORPORATION**

PROJECT: Wintmoyer Laboratories — BORING NO.: SB-72
PROJECT NO.: 200-3LC9 — DATE: 9/13/88 — DRILLER: Hydro Group-Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Partly Sunny 73°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	1, 2, 3, 3	1.8 / 2.0	1.6	Loose	Dk. Br.	Organic Rich Top Soil	Pt	WLSB-7200-1 Moist	0 1120
						Lt. Br.	Mottled Silty Clay			
					Stiff	To Yellow				
S-2	2-4	2, 2, 3, 6	2.0 / 2.0	2.8	Stiff	Lt. Tan To Yellow	Silty CLAY, some SAND	CL	Moist	0 1130
S-3	4-6	4, 3, 3, 3	2.0 / 2.0		Soft	Lt. Grey To Yellow Br. Red	SANDY Silty Clay w/ Limestone (Fine gravel) Shale and Quartz fragments	CL	WLSB-7204-1	0 1135
S-4	6-8	2, 2, 2, 1	1.4 / 2.0	6.3	V. Soft	Reddish Brown	SANDY Silty Clay w/ Shale (Fine gravel) fragments	CL	WLSB-7207-1	0 1142
S-5	8-9.5	2, 2, 18	1.0 / 1.5	9.4	V. Soft				Muddy	0 1150
					Soft	Lt. Green to Purple	Sandy Silty Clay w/ Limestone fragments	CL	Refusal @ 9.5'	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop.

BORING SB-72

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* See Legend on Back

AR300626

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9 DATE: 9/13/88
BORING NO.: SB-73
DRILLER: Hydro Group - Josh Chambers
ELEVATION:
FIELD GEOLOGIST: Wayne Downey Jr. Mark
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Warm 80°

SAMPLE NO. & TYPE	DEPTH (ft.)	BLOWS 6" or RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth, ft.)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
S-1	0-2	1, 1, 2, 4	2.0	.8	Soft	Dk Brown	Organic Rich Top Soil	Pt	WLSB-7300-1 Moist	1326
						Lt Brown To Red	Silty Clay	CL		
S-2	2-4	2, 2, 3, 3	2.0	3.7		Lt Gray To Tan	Silty Clay		Dry	1331
S-3	4-6	1, 1, 3, 2	2.0	5.7	M. Stiff		Weathered Coarse Sand w/ Clay + Silt	CL	WLSB7304-1 Moist	1336
S-4	6-8	2, 2, 3, 4	2.0	6.3	M. Stiff To Granular	Lt Tan To yellow and orange	Silty, Clayey Sand. coarse gr. w/ Quartz + Shale fragments	CL	WLSB7306-1 Moist. Sandy Nodules are Stained Orange and Black	1345
S-5	8-9	3, 10	.3, 1.0	9.0					Moist	1351
									Refusal 9.0' Bottom of hole @ 9.0	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340 lb. hammer, 18" drop.

BORING: SB-73

* See Legend on Back

AR300627 C: 1

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-74
PROJECT NO.: 200-3LC9 — DATE: 9/13/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: WAYNE DOWNEY Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, WARM 80° Breezy

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* SOIL DENSITY-CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
0										
S-1	0-2	2	2.0		Loose	DK Br.	Organic Rich Top Soil	Pt	WL SB-7400-1 Dry	0 1445
		3		.9		Lt Grey	Silty Clay			
		4				To Tan				
		4	2.0		M. Stiff		Silty Clay			
2										
S-2	2-4	2	2.0						Dry	0 1450
		3								
		3		3.2	M. Stiff	Lt Red to Brown	Sandy, Silty Clayey	GM		
		5	2.0			To yellow	Gravel Coarse Gr. Sand			
4						Orange				
S-3	4-6	3	2.0				Sub Angular to Rounded		WL SB-7404-1 Dry	0 14
		2					Variegated			
		3		5.3	V. Stiff	Lt Tan to Dk. Greenish Gray	Silty Clay	CL	Dry	
		3	2.0							
6				6.2						
S-4	6-8	1	2.0							0 1505
		2			M. Stiff	Lt Tan yellow	Sandy, Silty Gravelly	SP		
		2				To Reddish	Clay, w/ Sandstone			
		3	2.0			Brown	fragments to 1" dia			
8										
S-5	8-10	4	.3							0 1514
		5								
		4		▽					free water @ 9.3'	
		3	2.0	9.9						
10										
S-6	10-12	2	1.2		V. Stiff	Lt. Brown and yellow	Silty Clay	CL	WL SB-7410-1 Muddy	0 1520
		2								
		3				To Red				
		16	2.0		V. Dense	Brown and Gray	Fissile		Refusal @ 12.0'	
12				12			Limestone		Bottom of hole at 12	

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340 lb. hammer, 18" drop.

BORING SB-74

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* See Legend on Back

AR300628

BORING LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — BORING NO.: SB-75
PROJECT NO.: 200-3LC9 — DATE: 9/13/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Partly Cloudy, Warm 80°

SAMPLE NO. & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	FINE Time
S-1	0-2	2	.5	.6	Loose	Dk.Br.	Organic Rich Top Soil	P:	WLSB-7500-1 Mo.: -	0 1555
		11					Broken Tars, wire		Fill	
		13					Fill			
		10	2.0							
S-2	2-4	4	0				No Recovery Rock			0 11:00
		5								
		7								
		3	2.0	3.8						
S-3	4-6	4	1.2		Soft	Lt.Brown To Reddish Brown	Silty Gravel and Clay Fill		WLSB-7504-1 Dry	0 11:00
		4								
		5		5.5						
		4	2.0							
S-4	6-8	6	2				No Recovery Rock		Probable fill	1615
		6								
		8								
		6	2.0						water @ 8'	
S-5	8-10	4	0				No Recovery Rock			0 1625
		3								
		2								
		1	2.0						Muddy	
S-6	10-12	3	.2			Lt.Br.	No Recovery			0 1635
		2					Mass of wire in Shoe			
		1					Fill w/ Sandstone		Inappropriate to Sample	
		4	2.0							
S-7	12-14	WH	1.0		M.Soft	Lt.Tan	Sandy Silty Clay		WLSB7512-1	0 1640

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340lb. hammer, 18" drop.

BORING SB-75

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* See Legend on Back

AR300629

BORING LOG — **NUS CORPORATION**

PROJECT: Witmoyer Laboratories — BORING NO.: SB-75
PROJECT NO.: 200-3LC9 — DATE: 9/13/88 — DRILLER: Hydro Group - Josh
ELEVATION: — FIELD GEOLOGIST: Wayne Downey Jr. Chambers
WATER LEVEL DATA (Date, Time & Conditions): Partly Sunny, 80° Slight Breeze

SAMPLE NO. & TYPE	DEPTH (Ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth Ft)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU Time
		1					w/ Sandstone and			
	3	Wh					Shale fragments up			
		1	2.0				To 1" dia.			
	14	2								
S-8	14-14.5	12			Broken	Lt Gray	Limestone		Refusal @ 14.5	0 170
									Probably sink	
									hole w/ debris	
	4									
	6									
	8									
	10									
	12									

REMARKS: Samples obtained w/ 3" dia. Split Spoon. Driven by a 340 lb. hammer, 18" drop.

BORING SB-75

PAGE 2 OF 2

* See Legend on Back

AR300630

BORING LOG

NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO.: 200-3LC9
DATE: 10-19-88
BORING NO: SB-76 Lysimeter #1
DRILLER: Tom Santelli
ELEVATION:
FIELD GEOLOGIST: Scott M Kroll
Hydro Group
WATER LEVEL DATA
(Date, Time & Conditions) 10-19-88 overcast

SAMPLE NO & TYPE	DEPTH (ft)	BLOWS 6" OR RQD (%)	SAMPLE RECOVERY SAMPLE LENGTH	LITHOLOGY CHANGE (Depth ft)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
0 Shelby 8650	0-1'		.7				Refer to soil Boring		WL-SB7600-1
1			1.0				Log SB-51 for		FIRST ATTEMPT 4" 80
							Lithology description		Attempted 2'
									HNU=0ppm
2 S-Spoon 1-2 0955	2'-4'	7	2.0						SHELBY CAP MATERIAL
3		4							
		2							
		2	2.0						
4 S-Spoon 3-3 1015	4'-6'	2	.5						
5		1							
		1							
		1	2.0						
6									Augered to 8'
7									
8 Shelby 3-4 1025	8-10'		2.0						
									WL-SB 7608-1
9			-						Attempt 2'
		-	2.0						SHELBY = SLUDGE
10 Shelby 5-5 1055	10-10.5		.5/.5						HNU=0ppm
									WL-SB7610-1
							TOTAL DEPTH 10.5'		Attempted 2'
									SHELBY = LINER MAT.

REMARKS B-80- Mobile Drill, Continuous Split spoon sampling 3" OD
Driven 24" with a 340 pound hammer. Shelbys push with head of Drill
Split spoon taken to verify thickness of sludge zones
Lysimeter with be installed at 9' and will monitor original sludge

Lysimeter #1
BORING SB-76
PAGE 1 of 1

* See Legend on Back

AR300631

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories Site — BORING NO: SB 77 Lysimeter #2

PROJECT NO: 200-3LC9 — DATE: 10-19-88 — DRILLER: JEFF MAYNARD, HYDRO GROUP

ELEVATION — FIELD GEOLOGIST:

WATER LEVEL DATA

Date, Time & Conditions: 10-19-88 65° Partly Cloudy

Sample No. & Type	Depth	Blows per 6 in.	Sample Recovery / Sample Length	Lithology Change (Depth)	Log Density Consistency or Rock Hardness	Color	Material Classification	USCS	Remarks
Shelby S-1 1350	0-1.6'		1.6				Refer to Boring log		WL-SB7700-1
							SB-53 for detailed		Attempted 2'
			1.6				lithographic description		Shelby of cap material
									HNU = 0
									Augered to 4'
Shelby S-2 1410	4-4.8		.8						WL-SB7704-1
			.8						Attempted 2'
									Shelby of Excavated
									Lagoon sludge
S. Spoon S-3 1435	6-8'	3	.6						
		1/2							
			2.0						
S. Spoon S-4 1450	8-10'	W4	2.0						Did not obtain
		W4							Shelby of liner
		1							material due
		1	2.0						to difference in
							TOTAL DEPTH = 10'		liner depth of SB77-SB53
									will obtain Shelby of
									liner at another boring
							-		

REMARKS: B-80 Mobile Drill, Continuous sampling using 3" OD Split spoon driven 24" with a 340 pound hammer. Split spoon taken to verify thickness of sludge zones. Lysimeter # will be install to a depth of 8.8' and will monitor Excavated Lagoon sludge.

* See legend on back

BORING: SB 77 Lys

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AR300632

BORING LOG

NUS CORPORATION

PROJECT Whitmoyer Laboratories
PROJECT NO 200-3LC9
ELEVATION
WATER LEVEL DATA
(Date, Time & Conditions) 10-19-87 OVERCAST

BORING NO SB-78 Lysimeter #3
DATE
DRILLER TOM SANTELLI
FIELD GEOLOGIST Scott M. Krall

	SAMPLE NO & TYPE	DEPTH	BLOWS PER 6"	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (DEPTH)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
0	SHELBY #1 1650	0-2'						Refer to Soil Boring-		WL-SB7800-1
				1.1				Log SB-50 for		Attempted 2' SHELBY
1								Lithology details		HNU = 0 CAP SHELBY
				2.0						
2										AUGERED to 3'
										HNU = 0pp
3	SHELBY #2 1720	3-5'		2.0						WL-SB7803-1
										Attempted 2'
4										SLUDGE SHELBY
				2.0						
5	SHELBY #3 1735	5-5.5		.6 / .6						WL-SB7805-1
								TOTAL DEPTH 5.5'		Attempted 2'
6										LINER SHELBY

REMARKS B-80 Mobile Drill, Continuous split spoon sampling using 3" OD Split Spoon Driven 24" with a 340 pound hammer. Lysimeter #3 will be installed in hole. Bottom of Lysimeter will be 5.5' Lysimeter will monitor Original sludge material SHELBYS PUSHED WITH HEAD OF DRILL

BORING SB-78 Lysimeter #3

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* See legend on back

AR300633

BORING LOG

NUS CORPORATION

PROJECT Whitmoyer Laboratories Site
PROJECT NO 200-3LC9
ELEVATION
WATER LEVEL DATA
Date Time Depth

DATE 10-20-89
FIELD GEOLOGIST Scott M. Krall

BORING NO SB 79 Lysimeter #4
DRILLER Tom Santelli Hydro Geo

10-20-89 35'-48" Cm 0

Sample No. Type	Depth	Blows per 6"	Sample Recovery Sample Length	Lithology Change Description	Soil Density Consistency Force Hardness	Color	Material Classification	USCS	Remarks
0									
S-Spoon S-1 0750	0'-2'	1					Refer to soil boring		
1		1	1.2				log SB 47 for		HNU=0
		2					Lithologic details		
2		2	2.0						
Shelby S-2 0800									Attempt failed 3" Recov
3									at 800psi.
4									
Shelby S-3 0810	4'6'		2.0						WL-SB7904-1
5									Attempted 2'
									SHELBY EXCAVATED SLUDGE HNU=0ppm
6			2.0						
Shelby S-4 0815	6-6.7		.7						WL-SB7906-1
7			.7						Attempted 2' 800psi
							TOTAL DEPTH 7.0		SHELBY LINER MAP
8									Auger to 7.0
									Refusal
9									
10									

REMARKS B-80 Mobile Drill, Continuous Sampling using 3"OD Splitspoon driven 24" with 340 pound hammer. Splitspoon taken to verify sludge zones. Lysimeter will be installed to 5.5' monitoring

BORING SB 79 Lysimeter #4

PAGE 1 OF 1

* See legend on back Excavated sludge material.

AR300634

BORING LOG — NUS CORPORATION

PROJECT Whitmoyer Laboratories — BORING NO SB-80
PROJECT NO 200-3LCS — DATE 11/15/88 — DRILLER HYDROGROUP Bob Rivers
ELEVATION — FIELD GEOLOGIST P. JONES
WATER LEVEL DATA
(Date, Time & Conditions)

SAMPLE NO & TYPE	DEPTH	BLOWS PER 6 IN	SAMPLE RECOVERY & SAMPLE LENGTH	LITHOLOGY CHANGE (DEPTH)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU ppm
	0	5 / 5		0.33	STIFF	Brown	4" Topsoil		SAMPLE # NL-SB-0000-1	
S-1	2	6 / 5	18/24				S.It trace Clay	ML	MOIST	0/140
		11 / 10		3.0						
S-2	4	10 / 18	18/24		VERY STIFF	Brown. yellow-orange	S.It trace clay some fine gravel and sand	ML	MOIST	0/140
		6 / 8								
S-3	6	8 / 5	12/24		VERY STIFF				MOIST	0/140
		6 / 5		7.0			7.0-7.25' GREY CLAY w/ trace CL fragments			
S-4	8	50+	15	7.25		GREY	LIMESTONE		SAMPLE # NL-SB-0006-1	0/152
							Refusal at 7.25'			
S-5	10									

REMARKS RK- MOBILE DRILL B-80, 3" DIA x 2' length split-spoons 300 lb hammer x 30" drop

BORING SB-80

PAGE 1 OF 1

* See legend on back

AR300635

BORING LOG — NUS CORPORATION

PROJECT Whitmoyer Laboratories
PROJECT NO 200-3L09
ELEVATION
WATER LEVEL DATA
Date, Time & Conditions

DATE 11/15/88
FIELD GEOLOGIST P. Jones

BORING NO SB-81
DRILLER HYDRO GROUP
Bob Rivers

SAMPLE NO & TYPE	DEPTH	BLOWS PER 6"	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (DEPTH)	MATERIAL DESCRIPTION* CON. DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU
	0	1 / 3		0.5		Brown	- SILT / TRACE CLAY TOPSOIL	ML	SAMPLE NL-SB8100-1	
S-1	2	3 / 5	18/24		MED STIFF	Yellow-Brown	Silt - Some clay	ML	MOIST	0/15
		4 / 5					trace sand		SAMPLE NL-SB8102-1	
S-2	4	6 / 8	24/24		STIFF		Silt - Some clay	ML	MOIST	0/15
		7 / 8				Reddish brown-orange	trace sand trace gravel			
S-3	6	6 / 8	12/24		STIFF					0/16
		4 / 1							MOIST	
S-4	8	4 / 5	18/24	8.0	MED STIFF				SATURATED	0/16
		50-2"					2" RED CLAY ON TOP LIMESTONE		SAMPLE NL-SB8106-1	
S-5	10								BOH 8.2	
S-6	12									

REMARKS Rig Mobile Drill B-80. 3" DIA x 2' length split-spoon. 300 lb hammer x 30" drop

BORING SB-81

PAGE 1 OF

* See legend on back

AR300636

BORING LOG — NUS CORPORATION

PROJECT: Whitmoyer Laboratories
PROJECT NO: 200-SC9
DATE: 11/16/88
BORING NO: SB-B2
DRILLER: Bob Rivet Hydrogroup
ELEVATION:
FIELD GEOLOGIST: P. Jones
WATER LEVEL DATA
(Date, Time & Conditions)

SAMPLE NO & TYPE	DEPTH	BLOWS PER 6 IN	SAMPLE RECOVERY / SAMPLE LENGTH	LITHOLOGY CHANGE (Depth)	MATERIAL DESCRIPTION* SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS
	0	5 / 4		0.5		Brown	Silt - some clay soft	ML	Sample WL-SB2200-1 moist
S-1	2	4 / 3	18/24		MED STIFF	Reddish Brown	Clay - silty	CL	moist
		6 / 8		3.0	VERY STIFF	↓		↓	Sample WL-SB2202-1
S-2	4	8 / 12	24/24			GREEN	TOP 4" Clay - weathered WEATHERED LIMESTONE		
S-3	6						BOH = 4.0'		
S-4	8								
S-5	10								
S-6	12								
	14								

REMARKS: Rig - Mobile Drill B80 3" OD x 2' Split spoons. 300 lb hammer x 30" drop

BORING: SB-B2

PAGE 1 OF 1

* See legend on back

AR300637

BORING LOG — MUS CORPORATION

PROJECT Whitmoyer Laboratories
PROJECT NO 200-3209
ELEVATION
WATER LEVEL DATA
(Date, Time & Conditions)

DATE 11/16/88
FIELD GEOLOGIST P. Jones

BORING NO SB-83
DRILLER Bob Rivers
Hydrogroup

SAMPLE NO. & TYPE	DEPTH	BLOWS PER 6"	SAMPLE RECOVERY & SAMPLE LENGTH	PROJECT CHANGE (DEPTH)	SOIL DENSITY CONSISTENCY OR ROCK HARDNESS	COLOR	MATERIAL CLASSIFICATION	USCS	REMARKS	HNU
	0	2 / 3		0.6		Brown	Silt - clayey w/ roots	ML	Sample WL-SB83-00-1	0/0
S-1	2	4 / 6	15/24	2.0	Med Stiff	Reddish Brown	Clay - silty	CL	Moist	
		12 / 13-5"		3.25'		Grey	0.25' Clay - weathered limestone		Sample WL-SB83A2-1	0/0.5
S-2	4		9/9			Grey	LIMESTONE			
							BOH = 3.25'			
S-3	6									
S-4	8									

