EPA Region 5 Records Ctr.
393200

MG
OFC

STATE OF ILLINOIS
DEPARTMENT OF REGISTRATION AND EDUCATION
JOHN C. WATSON
DIRECTOR, SPRINGFIELD
BOARD OF NATURAL RESOURCES AND CONSERVATION
CHAIRMAN - - - JOHN C. WATSON
GEOLOGY - - - LAURENCE L. SLOSS
CHEMISTRY - - - ROGER ADAMS
ENGINEERING - ROBERT H. ANDERSON
BIOLOGY - - - THOMAS PARK
FORESTRY - - CHARLES E. OLMSTED
UNIVERSITY OF ILLINOIS
DEAN WILLIAM L. EVERITT
SOUTHERN ILLINOIS UNIVERSITY
PRESIDENT DELYTE W. MORRIS

ILLINOIS STATE GEOLOGICAL SURVEY

JOHN C. FRYE, CHIEF

115 South Washington Street
Naperville, Illinois 60540

February 22, 1968

RECEIVED
FEB 23 1968
DIVISION OF SANITARY ENGINEERING
ILLINOIS DEPT. OF PUBLIC HEALTH

Mr. Clarence W. Klassen
Chief Sanitary Engineer
Department of Public Health
Springfield, Illinois 62706

Dear Mr. Klassen:

This is in reply to your letter of February 14, 1968, directed to Dr. John C. Frye, requesting a description of the geologic conditions at a proposed landfill site for the Village of Arlington Heights, in the NE¼ of the SW¼ section 6, T42NR11E, Cook County, Illinois.

Enclosed is a copy of a report prepared by the Geological Survey for the Northeastern Illinois Planning Commission on June 6, 1966. This report describes the regional geologic conditions in that area from information available at the time. The following supplemental information is based on eleven soil boring logs (nos. 5 to 15 incl.) made by Illinois Drilling and Testing Company, which were sent to us by the Village of Arlington Heights.

These soil borings show that materials in the glacial drift, to a depth of 100 feet, are quite variable, consisting mainly of silty clay (probably till) interbedded with silts and sands. Corelation of units in this type of deposit is not always reliable, however, they indicate that a silty clay till, with low permeability, is present at a depth of 30-35 feet on the eastern side of the site, and at a depth of 20-25 feet on the western side. This unit seems to be continuous and is approximately 9 feet thick in the northern part of this site (Boring #15). The sands and silts which are interbedded with the clays, above this silty clay till are variable in texture. They are not extensive enough to appear on our regional

maps and would probably not be considered a useful source of water in this area.

Based on experience in other parts of northeastern Illinois, and assuming that the silty clay till discussed above is continuous, we would expect that most of the ground water moving away from this site would travel through the shallow sands northward towards Buffalo Creek.

In summary, the near surface sands and silts present at this site are probably not extensive or permeable enough to be considered for water supply purposes, however, they could allow the migration of leachate from the disposal site.

Yours truly,

George Hughes

George M. Hughes
Assistant Geologist
Northeastern Illinois Office
Section of Groundwater Geology
and Geophysical Exploration

encl.

cc: Mr. Benn Leland
State Sanitary Board

Cook County Health Dept.

0000800000427000013 0

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

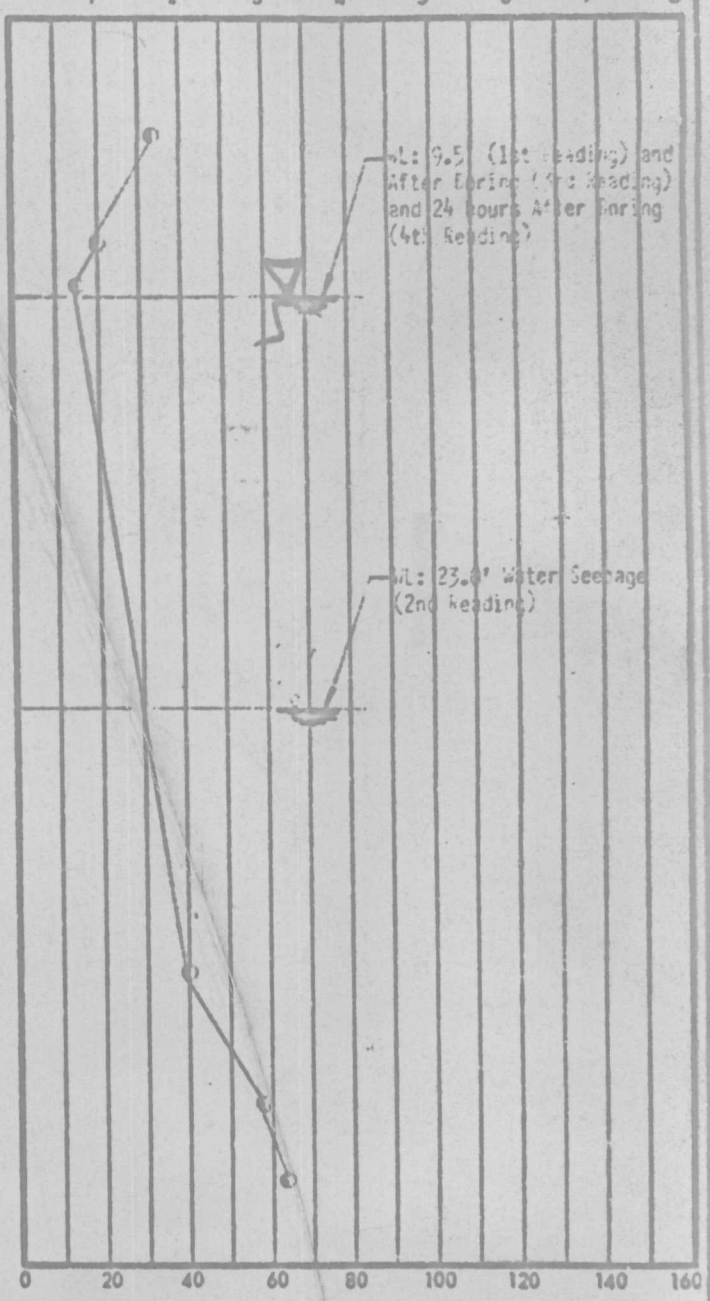
SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	4-52	BORING STARTED	1-15-68	STATION	WASH BORING ☐
BORING NO.	5	FOREMAN	pg	BORING COMPLETED	1-15-68	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
● – CALIBRATED PENETROMETER – Tons/Sq. Ft.

GROUND SURFACE — ELEV. 723.8

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.60'	General Clayey Fill–Trace to Some Topsoil–Dark Brown & Brown–Tough (Impervious)	1	ST		
7.0'	"Silt, Sand & Gravel" & "Silt & Clay"–Dark Brown & Brown–Medium Dense (Pervious) (Sand & Silt Layers)	2	ST		716.8
9.5'		3	ST		714.3
		4	ST		
	"Sand & Silt" & "Sand–Some Silt" & "Silt Layers"–Trace to Some Gravel–Dark Brown & Brown–Medium Dense (SC) to (MC) (Pervious)	5	ST		
		6	ST		
23.0'	"Silt–Some Sand & Clay" & "Silt–Some Sand"–Trace to Some Gravel–Gray–Medium Dense (SC) (Water Seepage) (Sand Layers) (Pervious)	7	ST		700.8
30.5'		8	ST		693.3
	"Clay & Silt" & "Clay–Some Silt"–Trace of Sand & Gravel–Blue–Very Tough (Impervious)	9	PA		
50.0'		10	ST		673.8
	End of Boring				



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION – Blows/Ft.
⊗ WATER CONTENT – %
× DRY DENSITY – Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: None	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Novak, Dempsey & Associates, Inc., Quality Control Consultants, Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

FORM 17-1 REV. 12/65

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

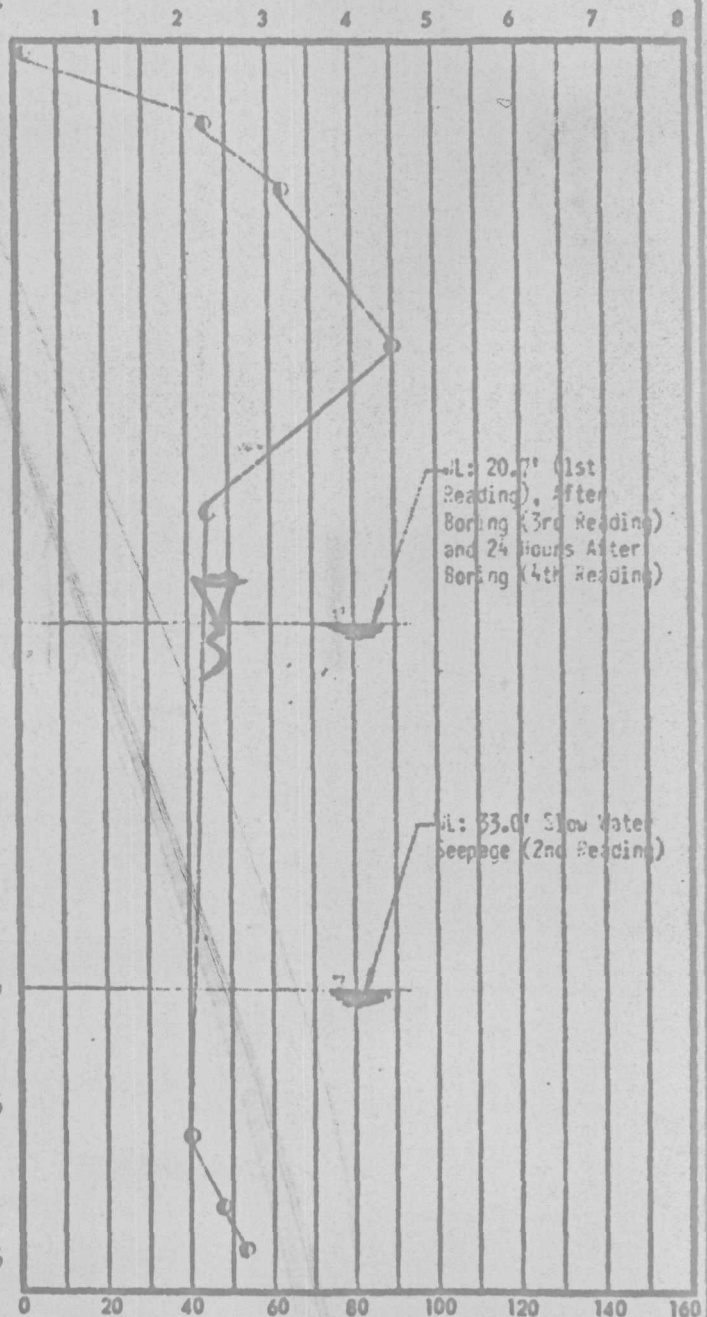
FILE NO. 1458

SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	M-52	BORING STARTED	1-15-63	STATION	WASH BORING ☐
BORING NO.	6	FOREMAN	pg	BORING COMPLETED	1-15-63	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
● – CALIBRATED PENETROMETER – Tons/Sq. Ft.

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.00'	GROUND SURFACE				728.6
0.5'	Dark Brown Topsoil–Loose (Pervious)				728.1
	"Clay & Silt" & "Clay–Some Silt"–Trace of Sand & Gravel–Brown & Gray and Blue–Very Tough to Hard (Impervious)	1	ST		
		2	ST		
9.5'					715.1
	"Silt & Clay" & "Silt–Some Clay"–Trace to Some Sand & Gravel–Gray–Medium Dense (Impervious)	3	ST		
20.0'	"Sand & Silt" & "Sand–Some Silt" & "Silt–Some Sand"–Trace to Some Gravel–Gray–Medium Dense (Pervious) (Water Bearing) (SC) to (ML)	4	ST		708.6
22.0'					706.6
	"Sand–Some Silt & Gravel" & "Sand, Silt & Gravel" & "Silt"–Gray–Medium Dense (Pervious) (Water Bearing) (Pervious)	5	ST		
		6	ST		
33.0'	"Silt–Some Sand" & "Silt & Sand"–Trace of Clay–Gray–Medium Dense (Pervious) (Slow Water Seepage)	7	ST		695.6
38.0'	"Clay–Some Silt" & "Clay & Silt"–Trace of Sand & Gravel–Blue–Very Tough (Impervious)	8	ST		690.6
		9	ST		
50.0'	End of Boring	10	SL		678.6



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION – Blows/Ft.
× DRY DENSITY – Lbs. Cu. Ft.
⊗ WATER CONTENT – %

OWNER: Village of Arlington Heights, Illinois	SCALE: None	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

FORM 17-1 REV. 12/65

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

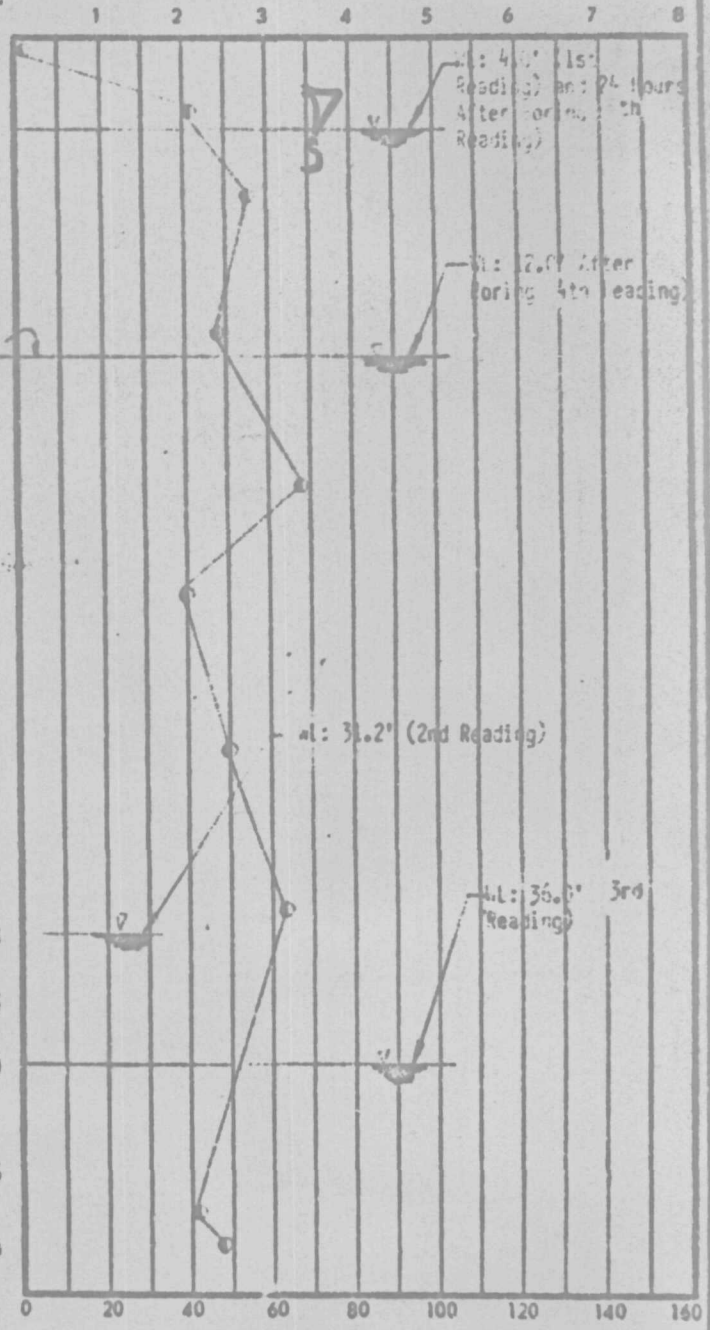
FILE NO. 1458

SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	3-52	BORING STARTED	1-16-68	STATION	WASH BORING [ ]
BORING NO.	7	FOREMAN	pg	BORING COMPLETED	1-16-68	OFFSET	DRY BORING [x]

O - UNCONFINED COMPRESSIVE STRENGTH - Tons/Sq. Ft.
◐ - CALIBRATED PENETROMETER - Tons/Sq. Ft.

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.00'	GROUND SURFACE				730.0
	Black Topsoil-Loose (Pervious)	—	PA		
1.0'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Brown & Gray-Very Tough (Impervious)	1	ST		729.0
4.0'	"Silt & Clay" & "Silt-Some Sand" & "Sand Seams"-Trace to Some Gravel-Brown & Gray-Medium Dense (Water Seepage) (Pervious)	2	ST		726.0
6.5'					721.5
	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious)	3	ST		718.0
		4	ST		
17.0'					713.0
	"Clay-Some Silt" & "Clay & Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	5	ST		
		6	ST		
		7	ST		
31.2'	Sand-Some Silt-Trace to Some Gravel-Gray-Medium Dense (MC) (Water Bearing) (Pervious)	8	ST		698.8
33.7'	"Sand & Gravel" & "Silt, Sand & Gravel" & "Silt Seams"-Gray-Medium Dense (MC) to (MC) (Water Bearing) (Pervious)	9	ST		696.3
36.0'	"Silt-Some Sand" & "Silt & Sand" & "Sand-Some Silt" & "Sand & Gravel Seams"-Gray-Medium Dense (Water Bearing) (Pervious)	10			694.0
		11	ST		
44.5'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	12	ST		685.5
50.0'		13	ST		680.0
	End of Boring				



S - SAMPLE NUMBER
T - TYPE OF SAMPLING
D - SAMPLING DISTANCE
WL - WATER LEVEL

● PENETRATION - Blows/Ft.
⊗ WATER CONTENT - %
× DRY DENSITY - Lbs./Cu. Ft.

OWNER	SCALE:	SITE
Village of Arlington Heights, Illinois	None	Nichols and Schaeffer Roads Cook County, Illinois
ARCHITECT - ENGINEER Novak, Dempsey & Associates, Inc. Quality Control Consultants Des Plaines, Illinois	BY: vaw	PROJECT NAME Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

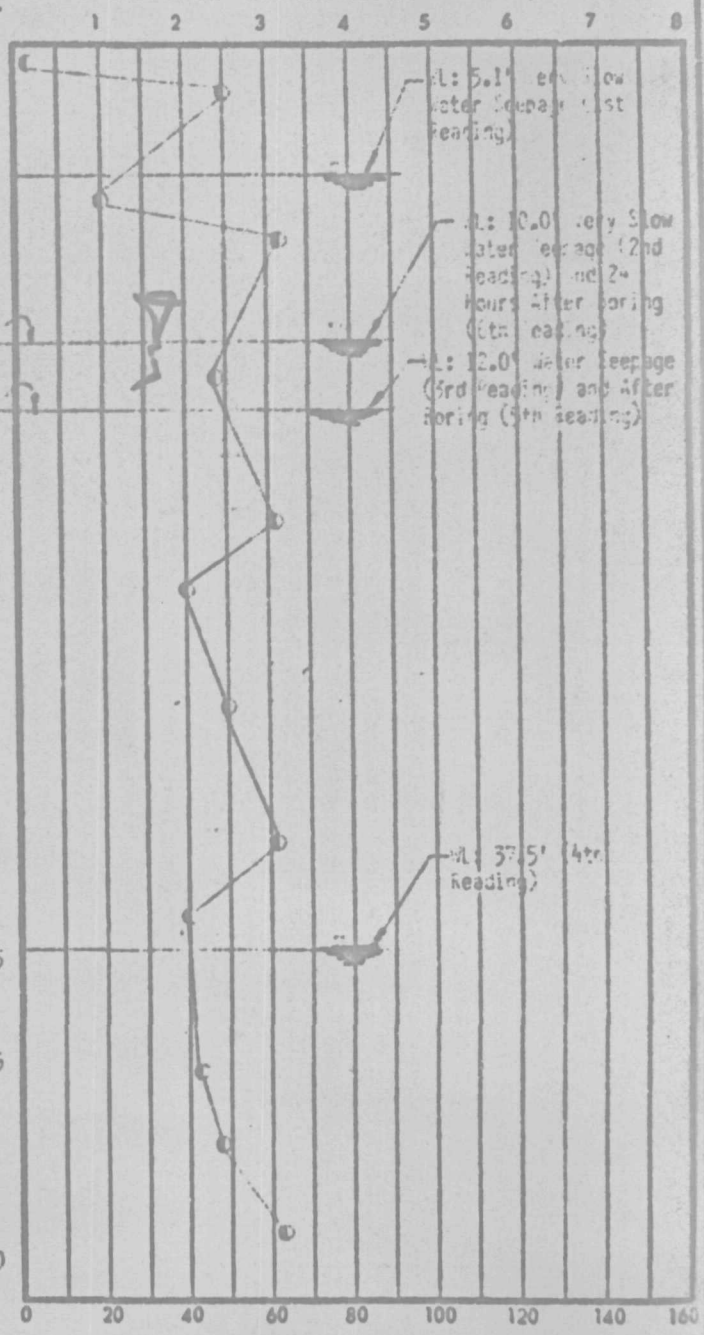
FILE NO. 1458

SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	3-52	BORING STARTED	1-16-[illegible]	STATION	WASH BORING ☐
BORING NO.	5	FOREMAN	[illegible]	BORING COMPLETED	1-1[illegible]	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
◐ – CALIBRATED PENETROMETER – Tons/Sq. Ft.