REMARKS Rig - Mobile Drill B-80 3" DIA x 2' length split spoons 300 lb hammer x 30" drop

BORING SB-83

PAGE 1 OF 1

* See Legend on Back

AR300638

APPENDIX B

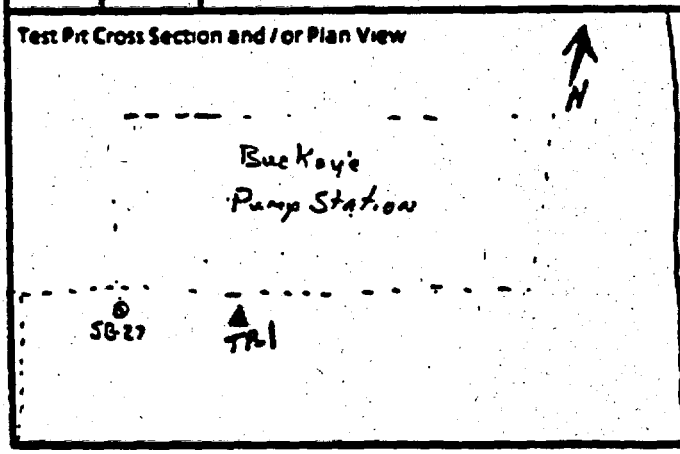
TEST PIT LOGS

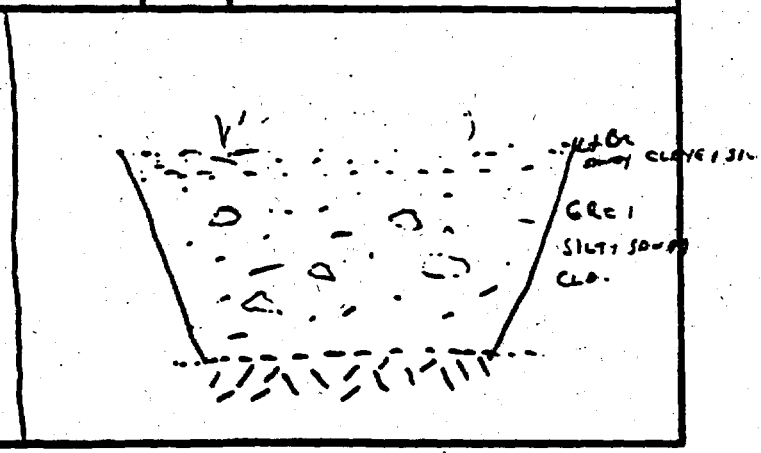
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmeyer Laboratories TEST PIT NO.: TP-1
PROJECT NO.: 200-3LC9 DATE: 09/15/88
LOCATION: 10' South of Buckeye Pumpstation fence + 20' East of SB-27
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes
Hydro Group

DEPTH (ft.)	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0 2.8		Lt. Br. Sandy clayey S.Lt w/	ML	Dry FILL
		Limestone Cobbles to 10" dia	CL	Lg. cobbles .4-2.9'
3.0	2.8	Thin TopSoil Layer		
	3.0	Greytotan Silty, Sandy, Clay on		Dry Clay sample taken
		Limestone Bedrock		FILL 1320
				WLTP0103-1 HMU-0
				Dry
				Total Depth 3.0

Test Pit Cross Section and / or Plan View





REMARKS Sunny Warm 80°
Test Dug with Backhoe

PHOTO LOG None TEST PIT TP-1

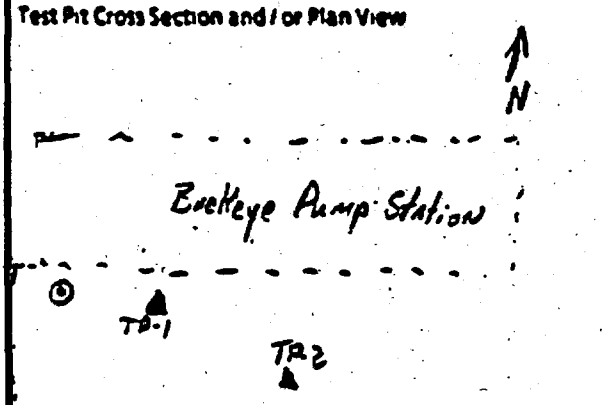
AR300640 PAGE 1 OF 1

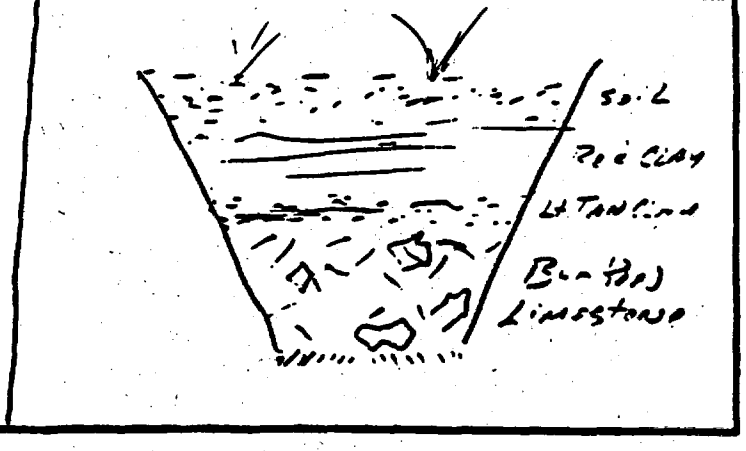
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-2
PROJECT NO.: 200-3LC9 DATE: 09/15/88
LOCATION: 30' South of Buckeye Pump Station fence + 100' from Property Line
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.7	.7	Lt Br. Silty Soil	ML	Dry
.7-1.3	1.3	Reddish Brown Silty Clay w/ Limestone	CL	Mod. St. ff. Dry
		fragments.		FILL
3.1	3.1	Lt Grey to Tan Silty Sandy Clay	CL	Soft, Moist (clay)
		Broken Limestone w/ Lt tan Clay		sample taken @ 1400
		Refusal @ 3.1' BLS.		WL-TP0200-1
				HNU-0
				WL-TP0203-1
				Total Depth 3.1

Test Pit Cross Section and / or Plan View





REMARKS Sunny, Warm, 80°
Test pit Dug w/ Backhoe

PHOTO LOG None

TEST PIT TP-2

AR300641

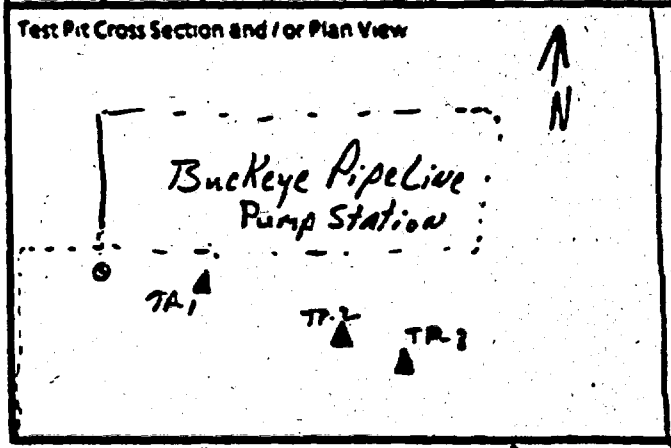
PAGE 01 OF 1

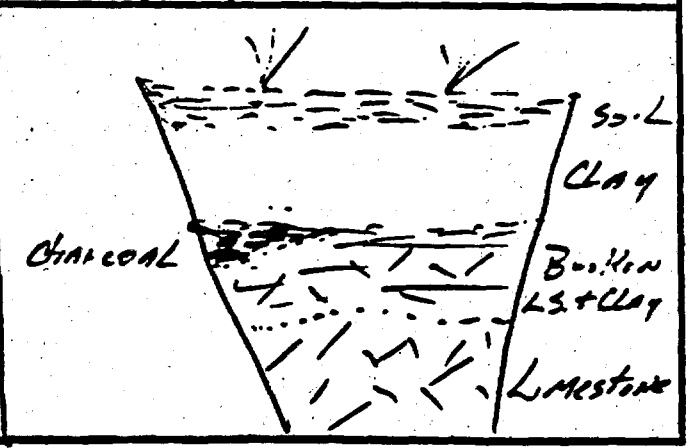
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-3
PROJECT NO.: 200-3LC9 DATE: 09/15/88
LOCATION: 45' South of Buckeye Pump Station fence + 130' from Property Line
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes
Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.6	.6	4B. Silty Top Soil	ML	Dry
.6-3.0		4B. Sandy Silty Clay FILL	CL	
	3.0			WL-TP-0303-1
		Broken Limestone overlain by		Sample taken of
		Black granular material to		Black material @ 1455
		3" thick w/ Lt. Tan To yellow green		2.0' B.L.S. (Below Land Surface)
		silty clay directly on bedrock		Possibly Residual
		interface		Charcoal and Sludge
				ERM Duplicate also
				Taken, FILL Material
				HNU Reading = 0ppm
				WL-TP0302-1
				WL-TP-0001-1T
				Total Depth 3.0

Test Pit Cross Section and / or Plan View





REMARKS Sunny, Warm, 80° 1430 Broke 1" Black ABS water
Test pit dug w/ Backhoe Line ≈ 25 gpm flow

PHOTO LOG None TEST PIT TP-3

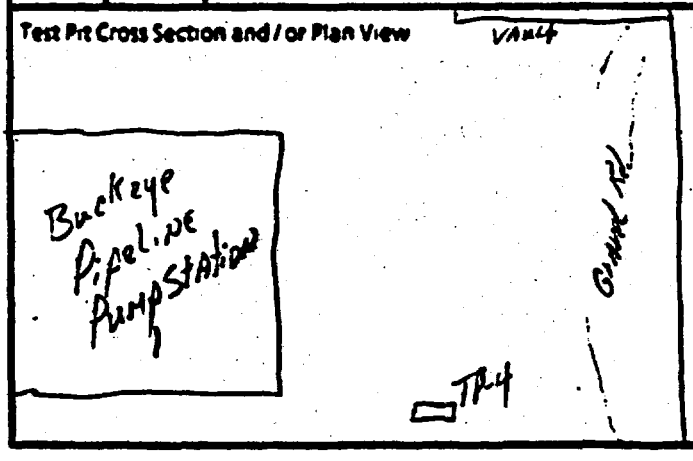
AR300642 PAGE 01 OF 1

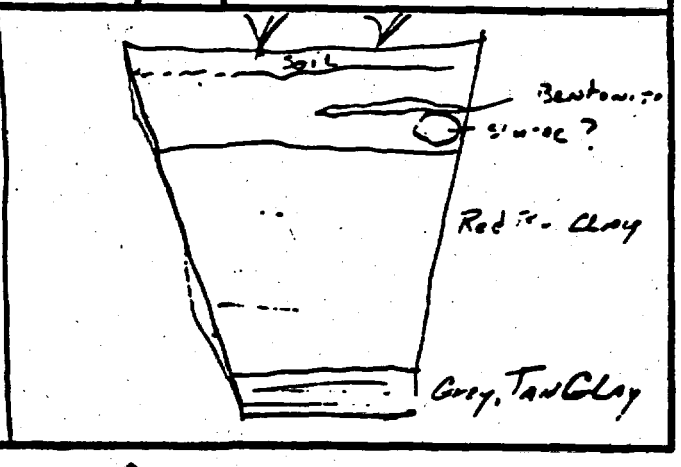
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-4
PROJECT NO.: 20C-3LC9 — DATE: 09/19/88
LOCATION: ≈ 30 feet East of Buckeye Pipeline fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth, FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
				WL-TP0400-1 1150
0-6	6	Lt Brown Silty Top Soil	ML	FILL
6-16		Redish Brown Silty Clay	CL	Mod. Loose
16-30	30	Red orange clay w/ some	CL	V. Dense
		gravel. 1" Thick Bentonite Lense over Sludge		Moist 4" Thick
		Lt Brown to Redish yellow Silty		Lense
		Clay		Poss. sludge sample HNu=0D 1430
	7.0			
		Yellowish Tan Silty, Sandy Clay		Wet HNu=0 1440
	9.0	Free water @ 8.7'		Bottom of hole at 9.0'
		Limestone Rock Refusal		
				WL-TP0403-1 1420
				WL-TP0408-1 1440

Test Pit Cross Section and / or Plan View





REMARKS
Dug w/ Backhoe
Hydraulic oil Leak @ 1215 Resumed @ 1414 ~~pit~~ completed
PHOTO LOG at 1440 — TEST PIT TP-4
Layer of Bentonite pellets placed in bottom of pit.

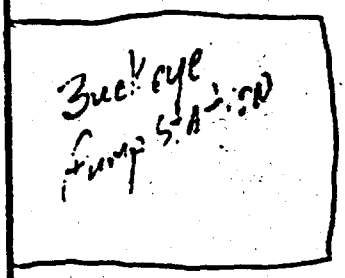
AR300643 — 1 of 1

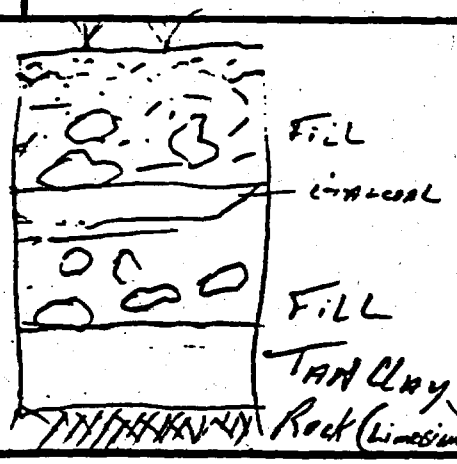
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-5
PROJECT NO.: 200-3LC9 DATE: 09/19/82
LOCATION: ≈ 50' South of S.E. corner of Buckeye pipeline
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-5.0		Lt Tan to Redish Brown Clayey	CL	FILL
		Silt Soil		Dry
		Silty Sandy Clay w/ Large	CL	
		Limestone boulders up to 3' dia.		Charcoal w/ wood sticks
5.0				& brards @ 5'
		Reddish brown clay	CL	Some redish Clay Matrix
				Mixed w/ Lt. Br. Silty clay
7.0	7.0	Lt Tan Sandy Silty Clay w/	CL	LITHOLOGY-1 SAMPLE 1535
		Limestone Fragments		Moist
				Bottom of hole @ 7.0
				Dry

Test Pit Cross Section and / or Plan View





REMARKS Test Pit Dug w/ Backhoe
Bentonite pellets placed in bottom of pit.

PHOTO LOG TEST PIT TP-5

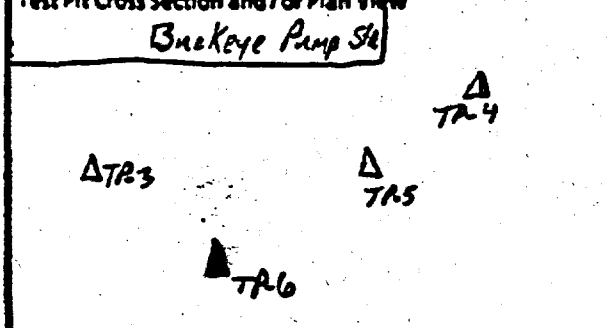
AR300644 PAGE 01 OF 1

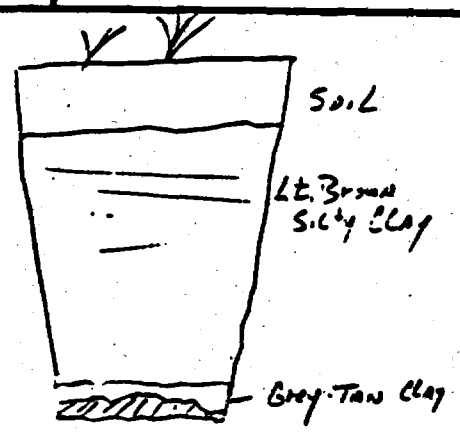
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-6
PROJECT NO.: 200-3LC9 DATE: 09/12/88
LOCATION: ≈ 80' South of Buckeye Pumpstation fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes

DEPTH (FL)	LITHOLOGY CHANGE (Depth/FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-8"	8"	Lt. Br. Silty organic Top Soil	PT	WLTD 06001 Dry 0 Noise
8"-7.3	8"	Lt. Yellowish Brown Silty Clay	CL	Mod Stiff
				Undisturbed Sample
				WL-TP0606-1
7.5'	7.3	Lt. TAN to Grey Sandy Silty Clay	CL	Dry 1620
				Bottom of Pit 7.5'

Test Pit Cross Section and / or Plan View





REMARKS Test Pit Dug w/ Backhoe
Bentonite pellets placed in bottom of hole.

PHOTO LOG

TEST PIT TP-6

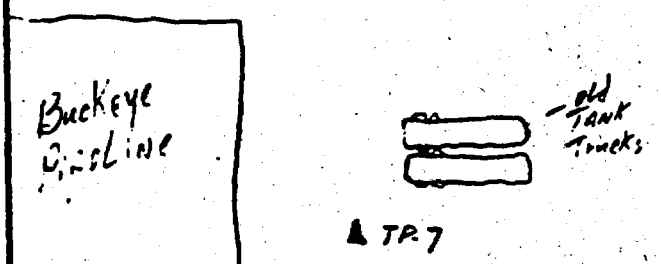
AR300645 PAGE 1 OF 1

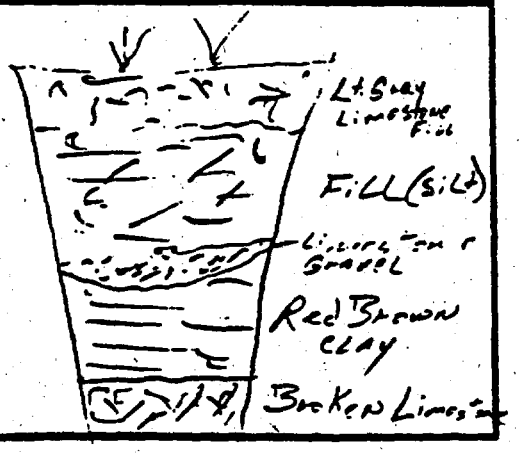
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-7
PROJECT NO.: 200-3LC9 DATE: 09/19/88
LOCATION: ≈ 25' East of Buckeye Pump Station fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ted Hayes
Hydro Group

DEPTH (ft.)	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-3'		Crushed Limestone and		Loose Fill
		Brown Silty Clay fill To	ML	Mod compact, Dry
		3'		
3.0-4.3	3.0	Yellow-TAN Limestone gravel		WLSP 0964 : 1705 Dry
	4.3'	Lense		FILL
		Redish Brown Clay (silty)	CL	↓ Moist
4.3-5.0	5'	LtTAN Sandy, Silty, Limestone	CL	Bottom of Lr @ 5.0'
		Gravel		

Test Pit Cross Section and / or Plan View





REMARKS Test Pit Dug w/ Backhoe
Bentonite pellets placed in bottom of Pit.