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.00'	GROUND SURFACE				729.0
	Dark Brown Topsoil-Loose (Pervious)				
1.2'	Clay & Silt-Trace of Sand & Gravel-Brown & Gray-Very Tough (Impervious)	1	ST		727.8
3.1'	"Silt-Some Sand & Clay" & "Silt-Some Sand" & "Sand Seams"-Brown & Gray-Medium Dense (Pervious) (Very Slow Water Seepage)	2	ST		725.9
6.4'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Brown & Gray-Very Tough (Impervious)	3			722.6
8.7'					720.3
					719.0
	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious) (Water Bearing Silt & Sand Seams at 10.0' and 12.0')	4	ST		
					717.0
		5	ST		
17.0'		6	ST		712.0
	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	7	ST		
		8	ST		
		9	ST		
37.5'	"Sand & Gravel-Some Silt" & "Sand-Some Silt" & "Silt-Some Clay" & "Silt"-Gray-Medium Dense (Pervious) (Water Bearing)	10	ST		691.5
40.5'		11	ST		688.5
	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	12	ST		
		13	ST		
50.0'	End of Boring				679.0



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION – Blows/Ft.
⊗ WATER CONTENT – %
× DRY DENSITY – Lbs. Cu. Ft.

OWNER Village of Arlington Heights, Illinois	SCALE: None	SITE Nichols and Schaeffer Roads Cook County, Illinois
ARCHITECT – ENGINEER Novak, Dempsey & Associates, Inc. Quality Control Consultants Des Plaines, Illinois	BY: VAW	PROJECT NAME Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2215 THATCHER AVENUE — RIVER GROVE, ILLINOIS

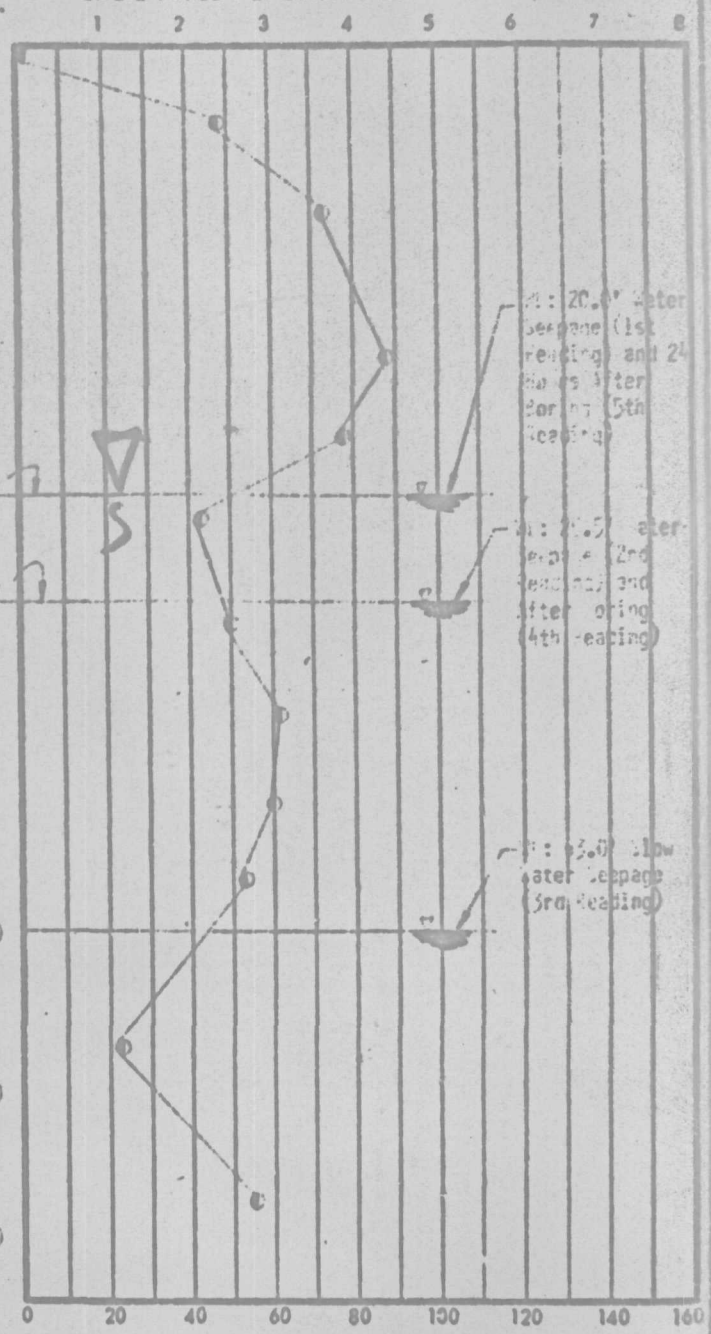
FILE NO. 1458

SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	4-52	BORING STARTED	1-1[illegible]	STATION	WASH BORING ☐
BORING NO.	9	FOREMAN	[illegible]	BORING COMPLETED	1-1[illegible]	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
⊕ – CALIBRATED PENETROMETER – Tons/Sq. Ft.

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.00'	GROUND SURFACE				711.0
	Dark Brown Topsoil–Loose (Pervious)	–	TA		
1.0'					710.0
	"Clay & Silt" & "Clay–Some Silt"–Trace of Sand & Gravel–Brown & Gray–Very Tough (Impervious)	1	ST		
		2	ST		
8.5'					702.5
	Silt & Clay–Trace to Some Sand & Gravel–Gray–Dense (Impervious)	3	ST		
12.0'					699.0
		4	ST		
					691.0
	"Clay & Silt" & "Clay–Some Silt"–Trace of Sand & Gravel–Blue–Very Tough (Impervious) (Water Bearing Silt & Sand Layers at 20.0' and 25.5')	5	ST		
					685.5
		6	ST		
		7	ST		
		8	ST		
		9	ST		
43.0'					668.0
	Silt & Clay–Trace to Some Sand–Trace of Gravel–Gray–Medium Dense (Pervious) (Slow Water Seepage)	10	ST		
47.0'					664.0
	Clay & Silt–Trace of Sand & Gravel–Blue–Very Tough (Impervious) (Water Bearing Silt & Sand Seams)	11	ST		
50.0'	End of Boring				661.0



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION – Blows/Ft.
⊗ WATER CONTENT – %
× DRY DENSITY – Lbs./Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: None	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

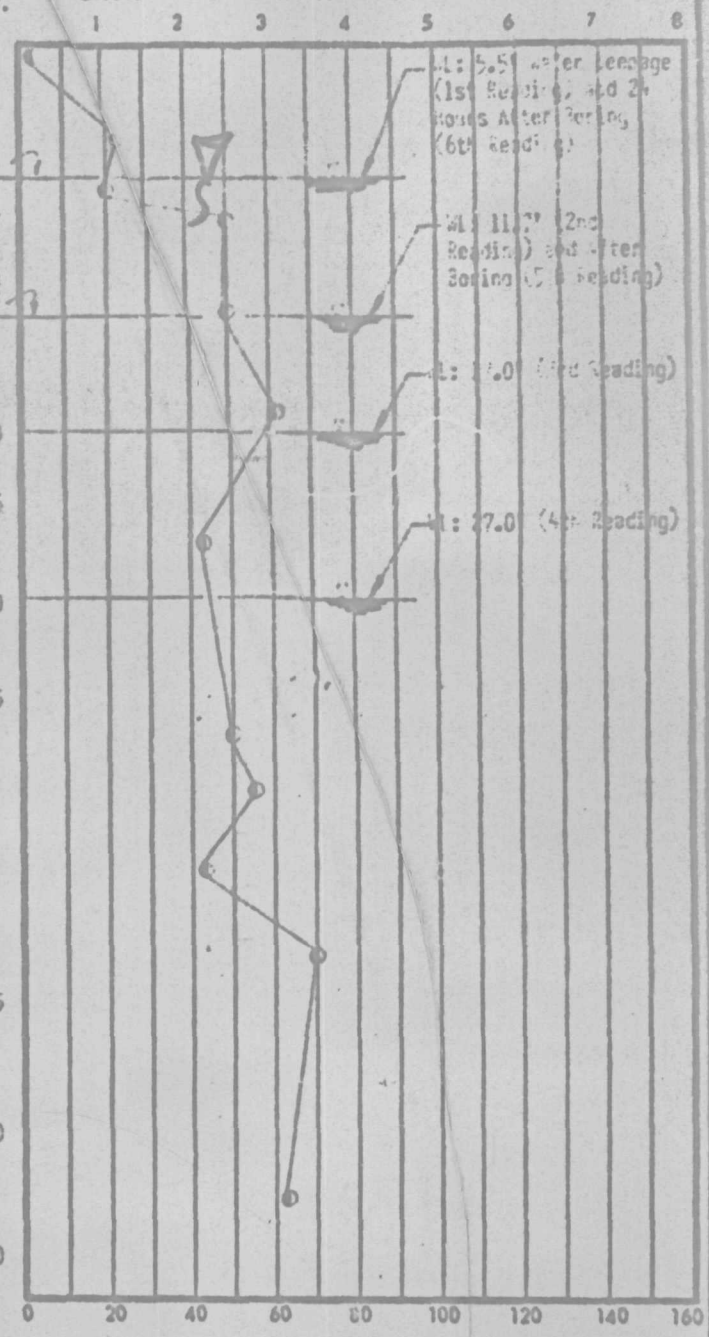
SOIL BORING LOG RECORD SHEET

REPORT NO.	1574	RIG	[illegible]-52	BORING STARTED	1-1[illegible]	STATION	WASH BORING ☐
BORING NO.	10	FOREMAN	[illegible]	BORING COMPLETED	1-1[illegible]	OFFSET	DRY BORING ☒

Q – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
C – CALIBRATED PENETROMETER – Tons/Sq. Ft.

GROUND SURFACE — ELEV. 716.0

DEPTH	DESCRIPTION OF MATERIAL	S	T	D
0.00'	Black Topsoil-Loose (Pervious)	1	ST	
5.5'	Clay & Silt-Trace of Sand & Gravel-Brown, Gray & Black-Tough (Impervious) (Water Bearing Silt & Sand Seams at 5.5')	2	ST	
		3	ST	
9.0'	Clay & Silt-Trace of Sand & Gravel-Brown & Gray-Very Tough (Impervious)	4	ST	
10.2'	Silt & Clay-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious) (Water Bearing Silt, Sand & Gravel Seams at 11.7')	5	ST	
		6	ST	
17.0'	"Silt & Sand" & "Sand-Some Gravel & Silt" & "Silt"-Gray-Medium Dense (SM) to (MC) (Pervious) (Water Bearing)	7	ST	
21.5'	Clay-Some Silt-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	8	ST	
27.0'	Sand & Gravel-Some Silt-Gray-Medium Dense (Pervious) (MC)	9	ST	
28.5'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious) (Silt Layers at 42.0' to 47.5')	10	ST	
		11	ST	
		12	ST	
		13	ST	
47.5'	Silt-Some Clay-Trace to Some Sand-Gray-Dense (Impervious)	-		
49.0'	Clay & Silt-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	14	ST	
52.0'	End of Boring			



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION - Blows/Ft.
⊗ WATER CONTENT - %
× DRY DENSITY - Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: None	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT - ENGINEER: Novak, Dempsey & Associates, Inc., Quality Control Consultants, Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2713 THATCHER AVENUE — RIVER GROVE, ILLINOIS

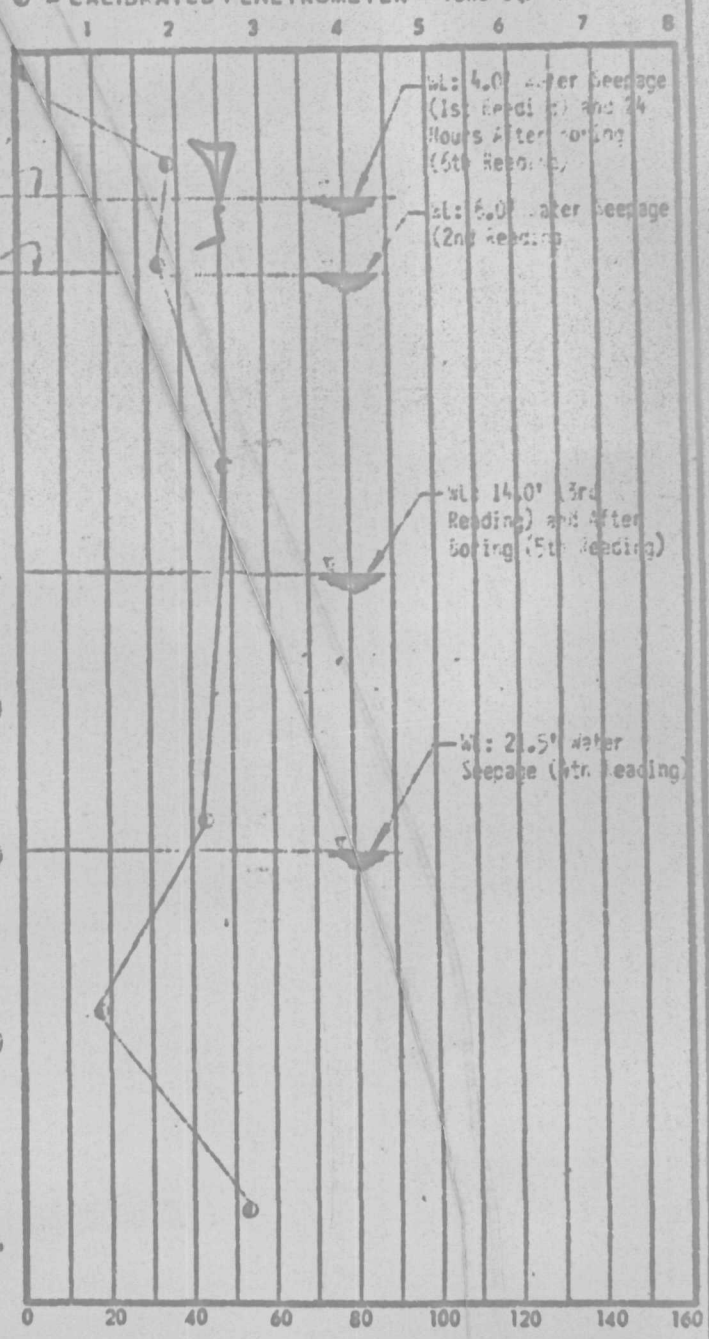
FILE NO. 1458 — SOIL BORING LOG RECORD SHEET

REPORT NO. 1374	RIG 6-52	BORING STARTED 1-1[illegible]	STATION	WASH BORING ☐
BORING NO. 11	FOREMAN [illegible]	BORING COMPLETED 1-1[illegible]	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
⊙ – CALIBRATED PENETROMETER – Tons/Sq. Ft.

GROUND SURFACE

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV
0.0'	[illegible] Brown Topsoil-Loose (Pervious)	–	PA		714.4
1.5'	"Silt & Clay" & "Silt-Some Clay" & "Silt-Some Sand" & "Silt-Some Sand, Clay & Gravel" & "Sand Seams"-Brown & Gray-Medium Dense (Pervious) (Water Seepage)	1	ST		712.9
		2	ST		710.4
		3	ST		708.4
9.0'	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious)	4	ST		706.4
14.0'	"Silt, Sand & Gravel" & "Sand & Gravel-Some Silt"-Gray-Medium Dense (SC) to (MC) (Pervious) (Water Bearing)	5	ST		700.4
19.5'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	6	ST		696.9
21.5'	"Silt-Some Sand & Clay" & "Silt-Some Sand" & "Sand Seams"-Gray-Medium Dense (Pervious) (Water Seepage)	7	ST		692.9
26.5'	Clay-Some Silt-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	8	ST		687.9
32.0'	End of Boring				682.4



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION - Blows/Ft.
⊙ WATER CONTENT - %
× DRY DENSITY - Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: 1" = 5'	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Howat, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

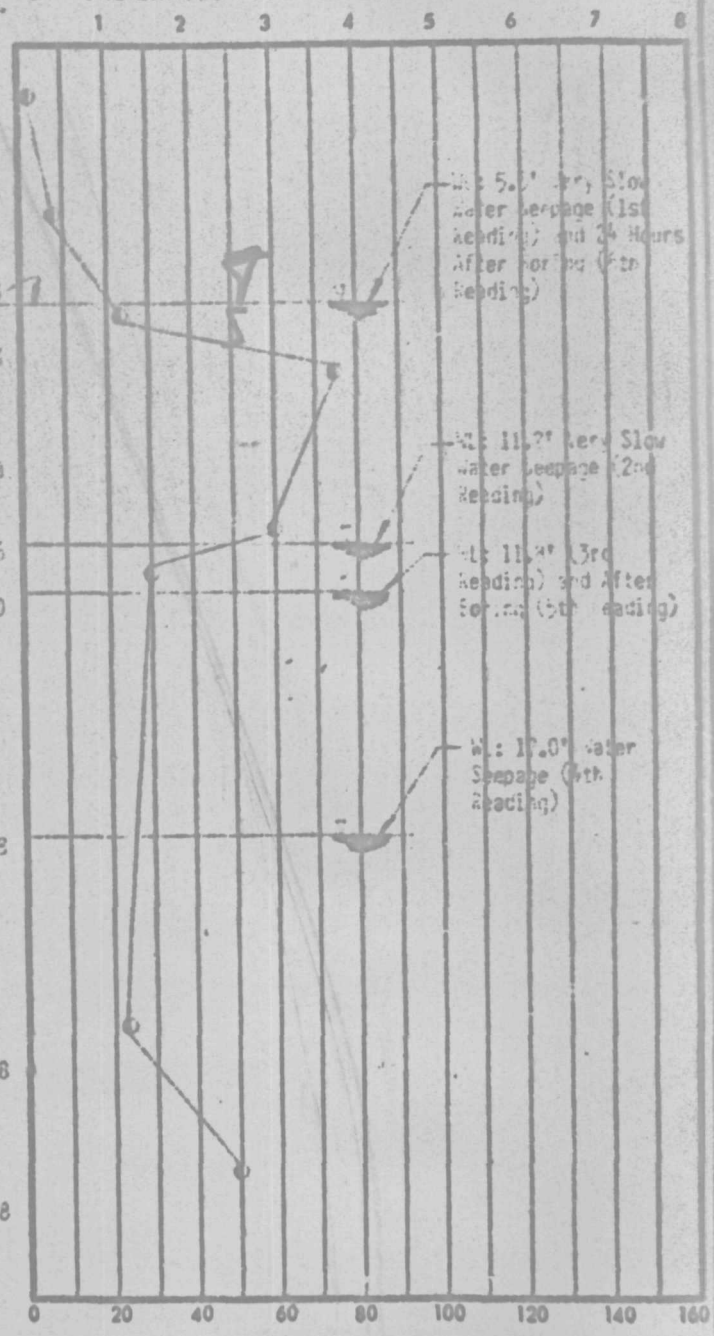
SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	6-52	BORING STARTED	1-[illegible]	STATION	WASH BORING ☐
BORING NO.	12	FOREMAN	pa	BORING COMPLETED	1-[illegible]	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
● – CALIBRATED PENETROMETER – Tons/Sq. Ft.

GROUND SURFACE — ELEV. 705.8

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
	Black Topsoil-Loose (Pervious)	–	PA		
6.0'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Brown, Gray & Black-Soft to Stiff (Impervious) (Water Bearing Silt & Sand Seams at 5.5')	1	ST		705.8
		2	ST		703.3
6.5'	Clay & Silt-Trace of Sand & Gravel-Brown & Gray-Very Tough (Impervious)	3	ST		702.3
9.0'	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious)	4	ST		699.8
11.2'	"Silt-Some Sand & Clay" & "Silt & Sand"-Gray-Medium Dense (Slow Water Seepage) (Pervious)	5	ST		697.6
11.8'		6	ST		697.0
	"Sand-Some Gravel & Silt" & "Sand & Gravel-Some Silt" & "Sand & Silt"-Gray-Medium Dense (SC) to (MC) (Pervious) (Water Bearing)	7	ST		
17.0'	"Silt-Some Sand & Clay" & "Silt-Some Sand"-Gray-Medium Dense (Pervious) (Slow Water Seepage)	8	ST		691.8
22.0'	Clay-Some Silt-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	9	ST		686.8
25.0'	End of Boring				683.8



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION - Blows/Ft.
⊗ WATER CONTENT - %
× DRY DENSITY - Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: 1" = 4'	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: vaw	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