PHOTO LOG TEST PIT TP-7

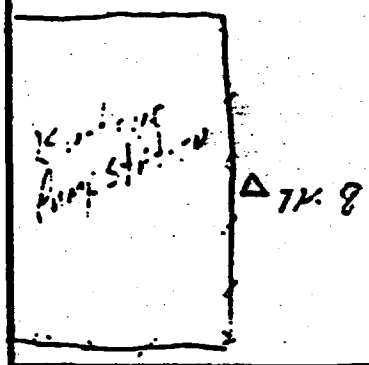
AR300646 PAGE 1 OF 1

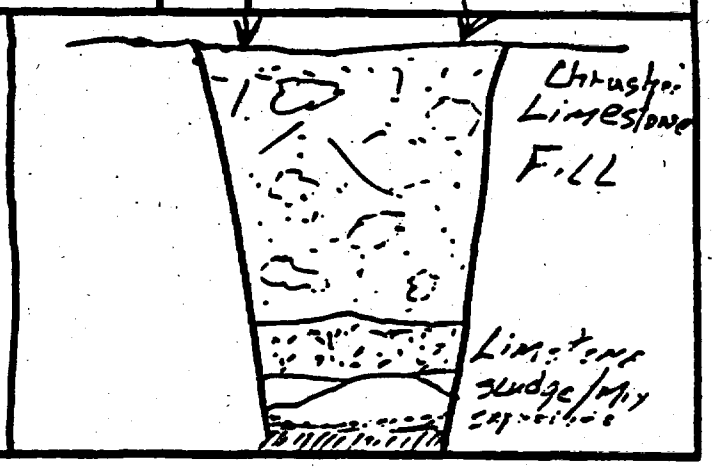
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-8
PROJECT NO.: 200-3LC9 DATE: 9/20/88
LOCATION: 10 feet East of Buckeye pumpstation fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Hydro Group Ron Fullerton

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-3'		Limestone Gravel Fill w/		WLTP08C3-1 Dry 1002
		Silty Soil Mixture w/Asphalt		Fill
		Chunks and limestone Cobbles		
		8" dia Light Brown		
		at 3.0' Layer of Chunks Limestone Gravel		Fill
3.0-3.5	3.0	Mixed Sludge w/Lt. Brown Silty Clay		WLTP08C3-12
	3.5	3.1" Thick Saprolite (Silty Clay)		WLTP08C3-1 Dry Some LS. Frag 1026
4.0		Creamy to Grey on Limestone		Residual c 4.5'
		Bedrock		Bottom of Pit 4.5'

Test Pit Cross Section and / or Plan View





REMARKS Test Pit dug w/ backhoe
Bentonite pellets placed in pit bottom

PHOTO LOG

TEST PIT TP-8

AR300647

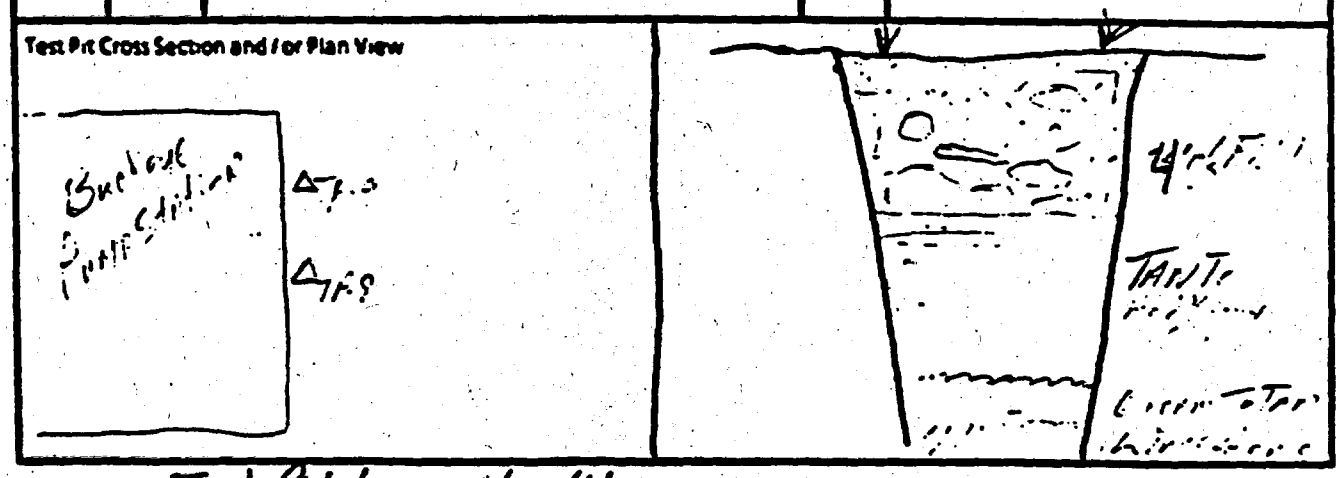
PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-09
PROJECT NO.: 20C-3LC9 DATE: 9/20/88
LOCATION: ≈10' East of Buckeye Pumpstation fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Hydro Group Ron Fullerton

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-3.7		Lt. Brown Silty Clay w/Lime.	CL	
		Stone cobbles, wood, glass, and		Dry
		Legs FILL		Fill
	3.7			
3.7-3.9	3.9	Redish Brown Sludge Mixed w/ soil	ML	
3.9-7.0		Silty Brown Clay,	CL	WLTP09D4-1 0 1128
		Lt. Yellow to Redish Brown Silty Sandy		Dry
	7.0	Saprolite on Limestone Bedrock		Dry
				Refusal @ 7.0'
				Bottom of pit

Test Pit Cross Section and / or Plan View



REMARKS Test pit dug w/ backhoe
Placed Bentonite in excavation but filled @ 11:45

PHOTO LOG

TEST PIT TP-9

AR300648

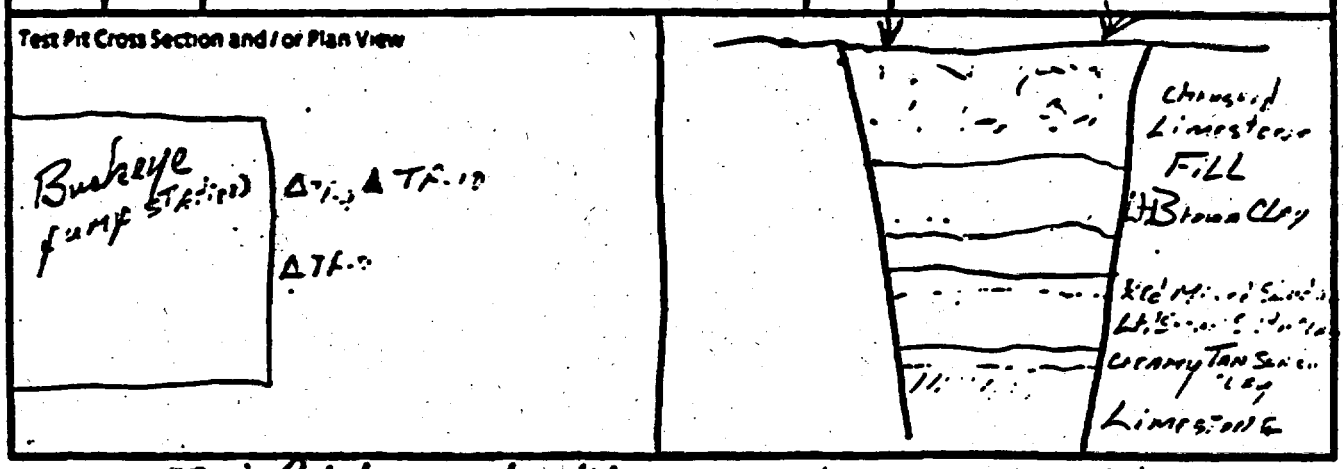
PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-10
PROJECT NO.: 20G-3LC9 — DATE: 9/20/88
LOCATION: ≈25' East of Buckeye Pumpstation fence
FIELD GEOLOGIST: Wayne Downey Jr. — operator: Hydro Group Ron Fullerton

DEPTH (FT.)	LITHOLOGY CHANGE (Depth/Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-1		Lt. Gray to Brown Crushed		WETP-1 @ 1320 Dry
	1.0	Limestone fill w/ sand and		FILL
1-3.4		organic top soil		
		Lt. Br. Silty Clay fill	CL	
		w/ wood fragments, wire etc.		Dry
3.4	3.4	Redish Brown Clay w/ Sludge		WETP-1 @ 3-1 1334
3.6		Mixed w/ Limestone chips		
		Lt. Tan to Red Brown Clay		Dry
5.0		Somewhat sandy		Refusal @ 5.0
		Limestone Bedrock		Bottom of pit

Test Pit Cross Section and / or Plan View



REMARKS Test pit dug w/ backhoe Started @ 1315 Completed @ 1350
2" catenite pellets placed in bottom of pit

PHOTO LOG — TEST PIT TP-10

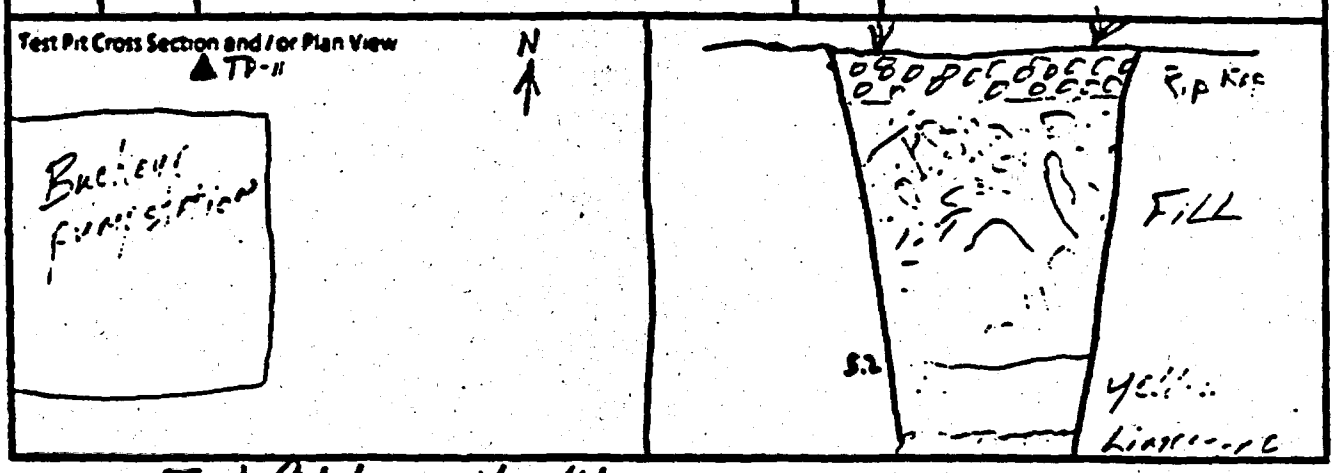
AR300649 — PAGE 011 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-11
PROJECT NO.: 20C-3LC9 DATE: 9/20/88
LOCATION: ≈35' North of Buckeye Pumpstation Fence
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Hydro Group Ron Fullerton

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION (Soil Dehsity / Consistency, Color)	USCS	REMARKS
0-1.0		3-6" Dia Limestone Rip Rap		FILL
	1.0	Loose		Dry
		Lt. yellow-Brown Silty Sandy		
		Clay w/ Limestone pebble/Sandy		
		Chips and some Lg. Limestone		Possible Filled
		Cobbles and rotted logs, wire		Sinkhole
1.0-5.2	5.2	And Metal fragments		Pit collapsed 3 times
		Lt. graybrown [illegible] SANDY Silt		
		w/ Lg. Limestone boulders		
5.2-8.5	8.5'	Lt. yellow clayey silt w/	CL	WHTP11E8-1 Sample 1450
		Limestone fragments		
				Refusal @ 10'
8.5-10.0	10.0			Bottom of Pit

Test Pit Cross Section and / or Plan View



REMARKS Test Pit dug w/ backhoe
Bottom [illegible] based on [illegible]

PHOTO LOG

TEST PIT TP-11

AR300650

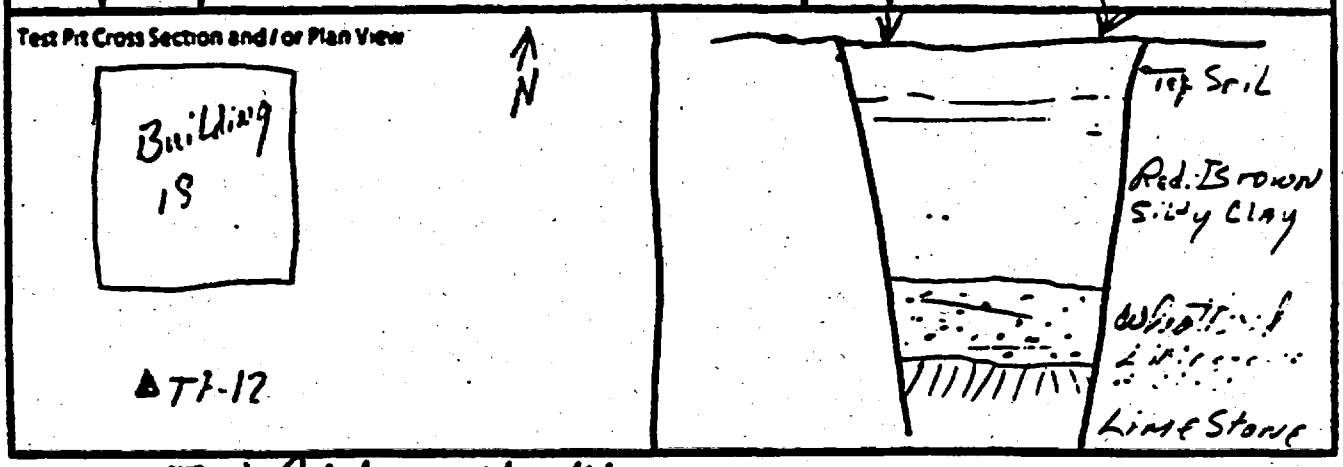
PAGE 0/1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-12
PROJECT NO.: 20C-3LC9 DATE: 9/20/88
LOCATION: ≈ 60' South of Building 18
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Hydro Group Ron Fullerton

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-1.2		Red Brown Organic Rich Top Soil	Pt	Moist 1555
	1.2			
		Red Brown Silty Clay	CL	Med Stiff
				Approx. - boundary based on visual
1.2-4.4	4.4'			Evidence Clay 1617 Moist
	4.6'	Weathered Fractured Limestone w/ Some Tan Sandy Clay		Refusal @ 4.6'
		Limestone Bedrock		

Test Pit Cross Section and/or Plan View



REMARKS Test Pit dug w/ backhoe
Bentonite Pellets placed in bottom of pit

PHOTO LOG

TEST PIT TP-12

AR300651

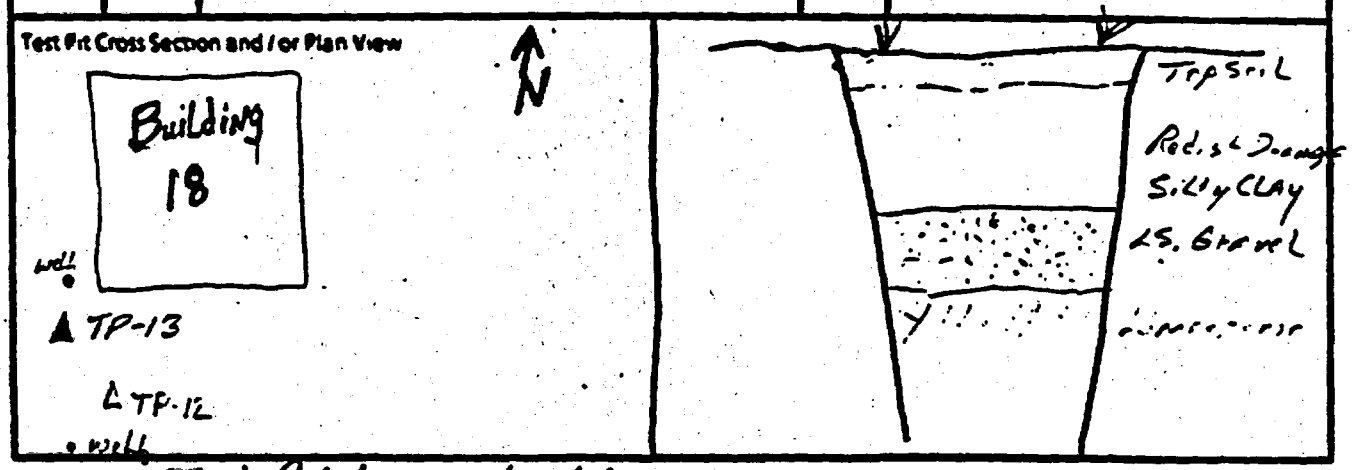
PAGE 1/1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-13
PROJECT NO.: 20C-3LC9 DATE: 9/20/88
LOCATION: ≈ 20' South of Building 18
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Hydro Group Ron Fullerton

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.7	.7	Lt Brown Silty Top Soil	Pt	WLTP1362-1 Disturbed Dry 0 1651
		Redish Brown to orange		Very Dense
.7-2.4	2.4	Silty Clay	CL	Dry
		Lt. Grey to creamy tan sandy		WLTP1362-1 1 Pic
		Silty Clay w/ Limestone		Dense Saprolite
2.4-3.6	3.6	fragments (Gravel)		Extremely moisture
		Broken Limestone		Dry, Highly
				Fractured
				Refusal @ 3.6'

Test Pit Cross Section and / or Plan View



REMARKS Test Pit dug w/ backhoe
Bentonite pellets placed in bottom of pit

PHOTO LOG

TEST PIT TP-13

AR300652

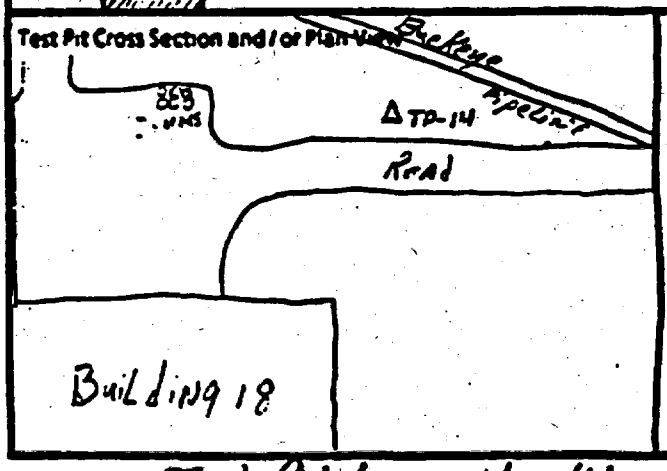
PAGE 01 OF 1

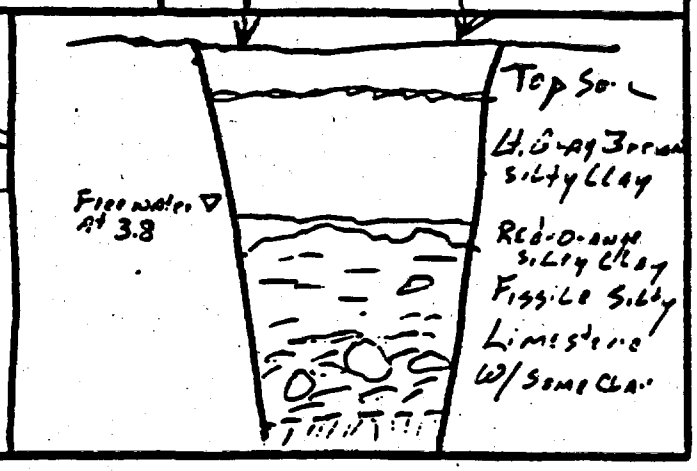
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-14
PROJECT NO.: 206-3LC9 DATE: 9/28/88
LOCATION: ≈100' North of Building 18
FIELD GEOLOGIST: Wayne Downey Jr. operator: Ron Fullerton Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth, FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
		Dk. Brown Top Soil	Pt.	WLTP14CD-1 Dry 0751
0-1.0		Mixed w/ yellow Silty Clay		Filled Area
1.0-3.0		Lt. Tan To Grey Silty, Sandy Clay	CL	Mottled Appearance w/ Boards, Wire, Concrete
				Moist WLTP14C3-1 0835
3.0-4.0		Organic Material (Logs) Black		Decaying Logs, Burnt wood, Red clay
		Lt. Grey-Brown Silty Sandy Clay		
4.0-5.0		Red orange Silty Clay	CL	Free water @ 3.8'
5.0-8.6		Lt Tan to Redish Brown Silty	CL	
		Sandy, Fissile Limestone /		WLTP14D8-1 Moist To Dry 0852
		w/ Some Lt. Tan Shale		
		Limestone is highly fractured		Bottom of Pit @ 8.6'
8.6				