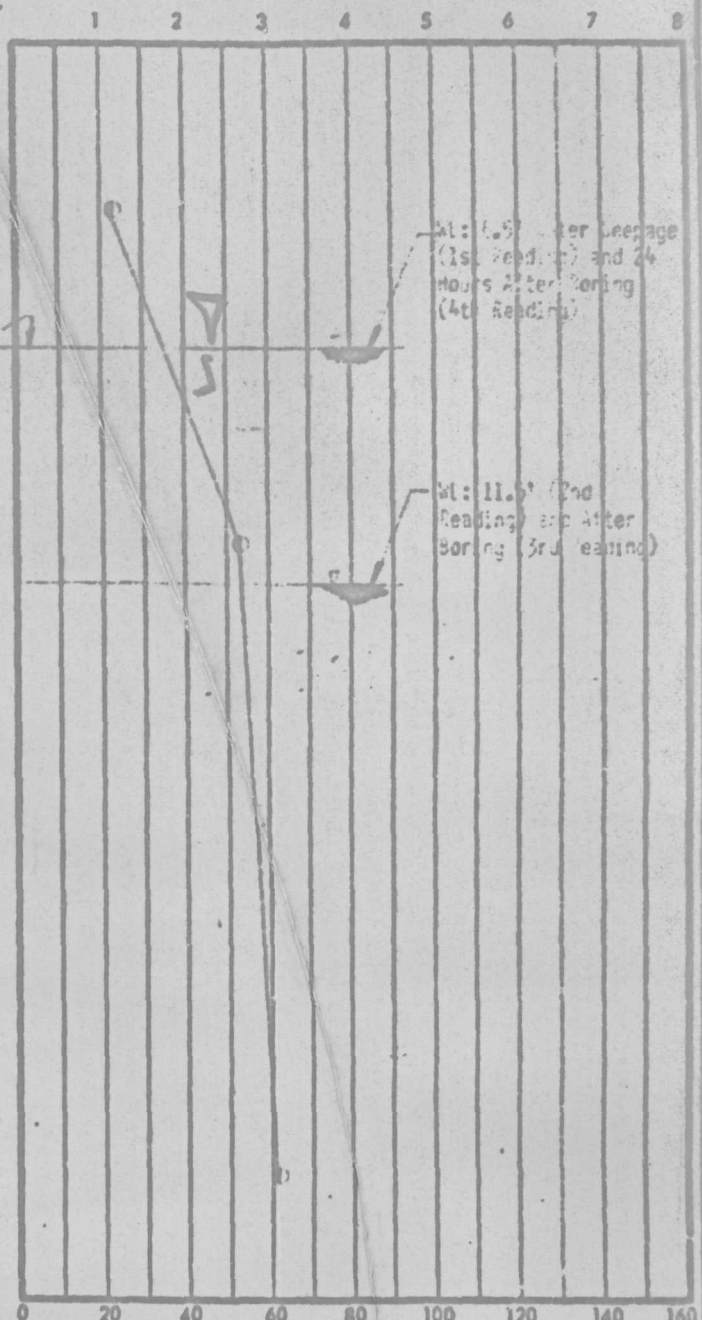
SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	6-52	BORING STARTED	1-18-68	STATION	WASH BORING ☐
BORING NO.	13	FOREMAN	[illegible]	BORING COMPLETED	1-[illegible]-68	OFFSET	DRY BORING ☒

O – UNCONFINED COMPRESSIVE STRENGTH – Tons/Sq. Ft.
⊙ – CALIBRATED PENETROMETER – Tons/Sq. Ft.

GROUND SURFACE — ELEV. 713.5

DEPTH	DESCRIPTION OF MATERIAL	S	T	D
0.0'	Black Topsoil–Loose (Pervious)	–	PA	
2.5'	Silt & Clay–Trace of Sand & Gravel–Dark Brown–Medium Dense (Impervious)	1	ST	
5.0'	"Silt–Some Sand & Clay" & "Silt–Some Sand & Gravel" & "Silt & Sand" & "Sand & Gravel Seams"–Brown–Medium Dense (SC) to (MC) (Pervious) (Water Seepage)	2	ST	
8.5'	"Silt & Clay" & "Silt–Some Clay"–Trace to Some Sand & Gravel–Gray–Medium Dense (Impervious)	3	ST	
11.5'		4	ST	
	"Sand–Some Gravel & Silt–Silt & Sand" & "Silt–Some Sand" & "Sand & Gravel"–Gray–Medium Dense (MC) (Pervious) (Water Bearing)	5	ST	
		6	ST	
23.0'	Clay & Silt–Trace of Sand & Gravel–Blue–Very Tough (Impervious)	7	ST	
28.0'	End of Boring			



S – SAMPLE NUMBER
T – TYPE OF SAMPLING
D – SAMPLING DISTANCE
WL – WATER LEVEL

● PENETRATION – Blows Ft.
⊙ WATER CONTENT – %
• DRY DENSITY – Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: 1" = 4'	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT – ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: VRW	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

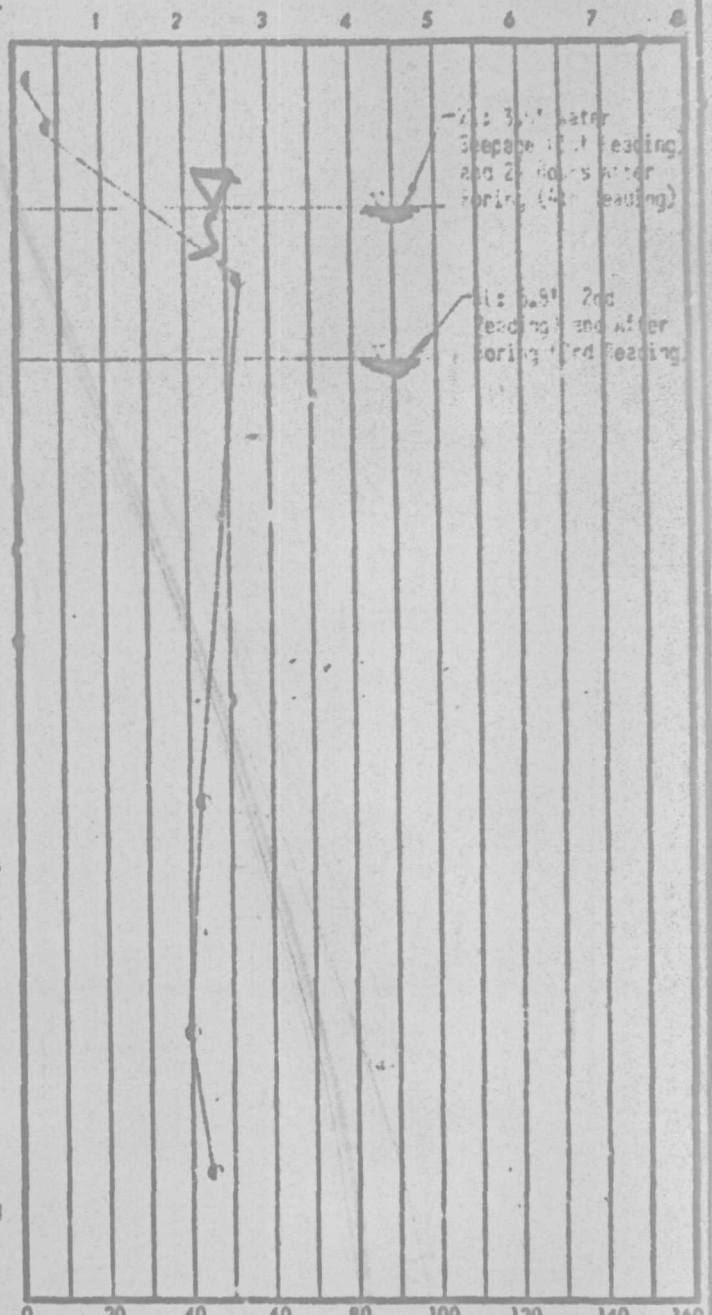
SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	-52	BORING STARTED	1-1-[illegible]	STATION	WASH BORING ☐
BORING NO.	14	FOREMAN	[illegible]	BORING COMPLETED	1-1-[illegible]	OFFSET	DRY BORING ☒

O - UNCONFINED COMPRESSIVE STRENGTH - Tons/Sq. Ft.
● - CALIBRATED PENETROMETER - Tons/Sq. Ft.

GROUND SURFACE

DEPTH	DESCRIPTION OF MATERIAL	S	T	D	ELEV.
0.0	Black Topsoil-Loose (Pervious)	-	FA		706.3
3.5	Silt & Clay-Trace of Sand-Brown-Loose (Impervious)	1	ST		700.3
5.5	Silt-Some Sand, Clay & Gravel-Brown-Medium Dense (Pervious) (SC) (Water Seepage)	2			698.5
8.5	Silt & Clay-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious)	3	ST		697.0
	"Sand-Some Gravel & Silt" & "Sand & Gravel-Silt Seams"-Gray-Medium Dense (SC) to (MC) (Pervious) (Water Bearing)	4	ST		
13.2	Silt & Clay-Trace to Some Sand & Gravel-Gray-Medium Dense (Impervious) (Silt Layers)	5	ST		690.0
17.5	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious) (Silt Seams)	6	ST		685.3
		7	ST		
25.0	End of Boring				678.8



S - SAMPLE NUMBER
T - TYPE OF SAMPLING
D - SAMPLING DISTANCE
WL - WATER LEVEL

● PENETRATION - Blows Ft.
⊗ WATER CONTENT - %
× DRY DENSITY - Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: 1" = 4'	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT - ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: VRW	PROJECT NAME: Proposed Sanitary Land Fill

ILLINOIS DRILLING & TESTING COMPANY

SOIL INVESTIGATION • FOUNDATION BORINGS

2715 THATCHER AVENUE — RIVER GROVE, ILLINOIS

FILE NO. 1458

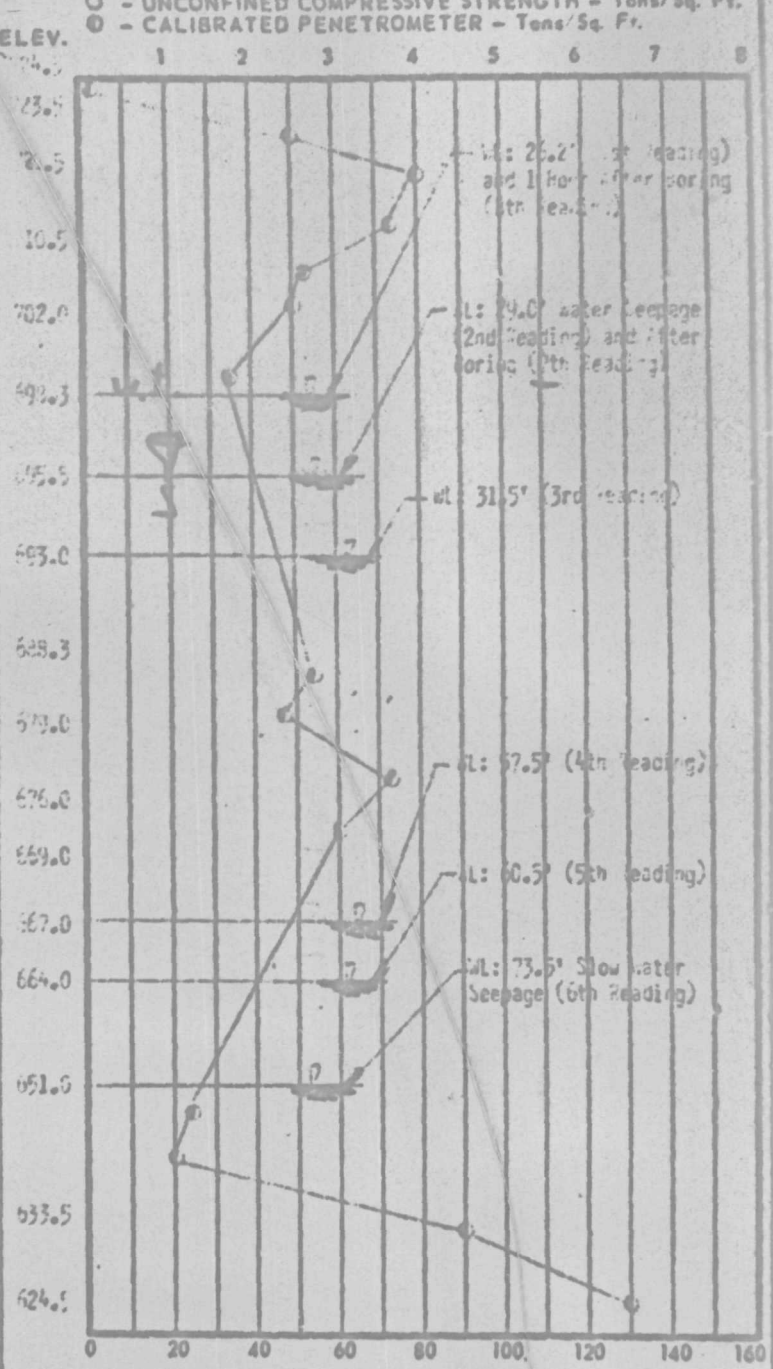
SOIL BORING LOG RECORD SHEET

REPORT NO.	1374	RIG	B-52	BORING STARTED	1-19-68	STATION	WASH BORING ☐
BORING NO.	15	FOREMAN	pg	BORING COMPLETED	1-20-68	OFFSET	DRY BORING ☒

O - UNCONFINED COMPRESSIVE STRENGTH - Tons/Sq. Ft.
● - CALIBRATED PENETROMETER - Tons/Sq. Ft.

GROUND SURFACE

DEPTH	DESCRIPTION OF MATERIAL	S	T	D
0.0'	Black Topsoil-Loose	-	PA	
	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Dark Brown-Medium Dense (Impervious)	1	ST	
5.0'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Brown & Gray-Very Tough to Hard (Impervious)	2	ST	
		3	ST	
10.0'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	4	ST	
		5	ST	
22.5'	"Silt-Some Sand & Clay" & "Silt-Some Sand" & "Sand Seams"-Trace to Some Gravel-Gray-Medium Dense (Impervious)	6	ST	
28.2'	"Silt-Some Sand, Clay & Gravel" & "Silt-Some Sand & Gravel" & "Sand & Gravel-Some Silt"-Gray-Medium Dense (Pervious) (SC) to (MC) (Water Bearing)	7	ST	
30.0'	"Silt-Some Sand & Clay" & "Silt-Some Sand"-Trace to Some Gravel-Gray-Medium Dense (SC) (Water Seepage) (Pervious)	8	ST	
31.5'	"Sand-Some Gravel & Silt" & "Sand & Silt" & "Silt Seams"-Gray-Medium Dense (SC) to (MC) (Water Bearing) (Pervious)	9	ST	
38.2'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	10	ST	
		11	ST	
45.5'	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Dense (Impervious) (Water Bearing Silt & Sand Seams)	12	ST	
48.5'	"Clay & Silt" & "Clay-Some Silt"-Trace of Sand & Gravel-Blue-Very Tough (Impervious)	13	ST	
55.5'	"Sand-Some Gravel & Silt" & "Silt & Sand"-Gray-Medium Dense (Pervious) (SC) (Water Bearing)	14	ST	
59.5'	Silt & Clay-Trace of Sand & Gravel-Gray-Medium Dense (Impervious)	-	PA	
60.5'	"Sand-Some Silt" & "Sand & Silt" & "Silt-Some Sand" & "Sand & Gravel Seams"-Gray-Medium Dense (Water Bearing) (Pervious) (Silt & Clay Layers) (SC) to (ML)	15	ST	
		16	ST	
		17	ST	
73.5'	"Silt-Some Sand & Clay" & "Silt-Some Clay" & "Silt-Some Sand" & "Sand Seams"-Gray-Medium Dense (Pervious) to (Impervious) (Very Slow Water Seepage) (Sand & Gravel Seams)	18	ST	
		19	ST	
		20	ST	
91.0'	"Silt & Clay" & "Silt-Some Clay"-Trace to Some Sand & Gravel-Gray-Very Dense (Impervious) (Sand & Gravel Seams)	21	ST	
		22	ST	
100.0'	End of Boring			



S - SAMPLE NUMBER
T - TYPE OF SAMPLING
D - SAMPLING DISTANCE
WL - WATER LEVEL

● PENETRATION - Blows/Ft.
⊗ WATER CONTENT - %
× DRY DENSITY - Lbs. Cu. Ft.

OWNER: Village of Arlington Heights, Illinois	SCALE: None	SITE: Nichols and Schaeffer Roads, Cook County, Illinois
ARCHITECT - ENGINEER: Novak, Dempsey & Associates, Inc. Quality Control Consultants, Des Plaines, Illinois	BY: vaz	PROJECT NAME: Proposed Sanitary Land Fill

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

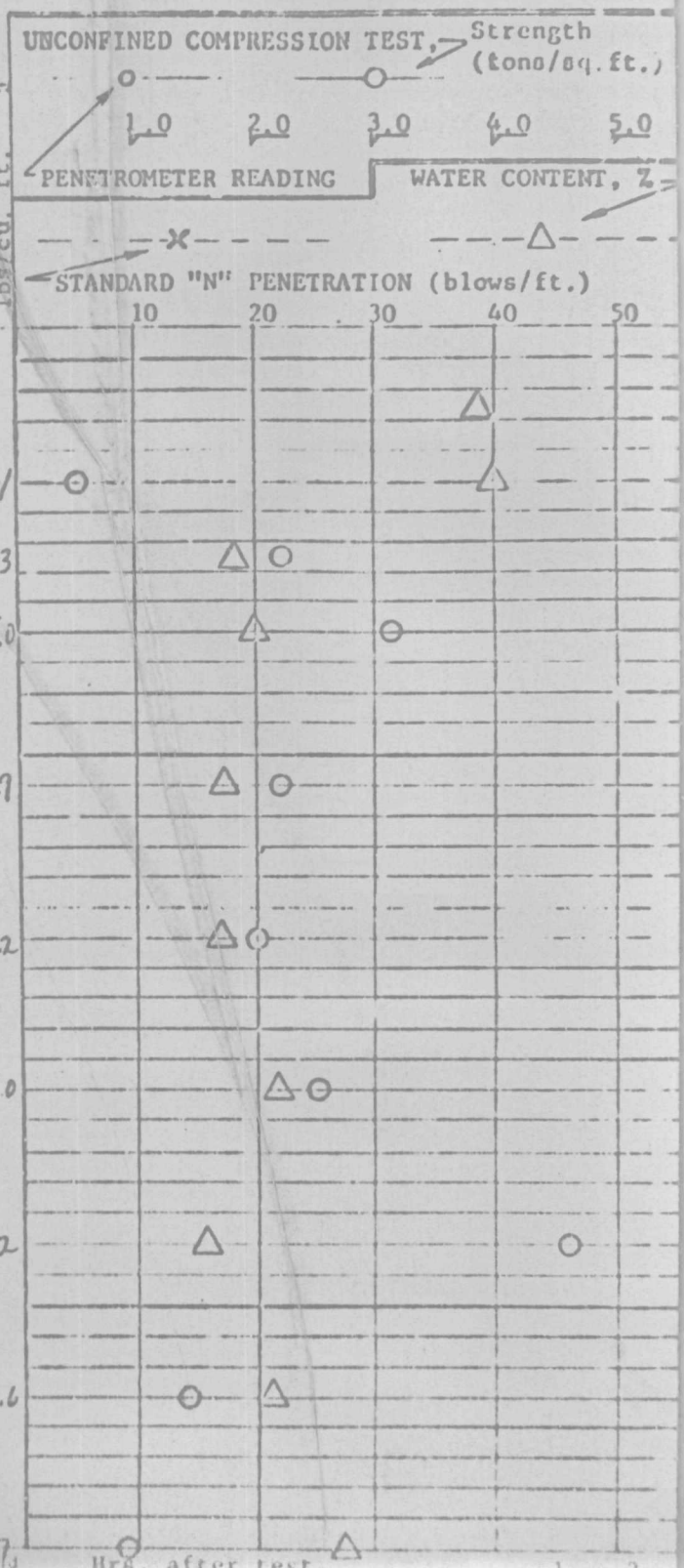
RECEIVED FEB 2 8 1972

SOIL BORING LOG

BORING NO: 1
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/1/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth Offset	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil, some clay, soft	
5.0				85.1
			Brown-gray clay, some silt and sand	
			Gray clay and sand, some silt, trace gravel, damp, very tough	107.3
10.0				105.0
15.0				112.7
20.0				114.2
			Gray-brown clay, some silt and sand, trace gravel	
25.0			Gray clay, some silt and sand, trace gravel, very tough	109.0
			Gray clay, some silt and sand, trace gravel, hard	
30.0				111.2
			Gray clay, some silt and sand, trace gravel, tough	
35.0				100.6
40.0				98.7



Weather Conditions: Water Level 3' Hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 1 cont'd.
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/1/71 By: IK
Equipt. Used: CME Drill
Comments:

Depth Offset	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
4			Gray clay, some silt and sand, trace gravel, stiff	
8			Gray clay, some silt and sand, trace gravel, tough	106.8
45	0			
10			Gray-brown silt and sand, dense	
51	0			
0			End of Boring	

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 2
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/1/71 By: JK
Equipt. Used: CME Drill
Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.) — c — 1.0 2.0 3.0 4.0 5.0
PENETROMETER READING
WATER CONTENT, %
STANDARD "N" PENETRATION (blows/ft.) 10 20 30 40 50

Depth (ft.)	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil (24")	
			Brown clay, some silt and sand, trace gravel, very tough	100.1
5.0			Brown clay, some silt and sand, trace gravel, tough	94.3
			Gray-brown clay, some silt and sand, trace gravel, very tough	112.0
10.0			Gray clay, some silt and sand, trace gravel, very tough	116.0
15.0				117.7
20.0			Gray clay and sand, some coarse gravel, trace silt, very tough	112.1
25.0				119.1
30.0				107.7
35.0			Gray clay and sand, some coarse gravel, trace silt, hard	112.6
40.0				102.7

Weather Conditions: Water level El. 624 Has after hrs.