Test Pit Cross Section and / or Plan View





REMARKS Test Pit dug w/ backhoe
Bent

PHOTO LOG Roll 4, # 7 Taken at 0852 Reser to page 95 Book # 1045 TEST PIT TP-14

AR300653

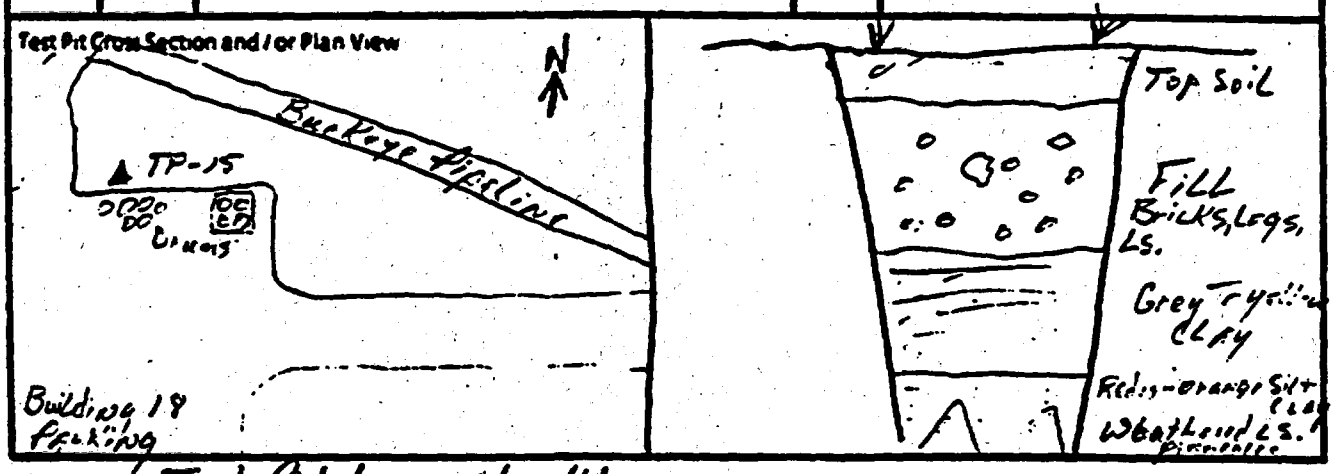
PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-15
PROJECT NO.: 200-3LC9 DATE: 9/28/88
LOCATION: ≈ 1' North of Asphalt pavement in Building 18 Parking Area
FIELD GEOLOGIST: Wayne Downey Jr. Operator:- Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (DEPTH FT.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.7	.7	Lt. Brown Organic Rich Silty Top	Pt	WLTP-1505-1 Disturbed Area 0945
		Soil		Dry Fill
1		Redish orange Silty Clay w/		Mod. Stiff
		Top Soil and Limestone Cobbles		
2		To 8" Dia. Some bricks + Logs		1 Rusted old 5gal. can
				Dry WLTP-1503-1 0 1000
3 34-4.0	3.4	Lt. Grey to Yellowish Sandy,	ML CL	Moist, Disturbed
4	4.0	Silty CLAY w/ Limestone frag-		
4.0-5.0		ments		Musty Swamp odor
5	5.0	Redish-orange silty CLAY		from 3-5' M. Stiff
5.0-6.5		Lt. TAN TO GRAY SANDY CLAY		Moist
		Pinnacle Limestone bedrock		
6.5				WLTP-1505-1 0 1030 Moist
				Bottom of Pit 6.5'

Test Pit Cross Section and / or Plan View



REMARKS Test Pit dug w/ backhoe
Bentonite Dust placed in bottom of Pit.

PHOTO LOG

TEST PIT TP-15

AR300654

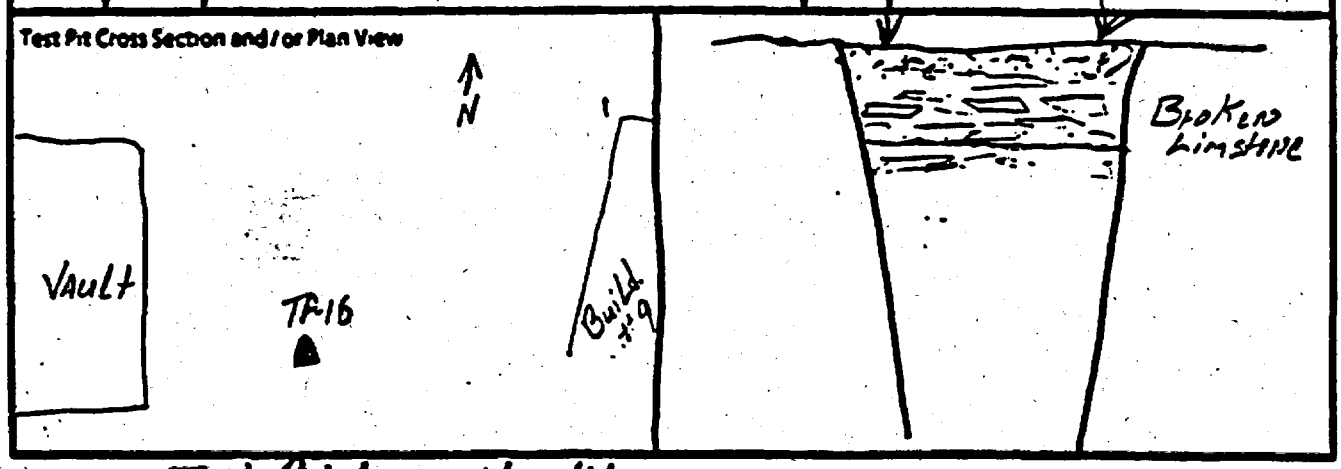
PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-16
PROJECT NO.: 200-3LC9 DATE: 9/26/88
LOCATION: 200' East of Vault
FIELD GEOLOGIST: Wayne Downey Jr. operator: Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, FT.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
1.4'	.6	Crushed Limestone Fill		Reddish Gravel 11/5
		Red-Orange Clay on Highly		Dry
		Fractured, Blocky Limestone		Im Appropriate for
				Sampling, (Too Many
				Rocks)
				Bottom of Pit 1.4'

Test Pit Cross Section and/or Plan View



REMARKS Test Pit dug w/ backhoe
Bentonite dust placed in bottom of pit
Too Many Rocks for sampling

PHOTO LOG

TEST PIT TP-16

AR300655

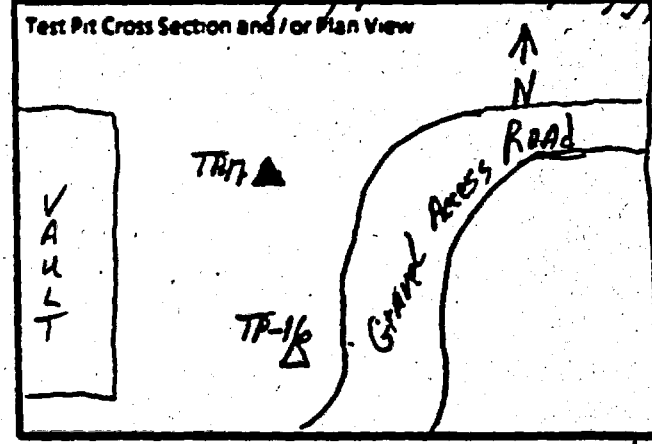
PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-17
PROJECT NO.: 20C-3LC9 DATE: 09/21/88
LOCATION: ≈ 50' East of Vault
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton and Ted Hayes Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.8	.8	Crushed Limestone Gravel Fill		WL-TP1700-1 Dry 1140
				FILL
		Lt. Yellowish-tan to Orange		
		Silty clay w/ Limestone, Shale		
.8-2.6	2.6	wire and Rotted wood		
		Void Area w/ Concrete, Soil,		Dry
2.6-3.6	3.6	Boards and Metal sheeting		WL-TP1702-1 2.6-3.6 Dry 1205
		DK. Brown to Grey, Burnt Timber		Musty Clay odor
		Lg.		Moist
	5.0	Voide 5.0'		old Rusted drums 5.0' BLS
		Buried 55 gal. Steel Drums		down to 7.0' Strong
	6.0	w/ Black Oozing tar		Creosote odor, Moist
		Redish Brown Silty Clay w/		WL-TP1707-1
	7.-	Black Tar Layer		WL-TP1707-1 Moist 1450
	8.6	Highly fractured flaggy limestone		No Tar Apparent to be on bedrock

Test Pit Cross Section and / or Plan View



LS. Gravel Fill
Fill (Clay + Soil)
Drums
Clay w/ Tar
Clay + Broken LS.
Limestone

REMARKS
Bentonite placed in bottom of pit. | Level B from 5' to 8.6 | Stopped @ 1220 Resumed at 1406 Finished Backfill 1605

PHOTO LOG #8 Test Pit w/ buried drum See Log book
#9 55 gal Steel Drums 1045 page 95
#10 Leaking tar in backhoe bucket
#11 Drum in situ profile

TEST PIT TP17
PAGE 0/1 OF 1

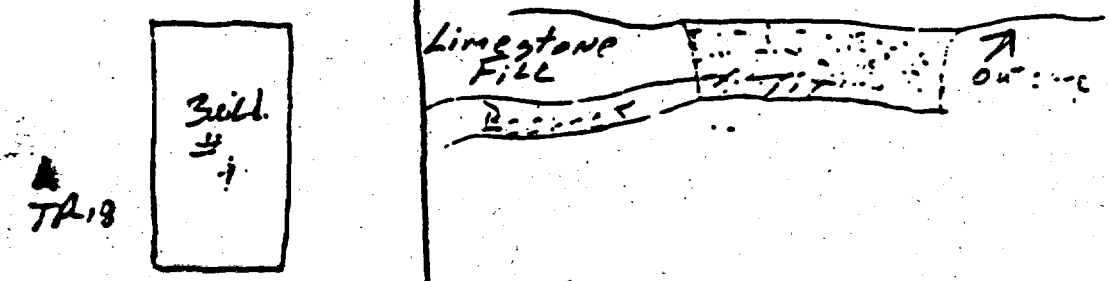
AR300666

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-13
PROJECT NO.: 200-3LC9 DATE: 09/22/88
LOCATION: ~ 25 feet west of Bu[illegible] = 9
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Fred Fullerton Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth/FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
[illegible]	5	[illegible] Crushed Limestone Fill		Dry Fill
		[illegible] Silt [illegible] 0.5'		Refusal @ 10'
		Highly fractures [illegible]		INCIP-1800-1 0816
		silty Limestone		Bottom of pit 10'

Test Pit Cross Section and / or Plan View



REMARKS Test pit dug w/ Backhoe
Bentonite placed @ bottom of pit
* No HNU, Instrument Malfunction

PHOTO LOG

TEST PIT TP-13

AR300657

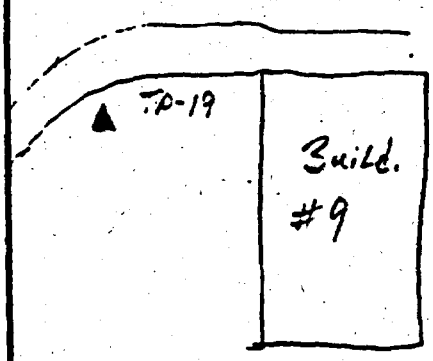
PAGE 1 OF 1

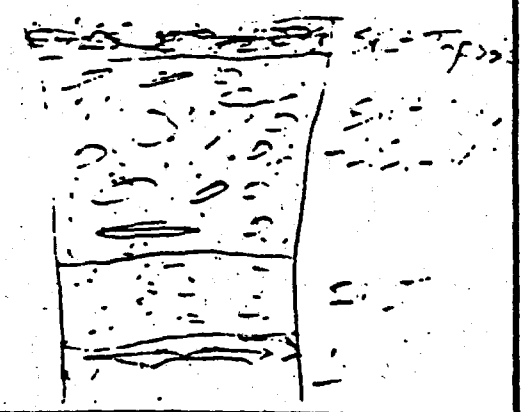
TEST PIT LOG | **NUS CORPORATION**

PROJECT: Whitmayer Laboratories TEST PIT NO.: TP-19
PROJECT NO: 20C-3LC9 DATE: 09/22/88
LOCATION: [illegible]
FIELD GEOLOGIST: Wayne Downey Jr. Operator: [illegible]

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
		Lt Grey To Brown Sandy, Silty	SM	W-TP19 OC-1 0856
		Top Soil		
		Limestone Fill w/ Lt tan		
		Brown Silty Clay [illegible]		
	3.1			
		Lt Brown Silty w/ some [illegible]	SM	W-TP19 [illegible] 0910
		and Limestone [illegible]		[illegible] 4.1'
		Limestone [illegible] Highly		[illegible]
		fractured flaggy		Bottom of pit 4.1

Test Pit Cross Section and / or Plan View





REMARKS Dug pit w/ Backhoe
* No HNU readings, Instrument malfunction

PHOTO LOG

TEST PIT TP-19

AR300658

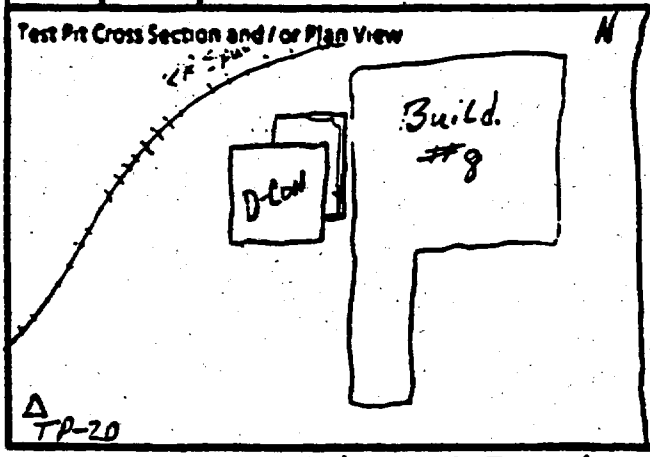
PAGE 011 OF 1

TEST PIT LOG | **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-20
PROJECT NO.: 200-3LC9 DATE: 09/22/88
LOCATION: 410' West of Building #2 and 25' from Railroad spur
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Fred Fullerton
Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth, FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.4	.4	V/D: Brown-tan Fine Sand		WLTP-2003 0955
		Loamy Top Soil and Gravel		Dry, Granular, Loose
.4-1.6	1.2	Gray/Black		Appears FILL
		Red-Brown to Orange Silty	CL	
		Sandy Clay FILL		Dry
1.6-3.0	3.0			Refusal @ 3.2'
		Limestone Cobbles		WLTP 2002-1 1005
				Dry

Test Pit Cross Section and / or Plan View



REMARKS Test pit dug w/ Backhoe Level B Started @ 0945
No HNU, Instrument malfunction Completed @ 1030

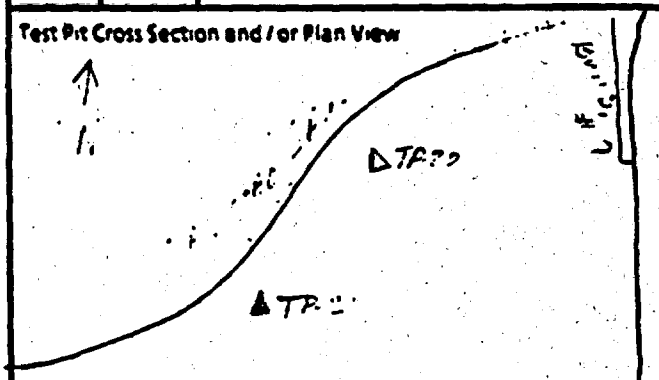
PHOTO LOG #12 1005 Roll #4 Sampling Activity TEST PIT TP-20

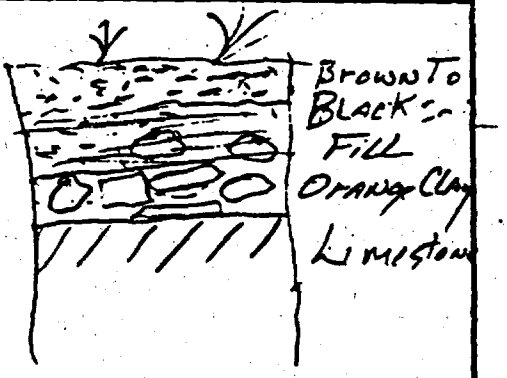
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-21
PROJECT NO: 200-3LC9 DATE: 09/22/88
LOCATION: ~25' Sou[illegible]
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Fullerton Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.4	.4	Lt. Brown to Black Silty	Pt	WXTP21 00-1 *
		Topsoil		Fill to approx.
.4-1.2	1.2	Red-Orange Silty, Sandy Clay	CL	1.2'
1.2-1.8	1.8	Broken Limestone Cobbles		
	2.0	To 10" dia. Some tan to Cream		WXTP21 02-1 Dry * 1043
		Sandy Clay Rind at Bedrock		
		Contact		Refusal @ 2.0' Bottom of pit

Test Pit Cross Section and / or Plan View





REMARKS Test pit dug w/Backhoe Level B 2N air @ 1030 @ 1043
* No HNU, Instrument malfunction