NOVAK DEMPSEY & ASSOCIATES, INC.

Quality Control Consulta...s

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 2 cont'd.
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/1/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth Ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
8			Gray clay and sand, some coarse gravel, trace, very tough	
15				112.2
18			Gray clay and sand, some coarse gravel, trace silt, tough	
25				115.0
			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.)
1.0 2.0 3.0 4.0 5.0
PENETROMETER READING
WATER CONTENT, %
STANDARD "N" PENETRATION (blows/ft.)
10 20 30 40 50

Weather Conditions:
Water Level 5' @ 24 Hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

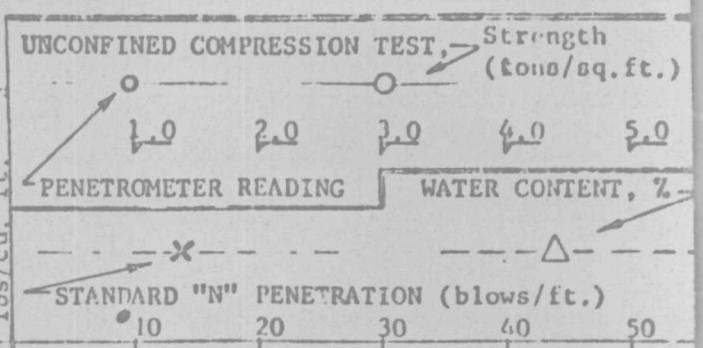
1032 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 3
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/2/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil (36")	
5.0			Brown clay, some topsoil, stiff	97.7
			Brown clay, some silt and sand, trace gravel	112.9
10.0			Gray clay, some silt and sand, trace gravel, very tough	117.2
15.0				120.9
20.0			Gray clay, some silt and sand, trace gravel, tough	103.3
25.0			Gray clay, some silt and sand, trace gravel, very tough	111.2
30.0				111.5
35.0				107.1
40.0			Gray clay and silt, trace fine sand, hard	10[illegible]



Weather Conditions: Water Level 8' @ ___ Hrs. after test

NOVAK DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 3 cont'd.
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/2/71 By: JK
Equipt. Used: CME Drill
Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)
1.0 2.0 3.0 4.0 5.0
PENETROMETER READING
WATER CONTENT, %
STANDARD "N" PENETRATION (blows/ft.)
10 20 30 40 50

Depth, Ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Gray clay and silt, trace fine sand, hard	
			Gray clay and silt, some sand, stiff	110.6
				102.2
			End of Boring	

Weather Conditions: Water Level at Grd. Hrs. After Test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

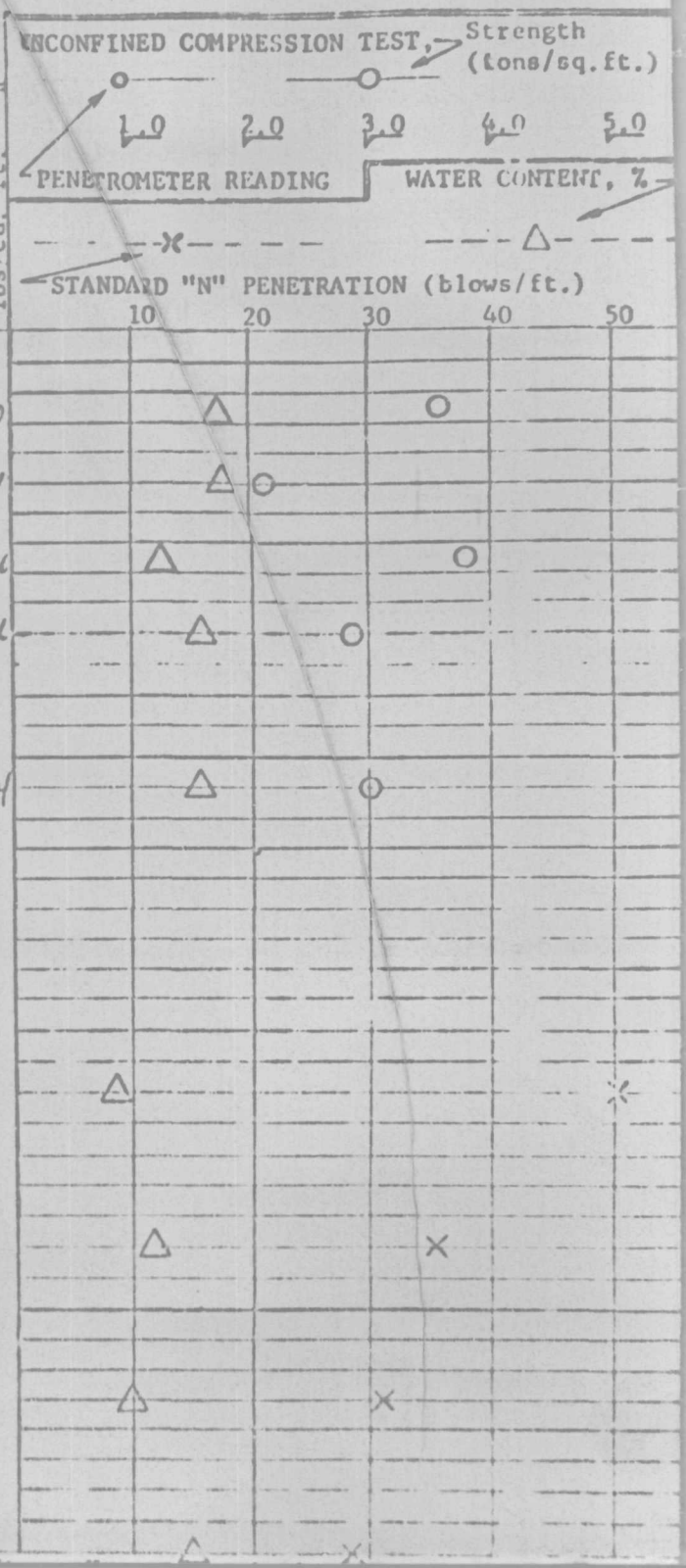
1532 DES PLAINES AVENUE o DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 4
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/2/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, Ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil (2")	
1			Brown clay, some silt and sand, trace gravel, very tough	99.0
4.0				101.1
				107.6
10.0			Gray clay, some silt and sand, trace gravel, very tough	107.6
15.0				115.4
20.0				
25.0			Coarse gray sand and gravel, wet, dense	
30				
35			Sand and gravel, some gray clay, dense	
40.0			Sand and gravel, some gray clay, medium dense	



NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 4 cont'd.
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj.No. 3140 Date: 3/2/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, Ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
2			Sand and gravel, some gray clay, medium dense	
50.0				
51.0			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Weather Conditions: Water Level ____ @ ____ Hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

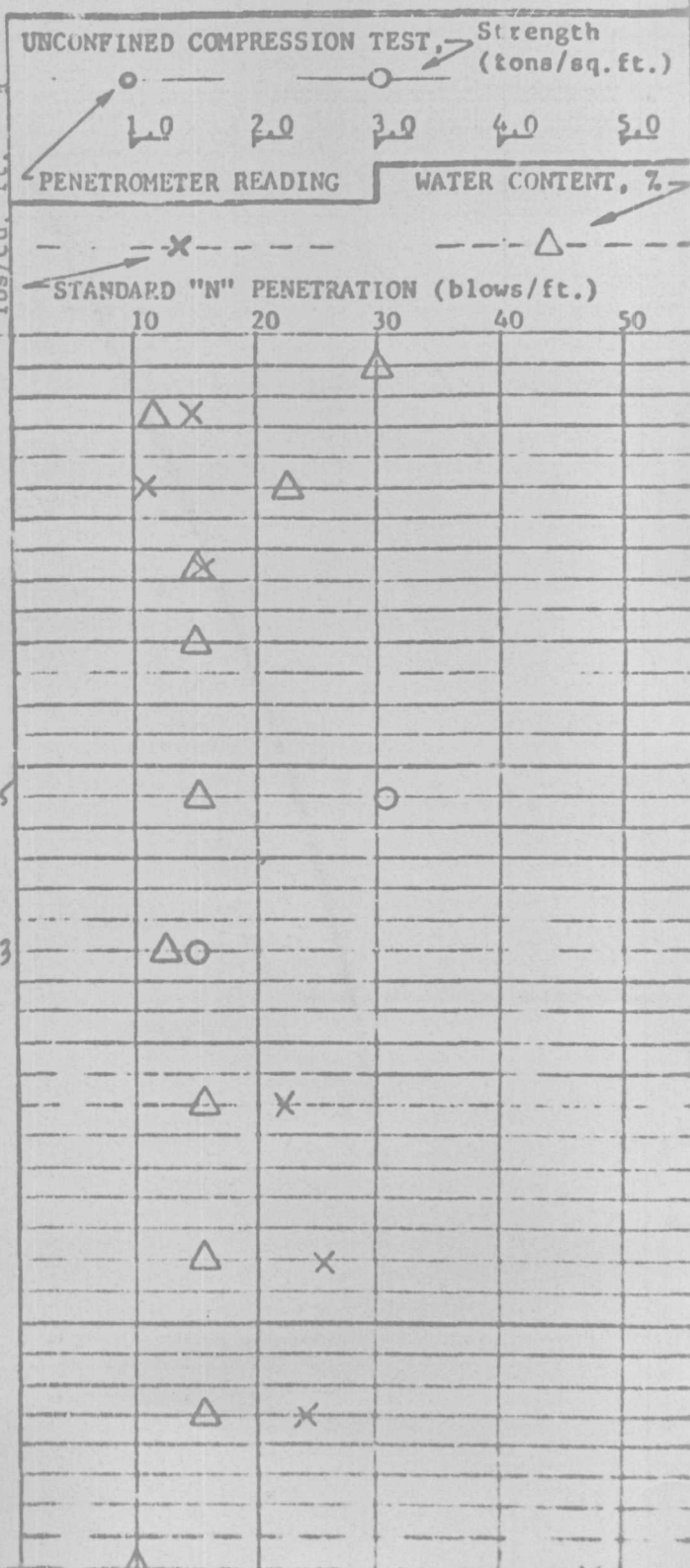
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 5
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/9/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth (ft.)	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil (18")	
			Brown sand and gravel, some clay, damp, medium dense	
10.0			Gray clay and silt, some gravel, trace sand, very tough	125.5
20.0			Gray clay and silt, some gravel, trace sand, tough	118.3
25.0			Gray sand and gravel, some clay, medium dense	
30.0				
35.0				
40.0			Gray clay, sand and gravel, hard	