PHOTO LOG

TEST PIT TP-21

AR300660

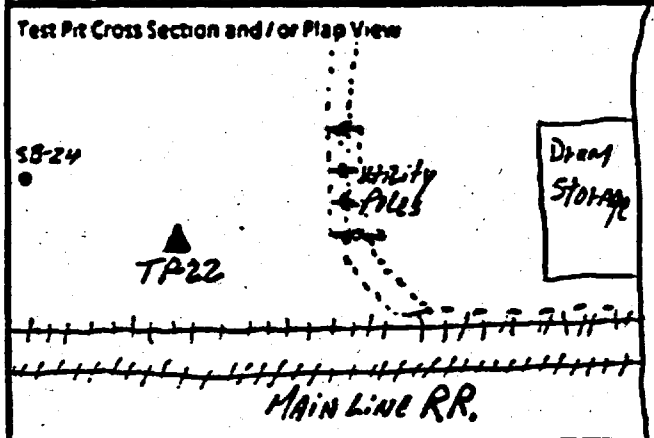
PAGE 1 OF 1

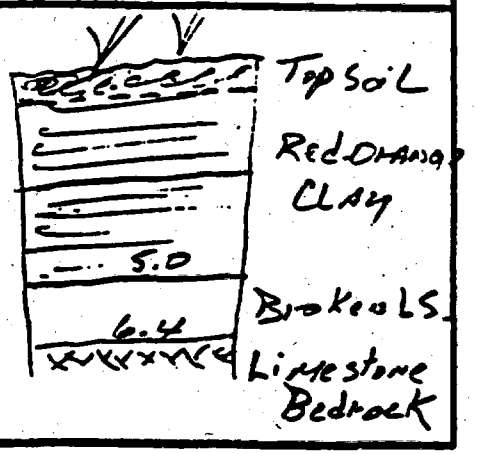
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-22
PROJECT NO.: 20C-3LC9 — DATE: 09/22/88
LOCATION: ≈50 feet North of Rail Line
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-1.0		Lt. Brown to Black Silty	Pt	WLTP2205-1 Dry 1109
	1.0	Topsoil		
		Redish-Orange Silty Clay	CL	Appears to be undisturbed
		Med. Stiff.		
		Sample @ 3.0'		WLTP2205-1 Dry 1123
				Refusal @ 6.4'
	5.0			Bottom of pit
		Lt. Tan to Cream Sandy Clay		Dry
		Mixed w/ Limestone Cobbles		V. fractured
6.4		To 8" dia.		WL-TP2206-1
		Limestone Bedrock		Dry

Test Pit Cross Section and / or Plan View





REMARKS: Test Pit Dug w/ Backhoe — Level B on Air @ 1105 off Air 1130.
* No HNu measurements taken

PHOTO LOG

TEST PIT TP-22

AR300661

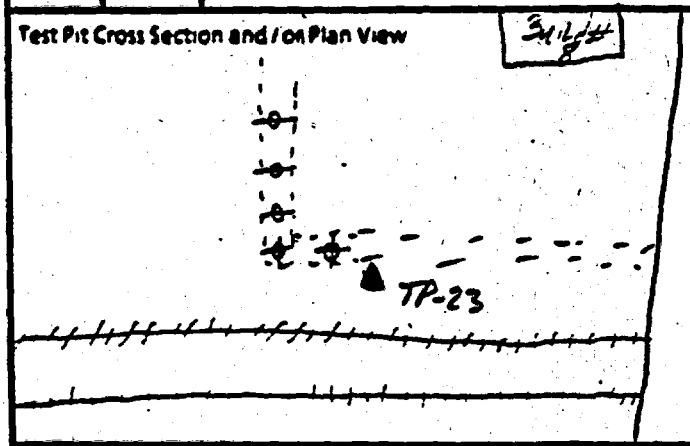
PAGE 1 OF 1

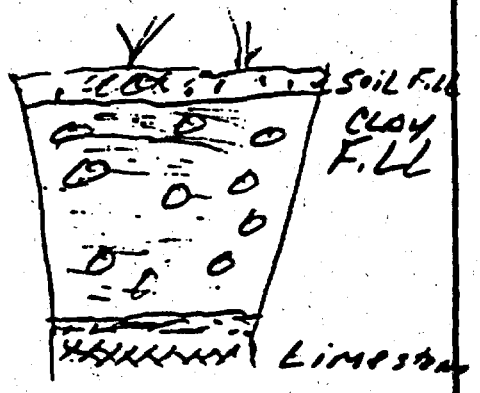
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-23
PROJECT NO.: 200-3LC9 DATE: 09/22/88
LOCATION: ≈130 feet South West of Building #8
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton HydroGroup

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-1.4		DK Brown to black Sandy,		WLTP-2300-1 Dry 1943*
	1.4	Silt w/ Fire bricks, Limestone		
		Fragments and Redish-Orange		
		Silty Clay FILL		
				Clay is damp
				Dry
				WLTP-2305-1 1400
1.4-5.6	5.6			Refusal @ 5.6'
		Broken Limestone		Bottom of Pit

Test Pit Cross Section and / or Plan View





REMARKS * No HNU, Instrument Malfunction Level B on Air 1336
Test Pit dug w/ Backhoe off Air 14

PHOTO LOG TEST PIT TP-23

AR300662

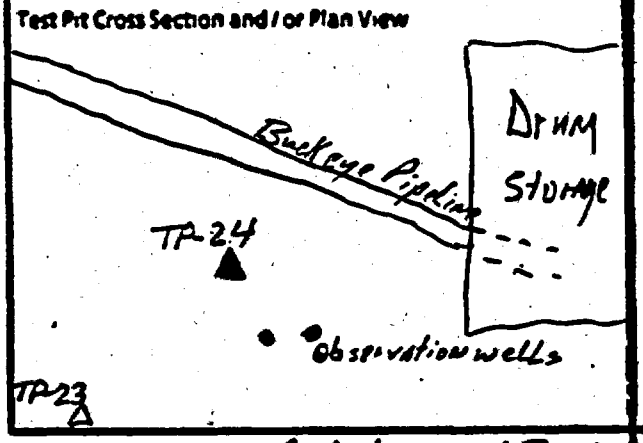
PAGE 1 OF 1

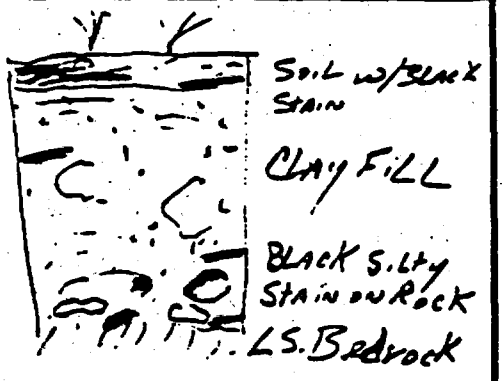
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-24
PROJECT NO.: 200-3LC9 — DATE: 09/22/88
LOCATION: ≈ 90' South of Building #8
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-6'		Black Staining in Silty Soil		WLTP 2401-1 Dry ≈ 1455
		FILL		
	0	Reddish-Brown, Silty, Clay	CL	
		w/ Limestone fragments		WLTP 2403-1 Dry ≈ 1520
	0	Drum remnants (small pieces)		Fish Oil odor
	3.3	Black Yuggy Staining in		Refusal @ 3.3'
		Limestone Bedrock		Limestone appears to
				have been dissolved
				where in contact w/ Black
				material

Test Pit Cross Section and / or Plan View





REMARKS: Test Pit dug w/ Backhoe — Level B — On Air 1453
* No HNU, instrument malfunction — Changed bottle ≈ 1459
Off Air 1527

PHOTO LOG — TEST PIT TP-24

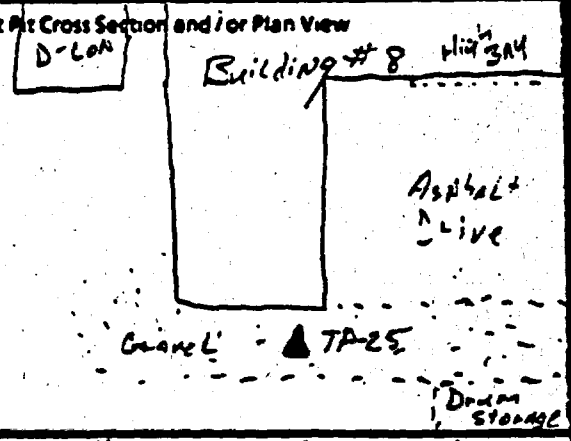
AR300663 — PAGE 1 OF 1

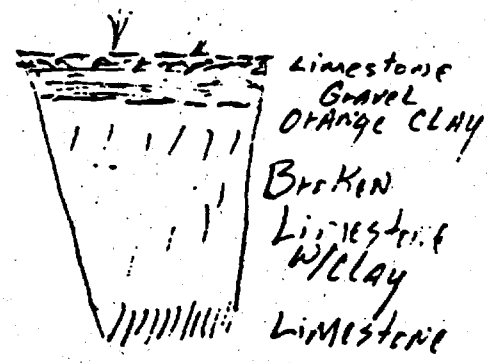
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-25
PROJECT NO.: 200-3L69 — DATE: 09/22/88
LOCATION: ≈ 20 feet South of Building #8
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.7	.7	Crushed Limestone, silty		FILL w/TP-25 @ 1616
		orange clay and Top Soil Mix		Dry
.7-1.3	1.3	Red-Orange Silty Clay	CL	Moder. Stiff Dry
				No Staining or odor
		Broken Limestone w/ Silty Clay		
		infilling		Dry
1.3-3.5	3.5	Highly Fractured Flaggy		Refusal @ 3.5'
		Limestone w/ some Clay		Bottom of pit
		infilling, dipping steeply to		
		the south		

Test Pit Cross Section and/or Plan View





REMARKS* No HNU Instrument Malfunction — Level B — on Air 1610
Test Pit Dug w/ Backhoe — off Air 1645
Replaced Tank 1647
Begin Pit - Dig 4 Seno

PHOTO LOG — TEST PIT TP-25

AR300664

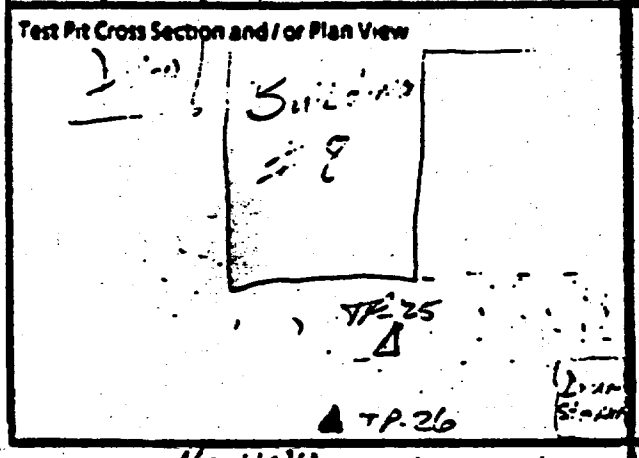
PAGE 011 OF 1

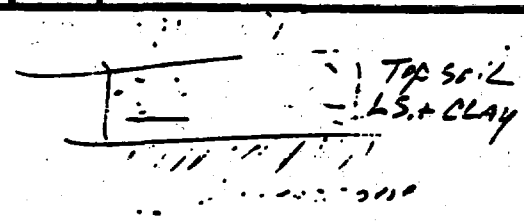
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-26
PROJECT NO.: 200-3LC9 DATE: 09/22/88
LOCATION: ≈ 35 south of Building #8
FIELD GEOLOGIST: Wayne Downey Jr. Director: Ron Fullerton
Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth,FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.8	?	Limestone + Silty Clay w/ Some top Soil Mix	ML TOPL	[illegible]
		Limestone Bedrock		Refusal @ .8 feet
				Bottom of Pit

Test Pit Cross Section and / or Plan View





REMARKS No HNU instrument malfunction
test pit dug w/ BACKHOE Level B after 1700

PHOTO LOG

TEST PIT TP-26

AR300665

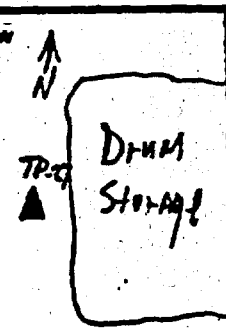
PAGE 011 OF 1

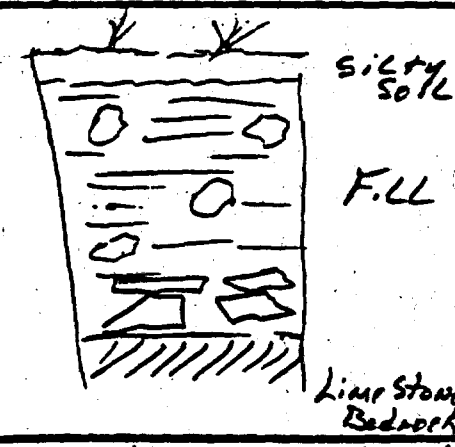
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-27
PROJECT NO.: 200-3LC9 DATE: 09/23/88
LOCATION: ≈20 feet West of the Drum Storage Area
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth,FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
	0-6"	Lt. Brown Silty Top Soil	PT	Dry
		Redish-Orange Silty Clay	CL	Moist, Mod. Stiff
		Fill to 3.0'		
		w/ Limestone Cobbles to 8"		No appreciable stain on soil
	3.0			
				0-HNU
		Broken Limestone w/		
		Silty Clay		
				0-HNU
	6.8	Limestone bedrock		

Test Pit Cross Section and / or Plan View





REMARKS Test Pit Dug w/ Backhoe Observation pit only, No Samples

PHOTO LOG TEST PIT TP-27

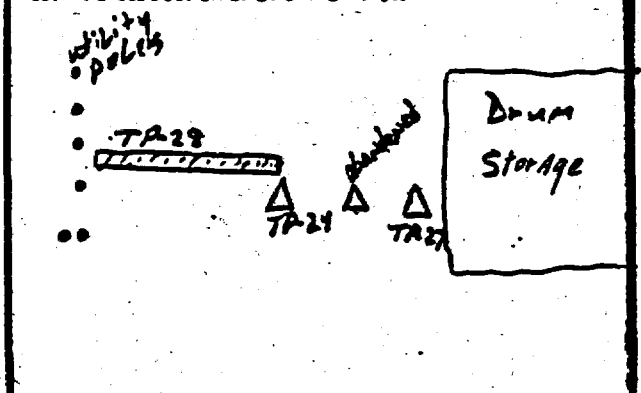
AR300666 PAGE 1 OF 1

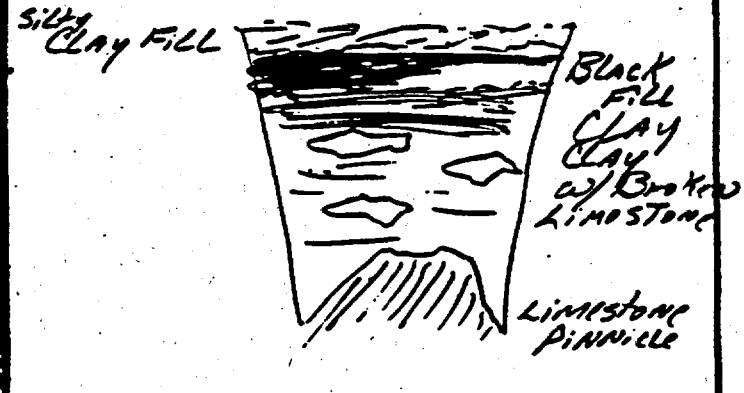
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-28
PROJECT NO.: 200-3LC9 DATE: 09/23/88
LOCATION: ≈ 50' west of Drum Storage Area
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, FT.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-6	6	Lt. Brown Clay w Black silty Zone up to 6" thick, FILL material		Dry 0 HNu
		Silty Redish-Brown clay	CL	Moist, Med. Stiff
6-3.5	3.5	Limestone Bedrock variable depth from 2.0-4.0 feet BLS		0 HNu

Test Pit Cross Section and / or Plan View





REMARKS Test Trench dug w/ backhoe. Trench is approx. 25 feet long. Observation pit only, No Samples.

PHOTO LOG #13 - 0900 Test pit profile depicting surficial stain layer
Frame #14 0901 Trench showing bedrock pinnacles
#15 0902 Bedrock Vug stai... Light green crystals
TEST PIT TP28
PAGE 011 OF 1

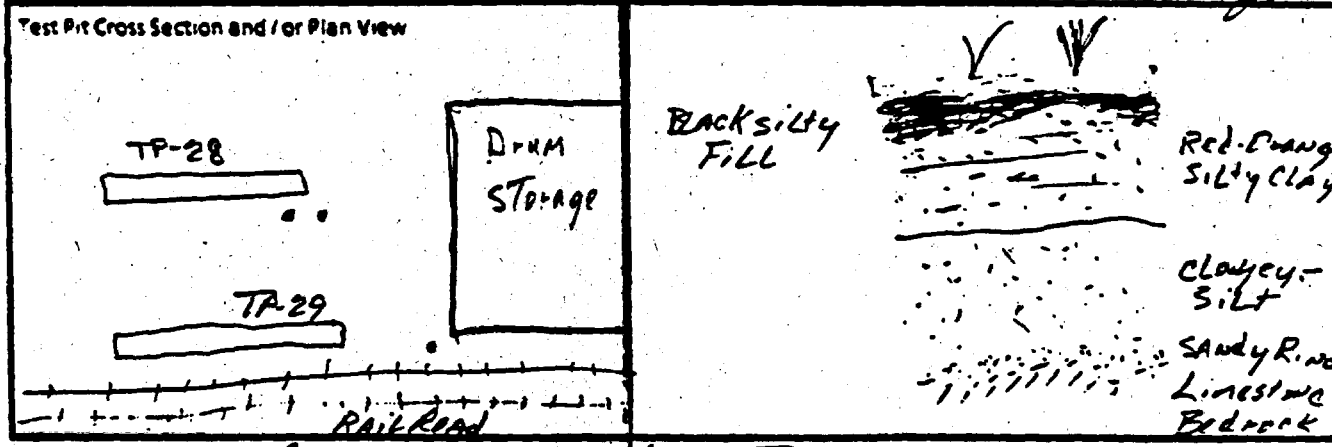
AR300667

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Quinit Moyer Laboratories — TEST PIT NO.: TP-29
PROJECT NO.: 200-3LC9 — DATE: 9/23/88
LOCATION: ≈ 40 feet North of Railroad
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-.4	.4	Lt. Brown Silty Clayey Soil	CL	OVM
.4-1.2	1.2	Black Granular Silty Fill		Dry
		Reddish-Orange Silty Clay	CL	
1.2-2.3	2.3			
		Lt. Yellow to orange Clayey Sandy Silt		Moist OVM
				Damp
		Fractured Limestone w/		OVM
2.3-6.5		Sandy Silt Rind		Refusal @ 6.5'
		Limestone Bedrock		Bottom of pit
				Started Backfilling 955

Test Pit Cross Section and / or Plan View



REMARKS: Test Pit dug w/ Backhoe. Trench is approx. 25 feet long. Finished Backfilling @ 1000
Observation Pit

PHOTO LOG

TEST PIT TP-29

AR300668

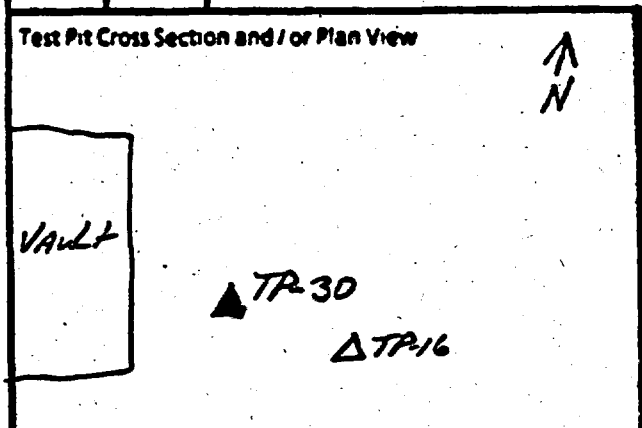
PAGE 1 OF 1

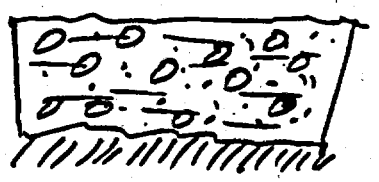
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-30
PROJECT NO.: 200-3LC9 DATE: 9/23/88
LOCATION: ≈ 25 feet Northwest of test pit #16
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (FL)	LITHOLOGY CHANGE (Depth, FL)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-2.0	0	Limestone Gravel fill w/ Some Silt + Clay Mix		Dry 0=HNU
	2.0	Limestone Bedrock (Flaggy)		No Soil stain evident
				Bottom of Pit

Test Pit Cross Section and / or Plan View





REMARKS Test pit dug w/ backhoe, No Samples, Observation pit only

PHOTO LOG TEST PIT TP-30

PAGE 1 OF 1

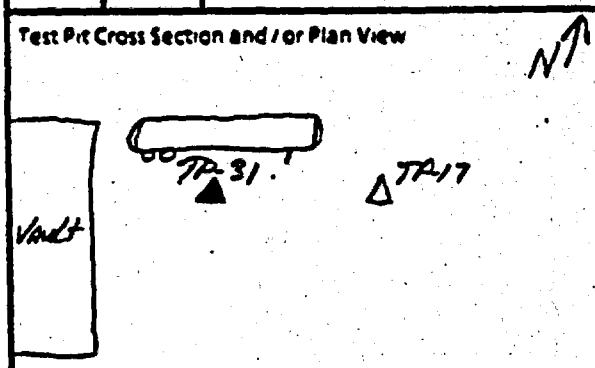
AR300669

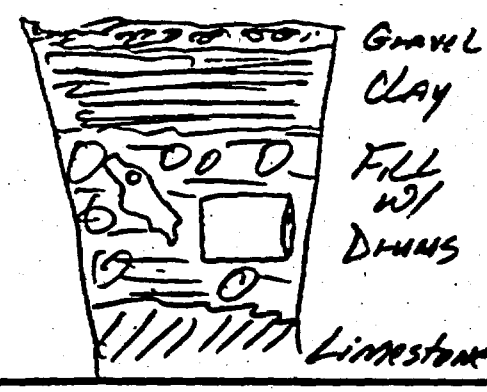
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-31
PROJECT NO: 2C0-3LC9 DATE: 09/23/88
LOCATION: ≈ 30 feet from Vault and 15 feet from TP-17
FIELD GEOLOGIST: Wayne Downey Jr. Operator: Ron Fullerton Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0-1.0	1.0	Limestone Gravel		
		Fill		Dry
		Bricks, Concrete, Logs.		0-HNU
		Clay and Limestone		
		Black Granular Material		Moist
		w/Some tar		
1.0-4.0	4.0	Drums + Black Granular		Fill 0-HNU
		Fill		Dry
4.0-5.5	5.5			Limestone bedrock
		Limestone Bedrock		is highly fractured

Test Pit Cross Section and / or Plan View





REMARKS Test pit dug w/ backhoe, No Samples, Observation pit only

PHOTO LOG

TEST PIT TP-31

AR300670 PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-32

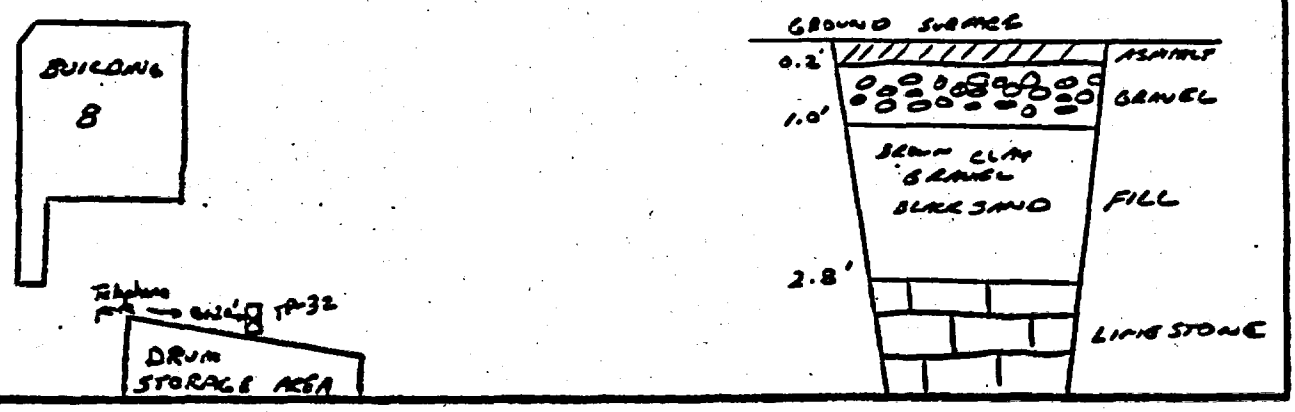
PROJECT NO.: 200-3409 — DATE: 9/26/88

LOCATION:

FIELD GEOLOGIST: P. JONES — OPERATOR - RON FULLERTON, Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2	Asphalt		LEVEL B PROTECTION
1.0	1.0	GRAVEL		
1.5		FILL - BROWN CLAY, GRAVEL		SAMPLE: WL-TP32.01-1
2.0		BLACK SAND - WET (SATURATED)		AT 1' depth 1050
2.5				
3.0	2.8	RESIDUAL - LIMESTONE BEDROCK AT 2.8'		WATER IN TEST PIT
3.5				INITIALLY, DRAINED OUT
4.0		TOTAL DEPTH = 2.8'		

Test Pit Cross Section and / or Plan View



REMARKS: TEST PIT DUG w/ BACKHOE

PHOTO LOG — TEST PIT TP-32

AR300067 PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Winthrop Laboratories TEST PIT NO.: TP-33

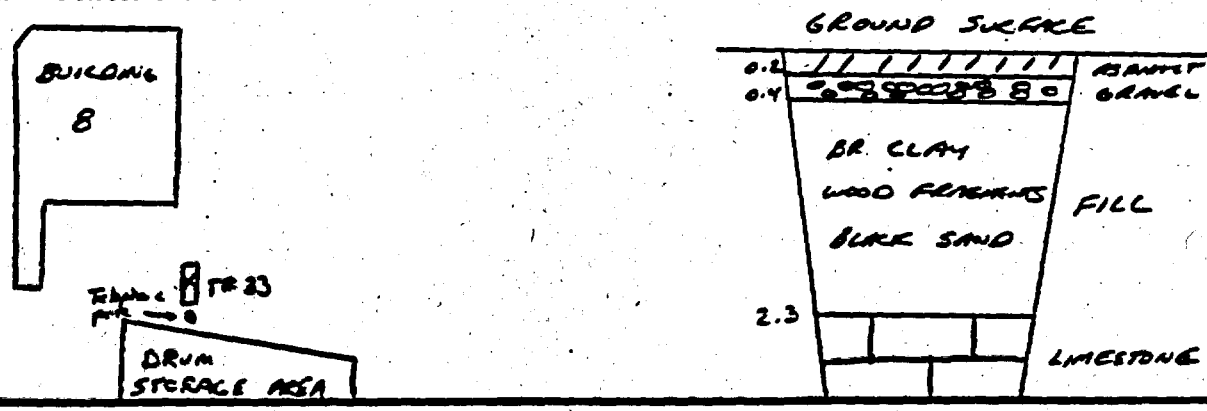
PROJECT NO: 200-3LC9 DATE: 9/26/88

LOCATION:

FIELD GEOLOGIST: P. JONES OPERATOR - RON FULLERTON HydroGroup

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2 / 0.4	ASPHALT / GRAVEL		LEVEL B PROTECTION
1.0		FILL - BR. CLAY - WOOD FRAGMENTS		
1.5		BLACK SAND - MOIST		SAMPLE: WL-TP3301-1'
2.0				AT 1' depth 1158
2.5	2.3	REFUSAL - LIMESTONE BEDROCK		
3.0				
3.5		TOTAL DEPTH - 2.3'		
4.0				

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG w/ BACKHOE

PHOTO LOG TEST PIT TP-33

AR300672 PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Wintrop Laboratories TEST PIT NO.: TP-34

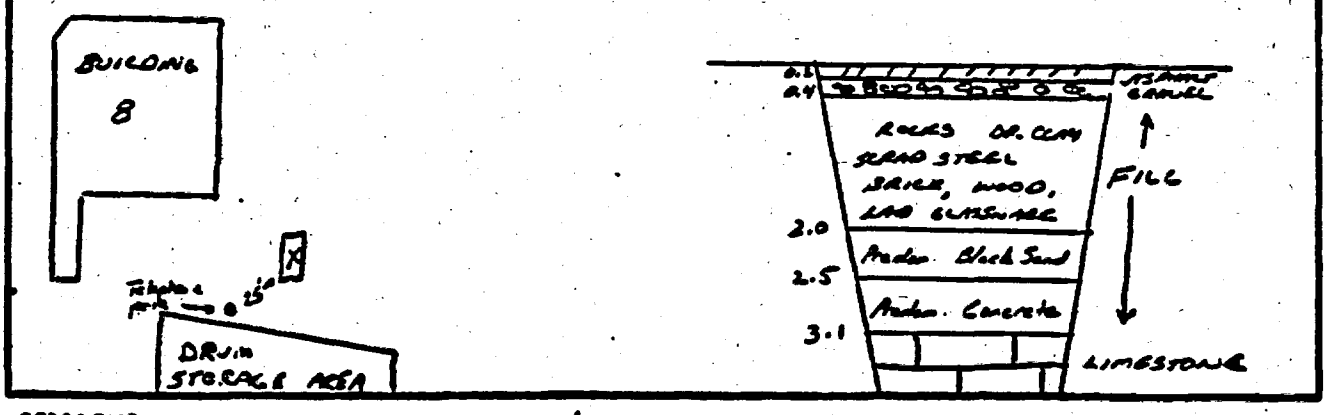
PROJECT NO: 200-3LC9 DATE: 9/26/88

LOCATION:

FIELD GEOLOGIST: P. JONES OPERATOR - RON FULLERTON Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, FT.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.1 / 0.4	ASPHALT / GRAVEL		LEVEL B PROTECTION
1.0		FILL - ROCKS, BR CLAY, SCRAP STEEL		
1.5		BRICK WOOD, LAB GLASSWARE		HNU = 3.0 PPM
2.0	2.0	MOIST		PIT DRY
2.5	2.5	FILL - Predominantly Black Sand MOIST		
3.0	3.1	FILL - Predominantly concrete		SAMPLES: WL-TP3401-1
3.5		REFUSAL LIMESTONE BEDROCK AT 3.1'		AT 0.5' depth 1413
4.0				
		TOTAL DEPTH = 3.1'		WL-TP3402-1
				AT 2-2.5' AT 1448

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG W/BACKHOE

PHOTO LOG TEST PIT TP-34

AR300673 PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-35

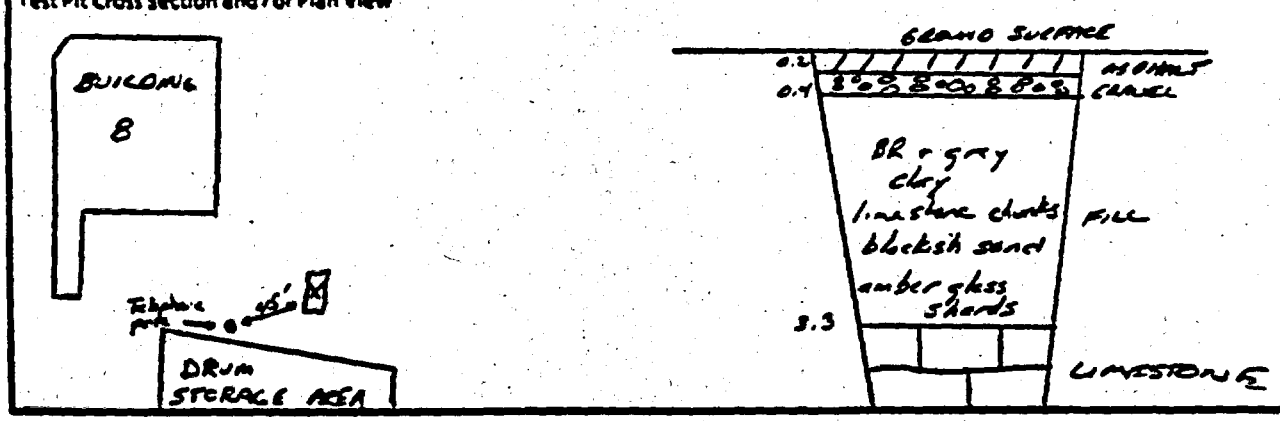
PROJECT NO.: 200-3LC9 DATE: 9/26/88

LOCATION:

FIELD GEOLOGIST: P. JONES OPERATOR - RON FULLERTON Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2 / 0.4	ASPHALT / GRAVEL		LEVEL B PROTECTION
1.0		FILL - Br-gry Clay		
1.5		limestone chunks (3" - 6" dia)		HNU = 3.0 ppm at Pit Face
2.0		Blackish sand		
2.5		Amber glass shards		SAMPLE: WL-TP3503-1
3.0		MOIST		at 3.3' depth 1549
3.5	3.3	REFUSAL - LIMESTONE BEDROCK		
4.0				
		TOTAL DEPTH = 3.3'		

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG W/ BACKHOE

PHOTO LOG

TEST PIT TP-35

AR300674

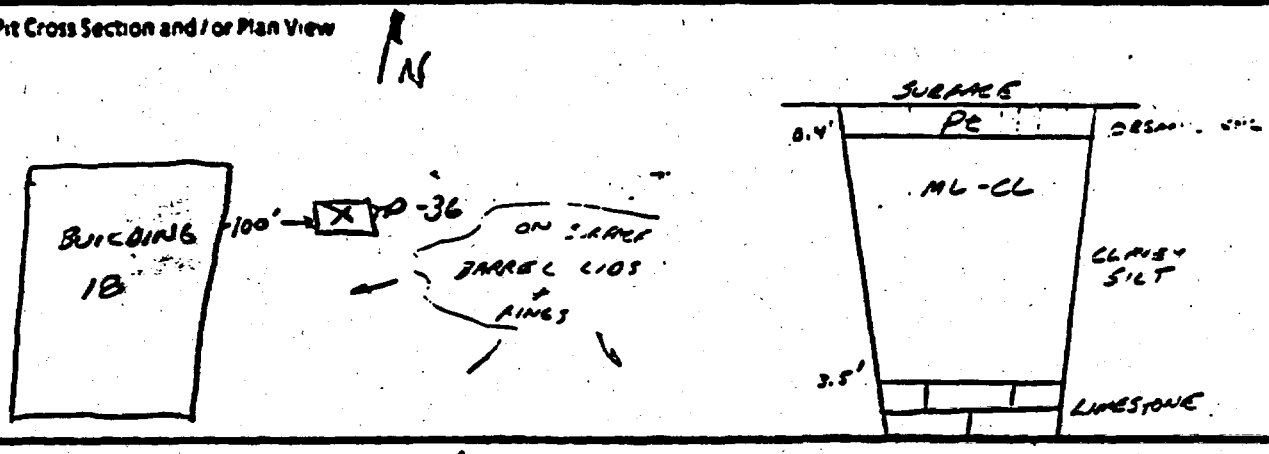
PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-36
PROJECT NO.: 200-3209 DATE: 9/27/88
LOCATION:
FIELD GEOLOGIST: P. JONES OPERATOR - RON FULLERTON HydroGroup

DEPTH (FT.)	LITHOLOGY CHANGE (Depth/Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.4	Brown TOPSOIL w/ roots - moist	Pt	LABEL & PHOTO: FOW
1.0				
1.5		Clayey Silt - roots to 3' depth	ML-CL	SAMPLES:
2.0		Reddish-brown (NATURAL)		WL-TP3600-1 0823
2.5		MOIST		WL-TP3603-1 0846
3.0				
3.5	3.5			HNU = No Instrument Resp.
4.0		Refusal LIMESTONE BEDROCK		
		TOTAL DEPTH = 3.5'		

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG w/ FORD 550 BACKHOE

PHOTO LOG TEST PIT TP-36

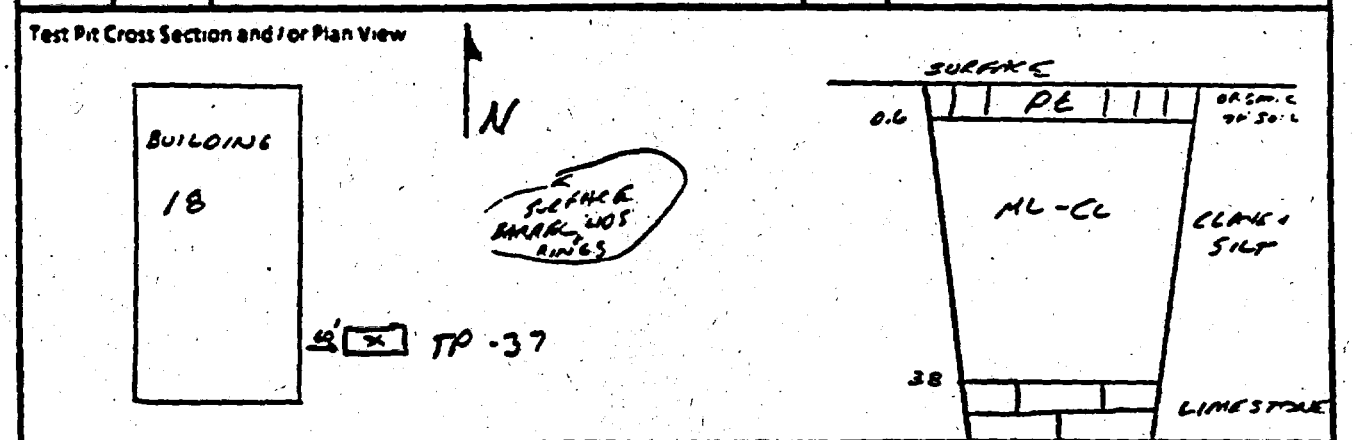
AR300675 PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-37
PROJECT NO: 200-3LC9 DATE: 9/27/88
LOCATION:
FIELD GEOLOGIST: P. JONES OPERATOR: RON FULLERTON Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.6	ORGANIC TOP SOIL w/ ROOTS MOIST	Pt	LEVEL 0 PROTECTION
1.0		(LIMESTONE ROCKS (6"-1' dia) on		
1.5		surface)	ML-CL	SAMPLES.
2.0		Clayey-silt Reddish brown		WL-TP3700-1 1919
2.5		(WATHERED) ROOTS TO 2.5' depth.		WL-TP3704-1 0930
3.0		MOIST		
3.5				HNU=0 NO INSTRUMENT RESPONSE
4.0	3.8	REFUSAL - LIMESTONE BEDROCK		
		TOTAL DEPTH = 3.8'		

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG w/ FORD 550 BACKHOE

Samples not sent

PHOTO LOG TEST PIT TP-37

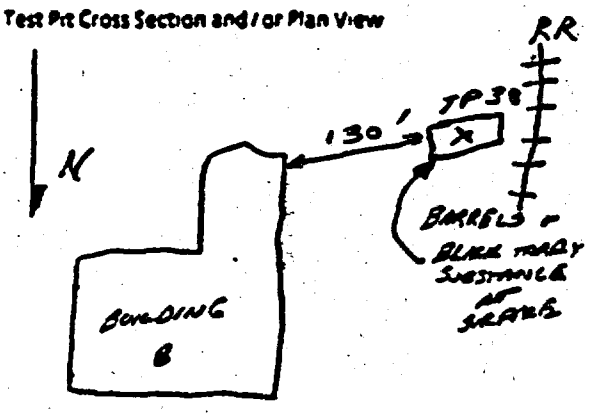
AR300676 PAGE 1 OF 1

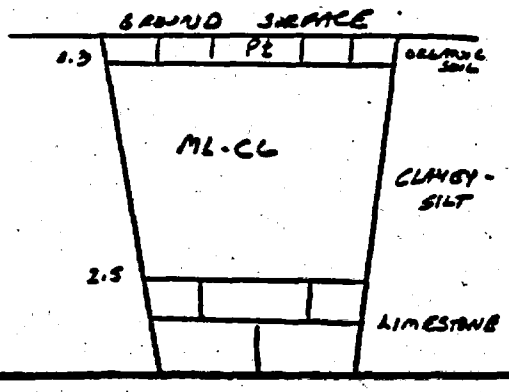
TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-38
PROJECT NO.: 200-3469 — DATE: 9/27/88
LOCATION:
FIELD GEOLOGIST: P. Jones — Operator - RON FULLERTON Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth/Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.3	ORGANIC SOIL w/ ROOTS - MOIST	Pt	LEVEL B PROTECTION
1.0		Clayey silt - reddish brown		
1.5		w/ roots - MOIST	ML-CL	SAMPLES:
2.0				WL-TP3800-1 (1030)
2.5	2.5			WL-TP3802-1 (1041)
3.0		Refusal Limestone bedrock		
3.5				HNU'S NO INSTRUMENT RESP
4.0		TOTAL DEPTH = 2.5'		
				Drums and black tarry
				substance at surface

Test Pit Cross Section and / or Plan View





REMARKS TEST PIT DUG w/ FORD 550 BACKHOE
Samples not sent

PHOTO LOG — TEST PIT TP-38

AR300674 — PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-39

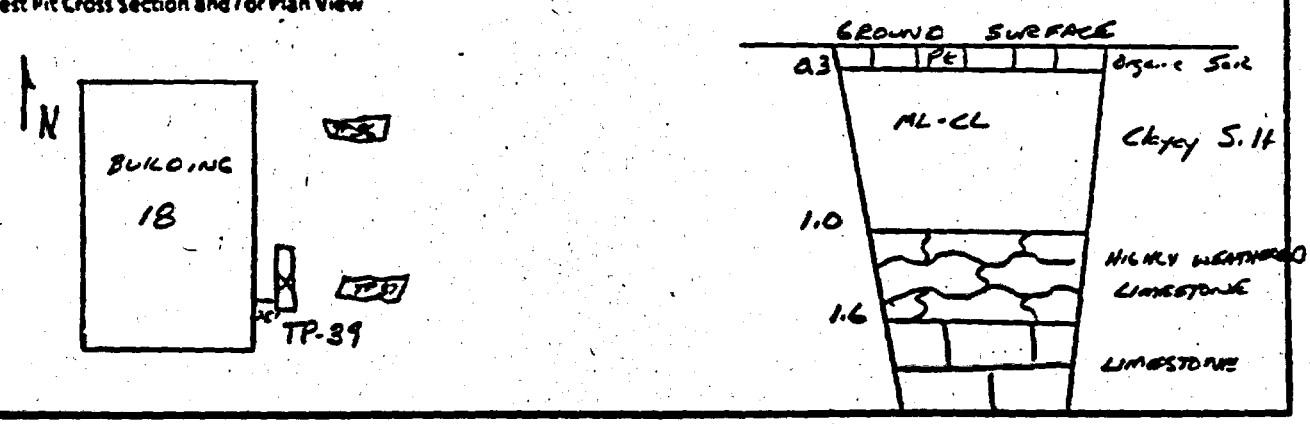
PROJECT NO.: 200-2C9 — DATE: 9/27/88

LOCATION:

FIELD GEOLOGIST: P. JONES — OPERATOR: RON FULLERTON, Hydro Group

DEPTH (Ft.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.3	Organic topsoil - moist	Pt	LEVEL B PROTECTION
1.0	1.0	Clayey silt reddish brown moist (natural)	ML-CL	
1.5	1.6	Highly weathered limestone bedrock		Sample:
2.0		Refusal - Limestone Bedrock		WL-TP3900-1 1225
2.5				
3.0		TOTAL DEPTH = 1.6'		
3.5				HNU = NO INSTRUMENT RESPONSE
4.0				

Test Pit Cross Section and / or Plan View



REMARKS: TEST PIT DUG w/ FORD 550 Backhoe

PHOTO LOG — TEST PIT TP-39

AR300678

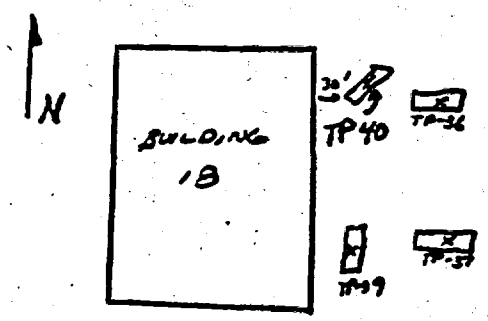
PAGE 1 OF 1

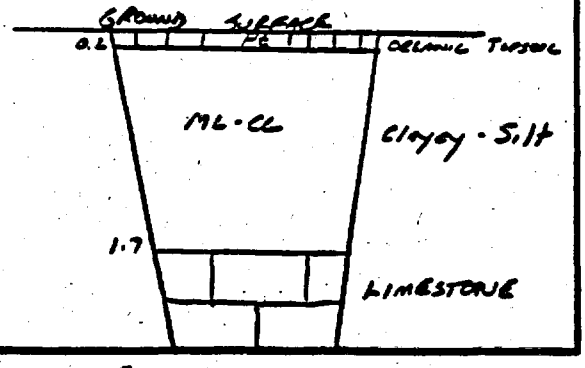
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-40
PROJECT NO: 200-3469 DATE: 9/27/88
LOCATION:
FIELD GEOLOGIST: P. JONES Operator - RON FULLERTON Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth/Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2	ORGANIC TOPSOIL - MOIST	Pt	LEVEL B PROTECTION
1.0		Clayey Silt - Reddish brown (Natural)	ML-CL	
1.5	1.7	MOIST		SAMPLE:
2.0		REFUSAL LIMESTONE BEDROCK		WL-TP4000-1 1304
2.5				
3.0				HNU: NO ENVIRONMENT RESPONSE
3.5		TOTAL DEPTH = 1.7'		
4.0				

Test Pit Cross Section and / or Plan View





REMARKS Test Pit Dug w/ Backhoe - FORD 550

PHOTO LOG TEST PIT TP-40

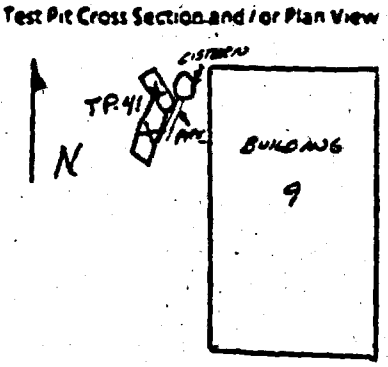
AR300679 PAGE 1 OF 1

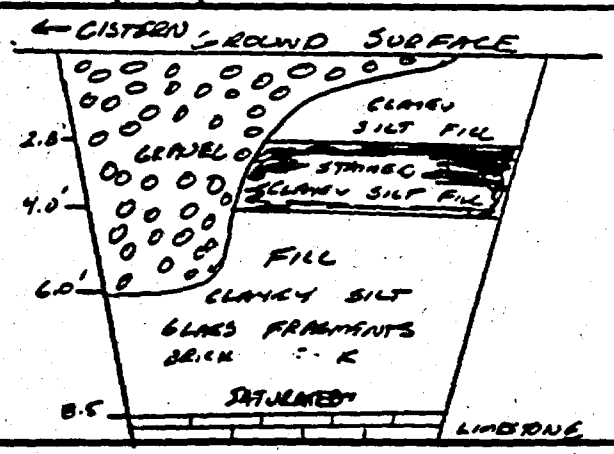
TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-41
PROJECT NO: 200-3LC9 DATE: 9/27/88
LOCATION:
FIELD GEOLOGIST: P. JONES Operator: RON FULLERTON HydroGroup

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5		GRAVEL TO 6' depth alongside		LEVEL B PROTECTION
1.0		cistern / CLAYEY-SILT Reddish	ML-CL	
1.5		brown w/ brick + debris		SAMPLES ACQUIRED:
2.0		to 28' away from cistern		WL-TP4100-1 1405
2.5		MOIST		WL-TP4103-1 1445
3.0	2.8			WL-TP4103-1D 1445
3.5		Stained (black) fill clayey silt		WL-TP4108-1 1515
4.0	4.0	w/ rock fragments - MOIST		WL-TP4108-1D 1515
4.5				HNU LOG:
5.0		Reddish brown clayey silt	ML-CL	Depth 4-6' - 4 ppm
5.5		fill w/ limestone fragments		Depth 8.5' - 10ppm
6.0	6.0	Glass, brick - MOIST		
6.5				
7.0				
7.5				

Test Pit Cross Section and / or Plan View





REMARKS TEST PIT DUG w/ BACKHOE FORD 550
- BZ = ~1 ppm at 8.5'

PHOTO LOG PHOTOGRAPHER: P. JONES FILM ROLL # 4 TEST PIT TP-41
WEATHER: SUNNY - 75°F
#18 - Cistern, pipe, and possible stained soil layer
#19 - Cistern, pipe, and possible stained soil layer
#20 - WEST SIDE TRENCH SHOWING STAINED SOIL LAYER

NR300680

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-41

PROJECT NO.: 200-3LC9 DATE: 9/27/83

LOCATION:

FIELD GEOLOGIST: P. JONES Operator P. JONES Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (Depth, Ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
8.0		7.5-8.5 FILL WAS SATURATED		
8.5	8.5	REFUSAL - LIMESTONE BEDROCK		
9.0				
		TOTAL DEPTH = 8.5'		

Test Pit Cross Section and / or Plan View

REMARKS TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG TEST PIT TP-41

AR300681

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-42

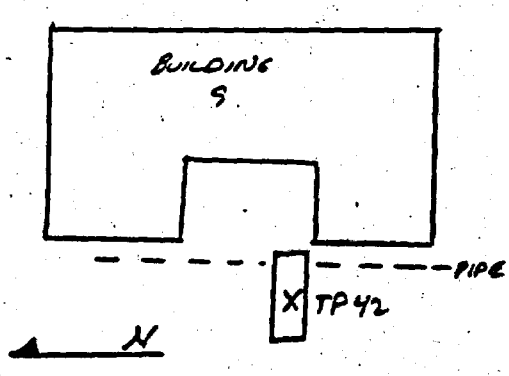
PROJECT NO: 200-3LC9 — DATE: 9/27/88

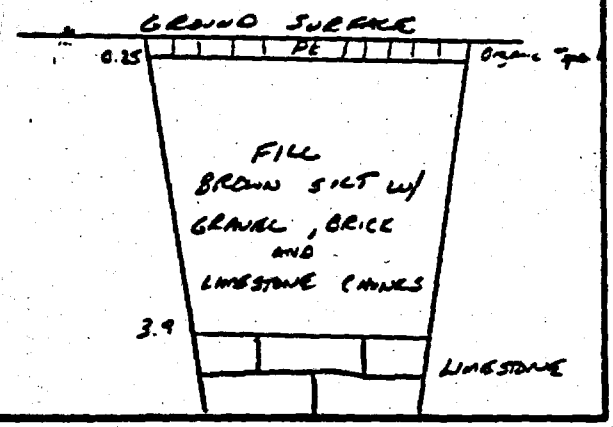
LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, Hydro Group

DEPTH (FT.)	LITHOLOGY CHANGE (DEPTH, FT.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.25	Organic topsoil - MOIST	Pt	LEVEL B PROTECTION
1.0				
1.5		FILL BROWN SILT w/		Tom Cole (6") pipe
2.0		GRAVEL, BRICK AND		at 2' depth / Gravel
2.5		LIMESTONE CHUNKS - DRY-DAMP		packed around pipe
3.0				
3.5				SAMPLES:
4.0	3.9	REFUSAL - LIMESTONE BEDROCK		WL-TP4200-1 1645
4.5				WL-TP4203-1 1800
5.0		TOTAL DEPTH = 3.9'		HOLE HO INSTRUMENT REMOVED
5.5				
6.0				
6.5				
7.0				
7.5				

Test Pit Cross Section and / or Plan View





REMARKS: TEST PIT DUG w/ BACKHOE - FORD 550

TEST PITTING PERFORMED

PHOTO LOG — TEST PIT TP-42

AR300682

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TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-43

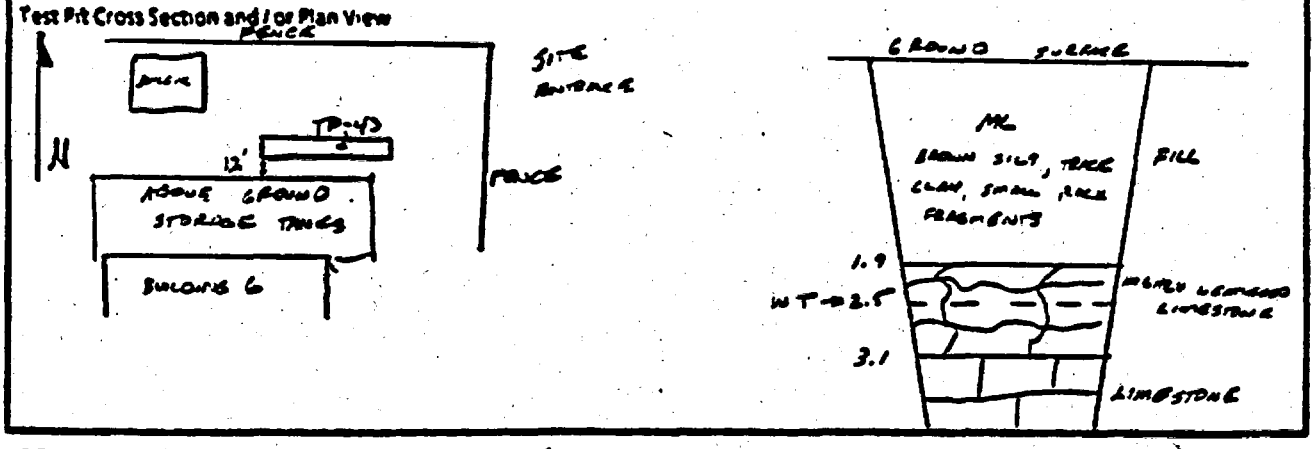
PROJECT NO: 200-3LC9 — DATE: 9/28/88

LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FOLLERTON, Hydro Group

DEPTH (ft.)	LITHOLOGY CHANGE (Depth, ft.)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5		FILL - BROWN SILT SMALL ROCK		LABEL B. PROTECTION
1.0		FRAGMENTS TRACE CLAY - MOIST	ML	
1.5				SAMPLES:
2.0	1.9			WL-TP4300-1 0935
2.5	WT -	WEATHERED FRACTURED LIMESTONE		WL-TP4303-1 0946
3.0	3.1	Ro WATER TABLE 2.5' depth		
3.5		TOTAL DEPTH = 3.1 FT.		HNU - NO INSTRUMENT READING
4.0		REFUSAL LIMESTONE		

Test Pit Cross Section and / or Plan View



REMARKS: TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG — TEST PIT TP-43

AR300683

PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-44

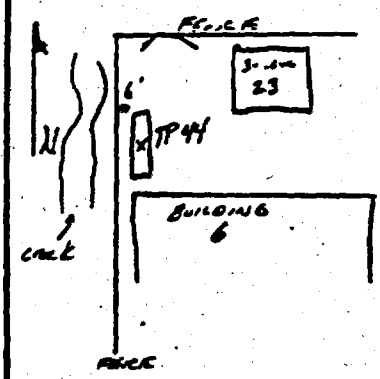
PROJECT NO: 200-3LC9 — DATE: 9/28/88

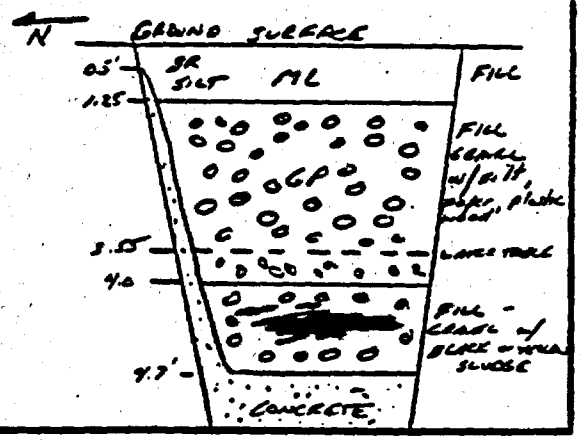
LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: Ron FULLERTON, Hydro Group

Depth (ft)	Lithology Change (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	DAMP			LEVEL B PROTECTION
1.0	1.25	← FILL - Predominantly Br Silt, trace clay - DAMP	ML	
1.5				SAMPLES:
2.0		FILL - Predominantly Gravel	GP	WL-TP4400-1 1024
2.5	MOIST	w/ silt, paper, plastic, wood		WL-TP4404-1 1037
3.0		fragments. Black tar like		
3.5	3.55 WT	material and yellow sludge like		
4.0		material - 4.0-4.7'		
4.5	SATR. 4.7			
5.0		← REFUSAL CONCRETE PAD		HNU - 2ppm at 4.5'
		TOTAL DEPTH = 4.7'		WATER TABLE AT 3.55'

Test Pit Cross Section and / or Plan View





REMARKS: TEST PIT DUG w/ FORD 550 BACKHOE

PHOTO LOG — TEST PIT TP-44

AR300684 — PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-45

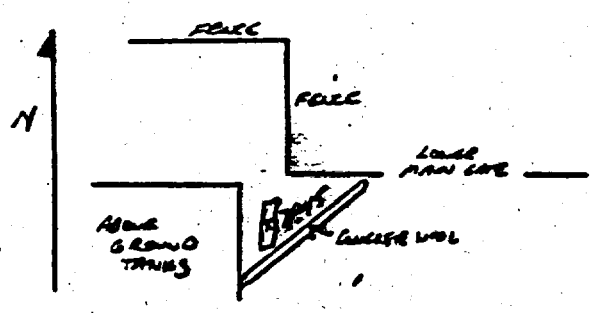
PROJECT NO: 200-3LC9 — DATE: 9/20/88

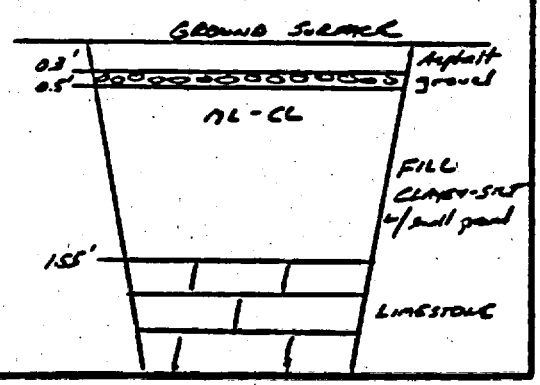
LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, Hydro Group

Depth (ft)	Lithology Change (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.3 / 0.5	← Asphalt / ← Gravel		LEVEL B PROTECTION
1.0		Reddish-brown clayey silt w/ med sand	ML-CL	
1.5	1.55	Fill - moist		SAMPLE:
2.0		← Refusal Limestone bedrock		NL-TP45D1-1 1300
2.5				
3.0		TOTAL DEPTH = 1.55'		
3.5				HNU = NO INSTRUMENT RESPONSE
4.0				
4.5				
5.0				

Test Pit Cross Section and / or Plan View





REMARKS: TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT TP-45

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AR300685

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-46

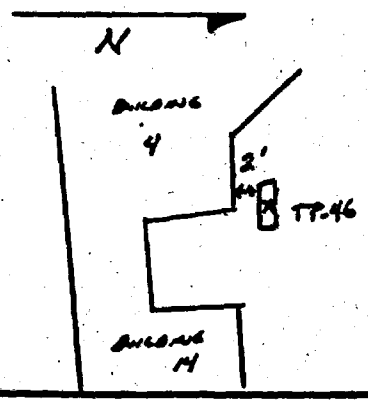
PROJECT NO 200-3LC9 — DATE 9/28/88

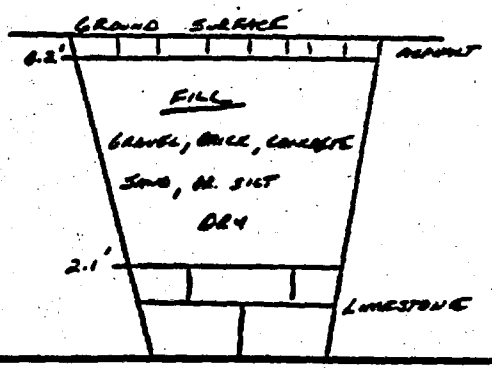
LOCATION:

FIELD GEOLOGIST P. JONES — Operator: RON FOLKERTON, Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2	ASPHALT (NO DISTINCT GRAVEL LAYER BELOW)		LEVEL B PROTECTION
1.0		FILL - GRAVEL, BRICK, CONCRETE, SAND		
1.5		Brown silt - DRY		SAMPLE:
2.0	2.1			WL-TP4600-1 1434
2.5		REFUSAL LIMESTONE BEDROCK		
3.0				
				HNU = NO INSTRUMENT RESPONSE
		TOTAL DEPTH = 2.1'		

Test Pit Cross Section and / or Plan View





REMARKS TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT TP-46

PAGE 1 OF 1

AR300686

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-47

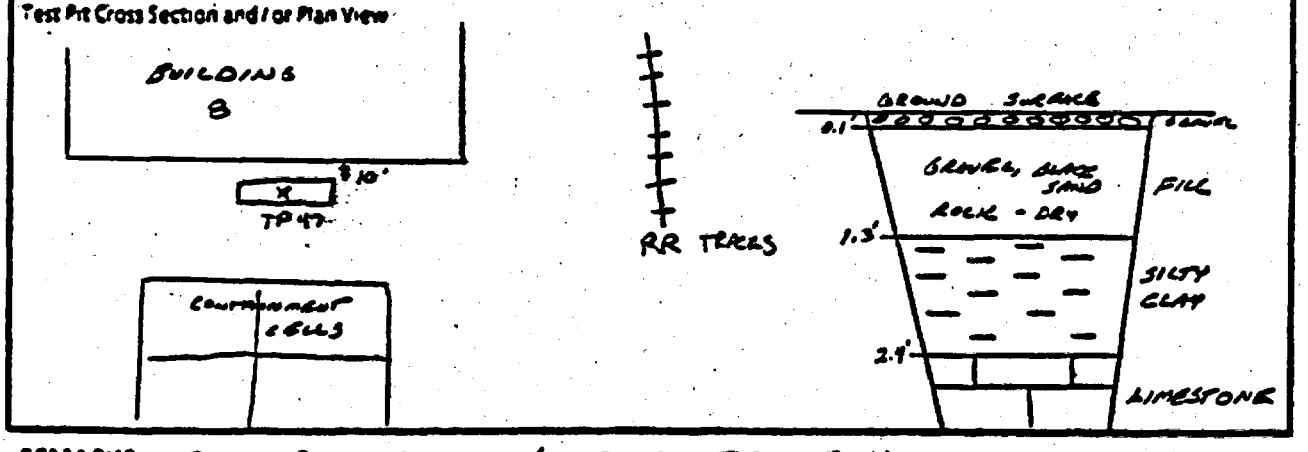
PROJECT NO: 200-3LC9 — DATE: 9/28/88

LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, HydroGroup

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
	0.1	← SURFACE GRAVEL		
0.5				LEVEL B PROTECTION
1.0		FILL - GRAVEL, Black SAND, ROCK FRAGMENTS DRY		
1.5	1.3'			SAMPLE.
2.0		SILTY CLAY - Reddish brown - MOIST (NATURAL)	CL	WL-TP4700-1 1520
2.5	2.4'	← BARUSAL LIMESTONE BEDROCK		
3.0				
3.5		TOTAL DEPTH = 2.4'		HOLE = NO DISTURBANCE BEYONDS
4.0				
4.5				
5.0				

Test Pit Cross Section and / or Plan View



REMARKS: TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT: TP-47

AR300687

PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-48

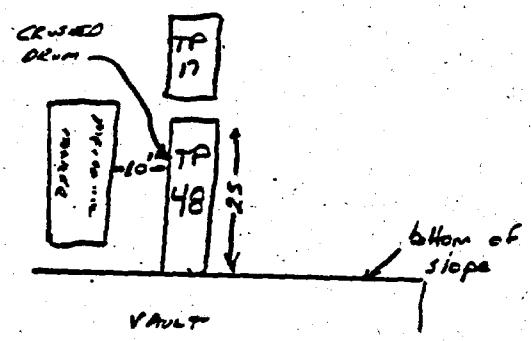
PROJECT NO: 200-3LC9 — DATE: 9/28/88

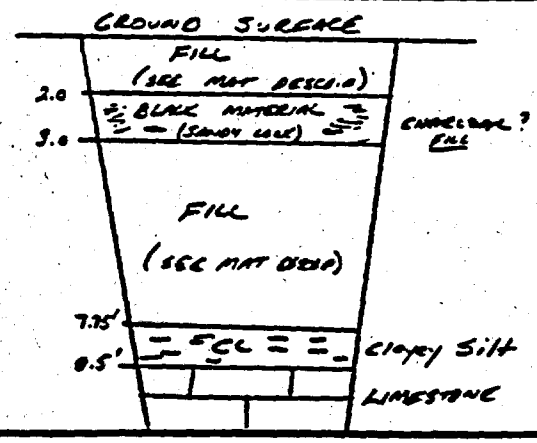
LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5		FILL - Limestone cobbles,		LEVEL B PROTECTION
1.0		brick, concrete, some steel		
1.5		pieces, 1 crushed drum		Observation Trench.
2.0	2.0	Silty clays - DAMP		
2.5		Black Stained - sandy look		NO SAMPLES
3.0	3.0	POSSIBLY CHARCOAL?		
3.5		FILL - limestone cobbles		
4.0		brick, concrete, wood,		HNU - NO INSTRUMENT RESPONSE
4.5		paper, and plastic - DAMP		
5.0				ORGANIC ODOR NOTED
5.5				WHEN CHANGING AIR TANK
6.0				
6.5				CRUSHED DRUM FOUND
7.0				AT 1.5' depth - location
7.5				shown on Plan View

Test Pit Cross Section and/or Plan View





REMARKS: TEST PIT DUG w/ FORD 550 BACKHOE

PHOTO LOG — TEST PIT TP-48

AR300688

PAGE 1 OF 2

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-48

PROJECT NO 200-3LC9 DATE 9/28/88

LOCATION:

FIELD GEOLOGIST P. JONES Operator: RON FOLLRATON Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
	7.75	FILL - DEBRIS		
8.0				
8.5	8.5	Silty Clay - Reddish Brown - moist	CL	NATURAL
		REDISH LIMESTONE BEDROCK		
		TOTAL DEPTH - 8.5 ft.		

Test Pit Cross Section and / or Plan View

REMARKS TEST PIT DUG W/ FORD 555 BACKHOE

PHOTO LOG

TEST PIT TP-48

AR300689

PAGE 2 OF 2

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-49

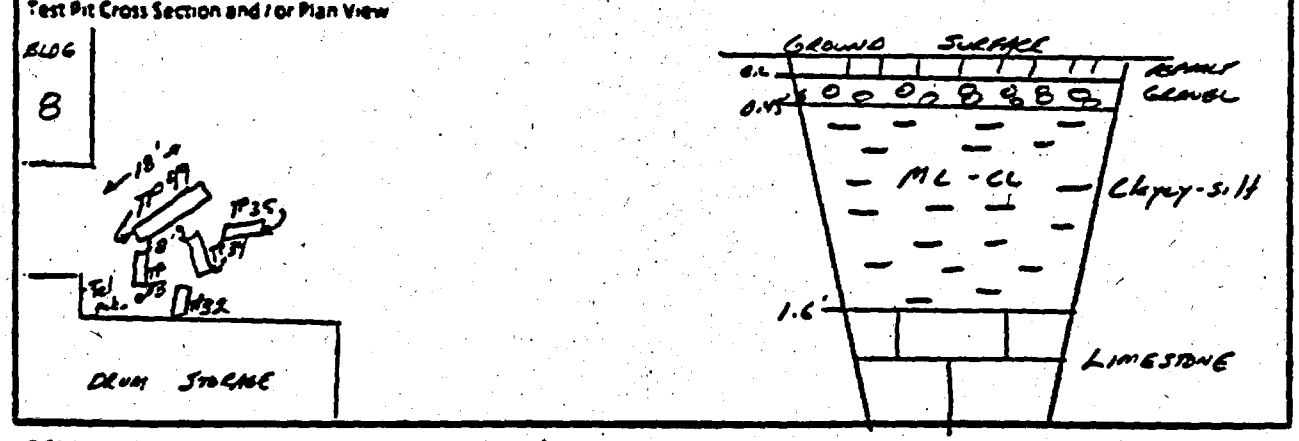
PROJECT NO 200-3LC9 — DATE 9/29/88

LOCATION:

FIELD GEOLOGIST P. JONES — Operator: RON FULLERTON, Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.1 / 0.45	← ASPHALT ← GRAVEL		LEVEL D PROTECTION
1.0		Clayey Silt Reddish brown - moist	ML-CL	
1.5	1.6	NATURAL		NO SAMPLES
2.0		Refusal - Limestone Bedrock		
2.5				Observation Pit
3.0		TOTAL DEPTH = 1.6'		
3.5				MANU - NO INSTRUMENT READ
4.0				
4.5				
5.0				

Test Pit Cross Section and / or Plan View



REMARKS TEST PIT DUG W/ FORD 555 BACKHOE

PHOTO LOG — TEST PIT TP-49

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-50

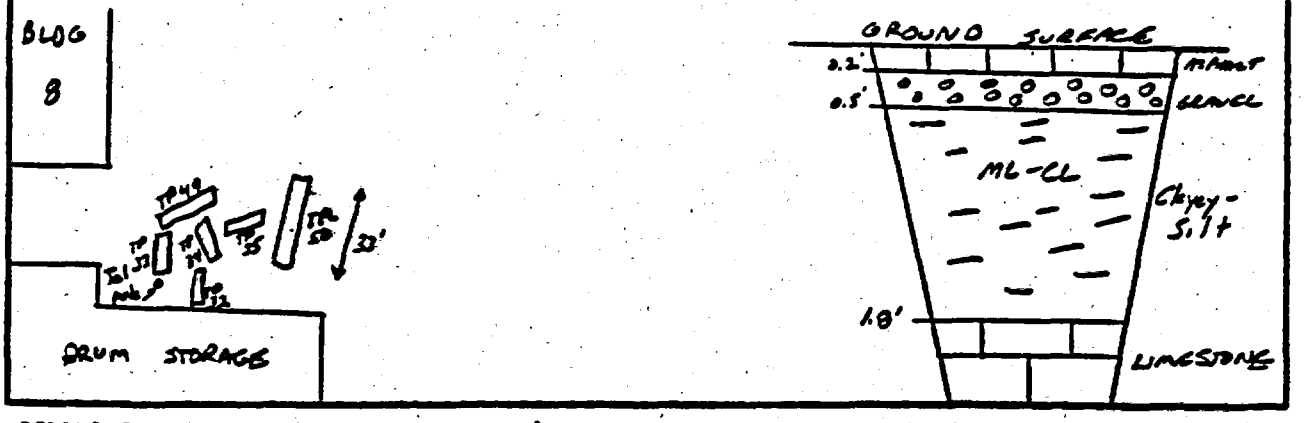
PROJECT NO: 200-3LC9 — DATE: 9/29/88

LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, Hydro Group

Depth (ft)	Lithology Change (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5	0.2 / 0.5	ASPHALT / GRAVEL		LEVEL D PROTECTION
1.0				
1.5		Clayey-Silt Reddish brown - MOIST	ML-CL	OBSERVATION PIT -
2.0	1.8			NO SAMPLES
2.5		REFUSAL - LIMESTONE BEDROCK		
3.0				
3.5		TOTAL DEPTH = 1.8'		HNU = NO INSTRUMENT REC
4.0				

Test Pit Cross Section and / or Plan View



REMARKS: TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT: TP-50

AR300691

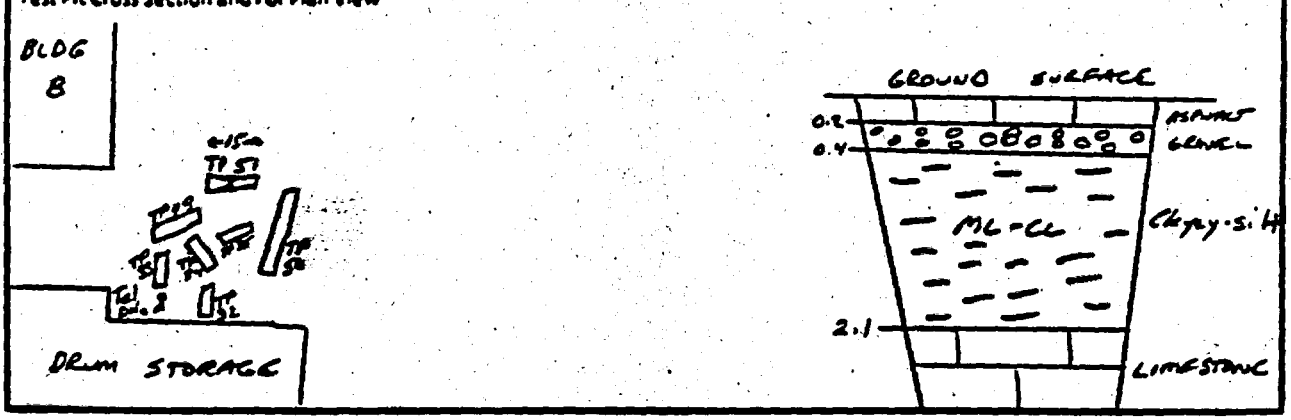
PAGE 1 OF 1

TEST PIT LOG **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories TEST PIT NO.: TP-51
PROJECT NO: 200-3LC9 DATE: 9/29/88
LOCATION:
FIELD GEOLOGIST: P. JONES Operator: RON FULLERTON Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
	0.2	ASPHALT		
0.5	0.4	GRAVEL		LEVEL D PROTECTION
1.0				
1.5		Clayey-Silt Reddish-brown-moist	ML-CL	OBSERVATION PIT -
2.0	2.1			NO SAMPLES
2.5		REFUSAL LIMESTONE BEDROCK		
3.0				HNU= NO INSTRUMENT
3.5		TOTAL DEPTH= 2.1'		RESPONSE

Test Pit Cross Section and/or Plan View



REMARKS TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT TP-51

AR300692

PAGE 1 OF 1

TEST PIT LOG — **NUS CORPORATION**

PROJECT: Whitmoyer Laboratories — TEST PIT NO.: TP-52

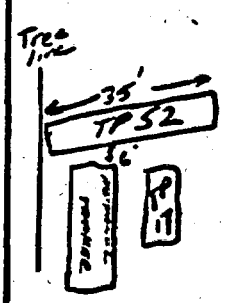
PROJECT NO: 200-3LC9 — DATE: 9/29/88

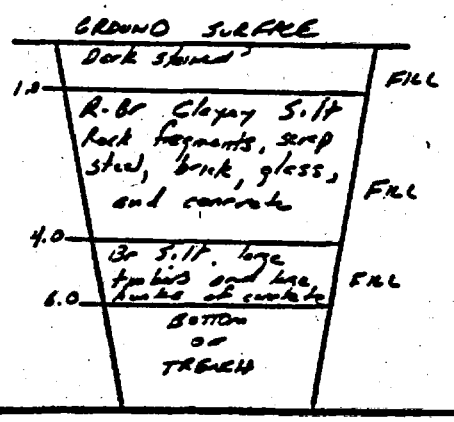
LOCATION:

FIELD GEOLOGIST: P. JONES — Operator: RON FULLERTON, Hydro Group

DEPTH (ft)	LITHOLOGY CHANGE (Depth, ft)	MATERIAL DESCRIPTION (Soil Density / Consistency, Color)	USCS	REMARKS
0.5		FILL - Predominantly dark stained		LEVEL B PROTECTION
1.0	1.0	silt w/gravel		
1.5		FILL - Predominantly reddish-	ML-	Observation Pit -
2.0		brown clayey silt w/ rock fragments	CL	NO SAMPLES
2.5		scrap steel, brick, ~~and~~ PAJ 9/29/88		
3.0		glass, and concrete - moist		HNU: NO INSTRUMENT
3.5				RESPONSE
4.0	4.0			
4.5		FILL - Br Silt - large boles		NO ORGANIC GAS
5.0		and large hunks of concrete		NOTED WHEN [illegible]
5.5				FOR [illegible]
6.0	6.0			
6.5				NO DRUMS LOCATED
7.0		TOTAL DEPTH = 6.0'		
7.5				

Test Pit Cross Section and / or Plan View





REMARKS: TEST PIT DUG W/ FORD 550 BACKHOE

PHOTO LOG

TEST PIT: TP-52

AR300693

PAGE 1 OF 1