Weather Conditions: Water Level 7' 0" Hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysts, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 5 cont'd.
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/9/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Gray clay, sand and gravel, hard	
45.0				
50.0				
51.0			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

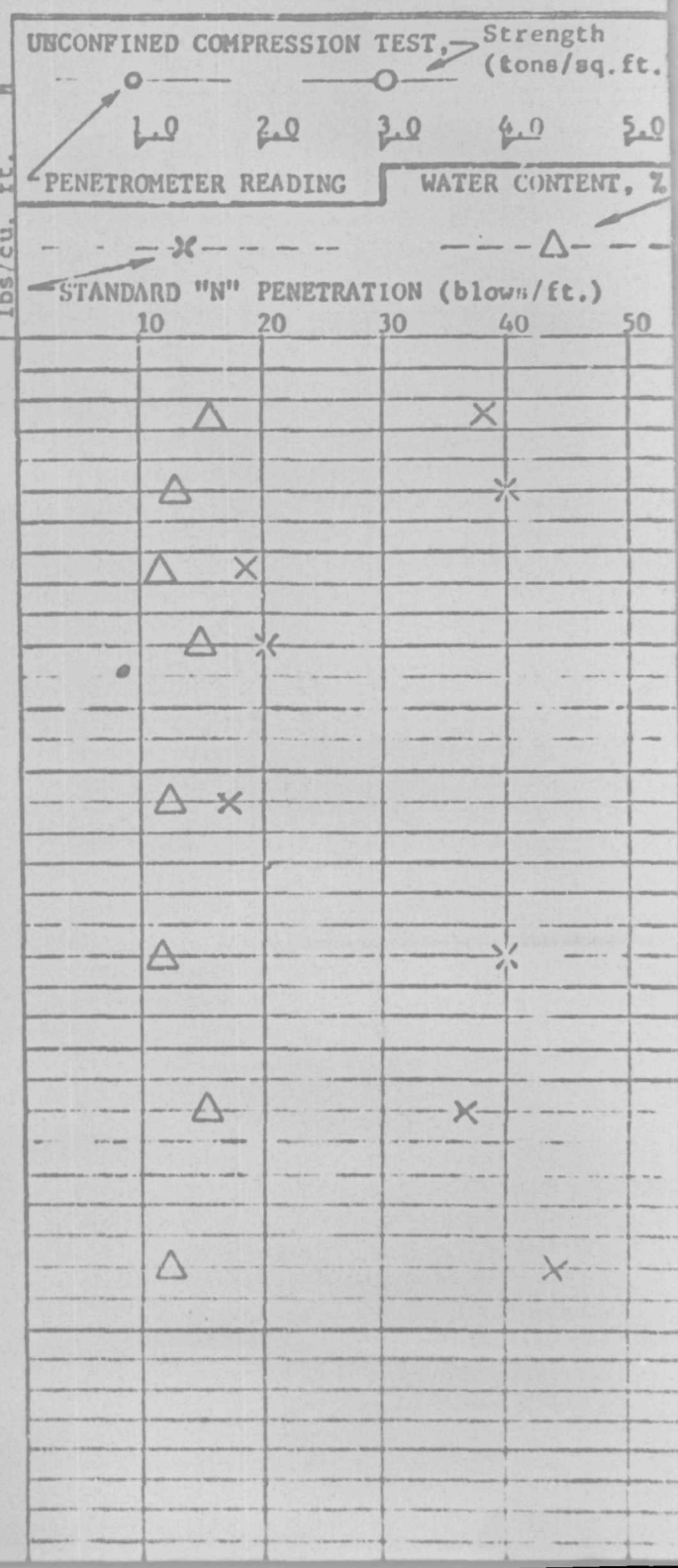
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 6
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir Phase I

Proj. No. 3140 Date: 3/5/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil (3")	
			Brown sand and gravel, some clay and silt, dense	
5.0				
			Brown sand and gravel, some clay and silt, medium dense	
10.0				
15.0				
			Gray silt and gravel, some clay, dense	
20.0				
25.0				
			Brown sand and gravel, some silt, trace clay, dense	
30.0				
33.0			Rock or obstacle	
			End of Boring	



NOVAK, DEMPSEY & ASSOCIATES, INC

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 7
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj.No. 3140 Date: 3/17/71 By: JK
Equipt. Used: CME Drill
Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING | WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Depth, ft.	Sample Number	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu.ft.
				Existing Surface - Elev. ft: 726.90	
5.0				Brown silt, sand and gravel, trace clay, medium dense	
10.0					
15.0				Gray clay, some silt, sand and gravel, tough	118.5
20.0					114.4
25.0					119.2
30.0				Gray clay, some silt, sand and gravel, very tough	
35.0					

NO' K, DEMSEY & ASSOCIA 'S, INC.

Quality Control Consultants

Analysis, Testing, Research, Development of Construction Materials

NO K, DEMPSEY & ASSOCIA S, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

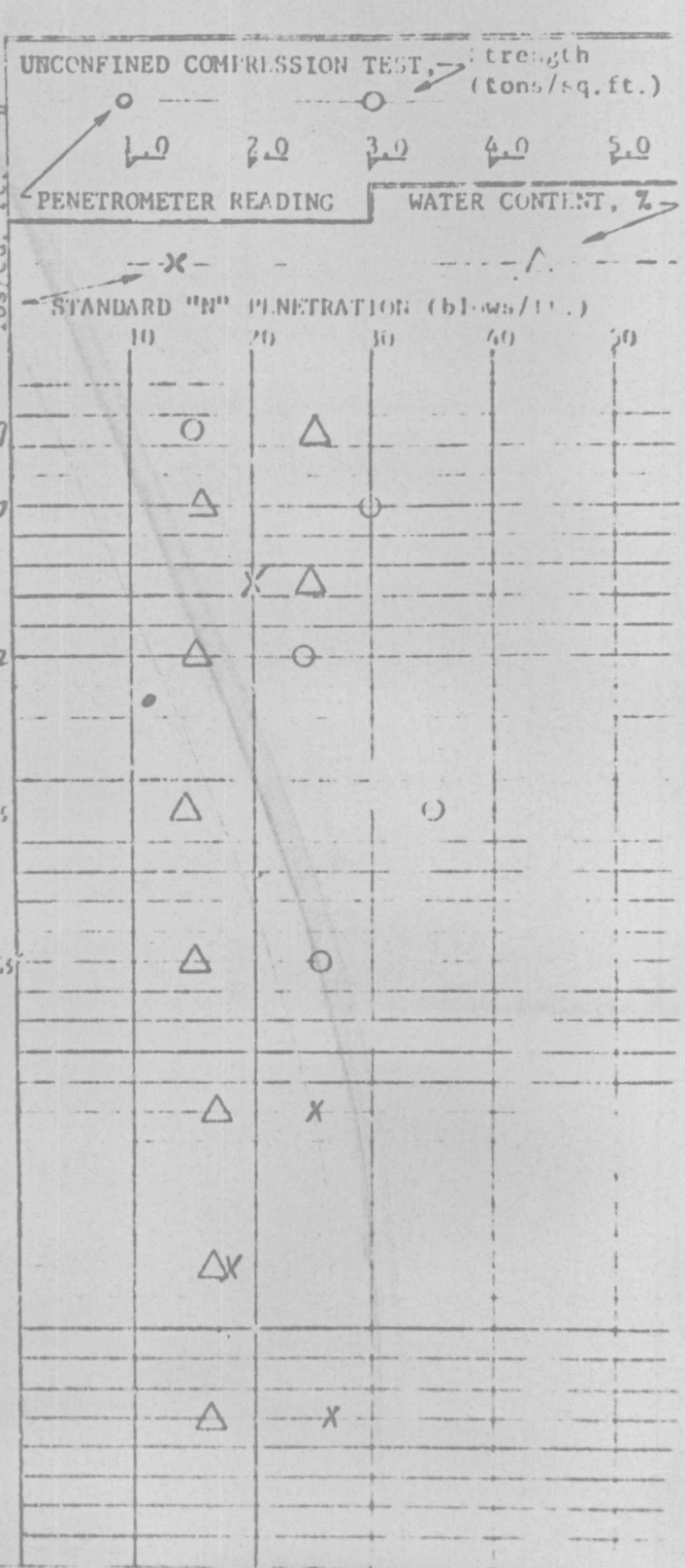
1533 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 8
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/18/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface Elev. ft: 726.37	
			Black topsoil	
			Brown clay and silt, some sand and gravel, tough	86.7
5.0			Brown clay and silt, some sand and gravel, very tough	112.7
			Brown silt and sand, trace gravel, medium dense	
10				112.2
15.0				115.5
20.0				105.5
			Gray clay, some silt, sand and gravel, very tough	
25.0				
30.0				
35.0				



Weather Conditions: Water Level @ hrs. after end

NO. .K, DEMPSEY & ASSOCIA S, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 8
CLIENT VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/18/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Rate	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40				
45				
50				
55.0			Gray clay, some silt, sand and gravel, hard	
60.0				
65.0				
70				
			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING

WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysts, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 9
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/22/71 By: JK
Equipt. Used: CME Drill
Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.)
1.0 2.0 3.0 4.0 5.0
PENETROMETER READING
WATER CONTENT, %
STANDARD "N" PENETRATION (blows/ft.)
10 20 30 40 50

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft: 725.68	
5.0			Brown clay, some silt, sand and gravel, very tough	105.0
				113.7
10.0			Brown clay, some silt, sand and gravel, hard	124.9
				106.9
15.0			Gray clay, some silt and sand, trace gravel, very tough	108.4
20.0				113.2
25.0			Gray clay, some silt and sand, trace gravel, tough	106.5
30.0			Gray sand and gravel, trace clay, dense	
35.0			Gray sand and gravel, trace clay, medium dense	

NC AK, DEMPSEY & ASSOCIA S, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1332 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 9

CLIENT: VILLAGE OF ARLINGTON HEIGHTS

LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/22/71 By: JK

Equipt. Used: CME Drill

Comments:

Depth, ft.	Sample Ranges	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40			Gray sand and gravel, trace clay, dense	
45			Gray clay, some silt, sand and gravel, medium dense	
50				
55			Gray clay, some silt, sand and gravel, dense	
60.0				
65.0				
70.0				
			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING

WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Other Conditions:

Water Level 16.0'

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

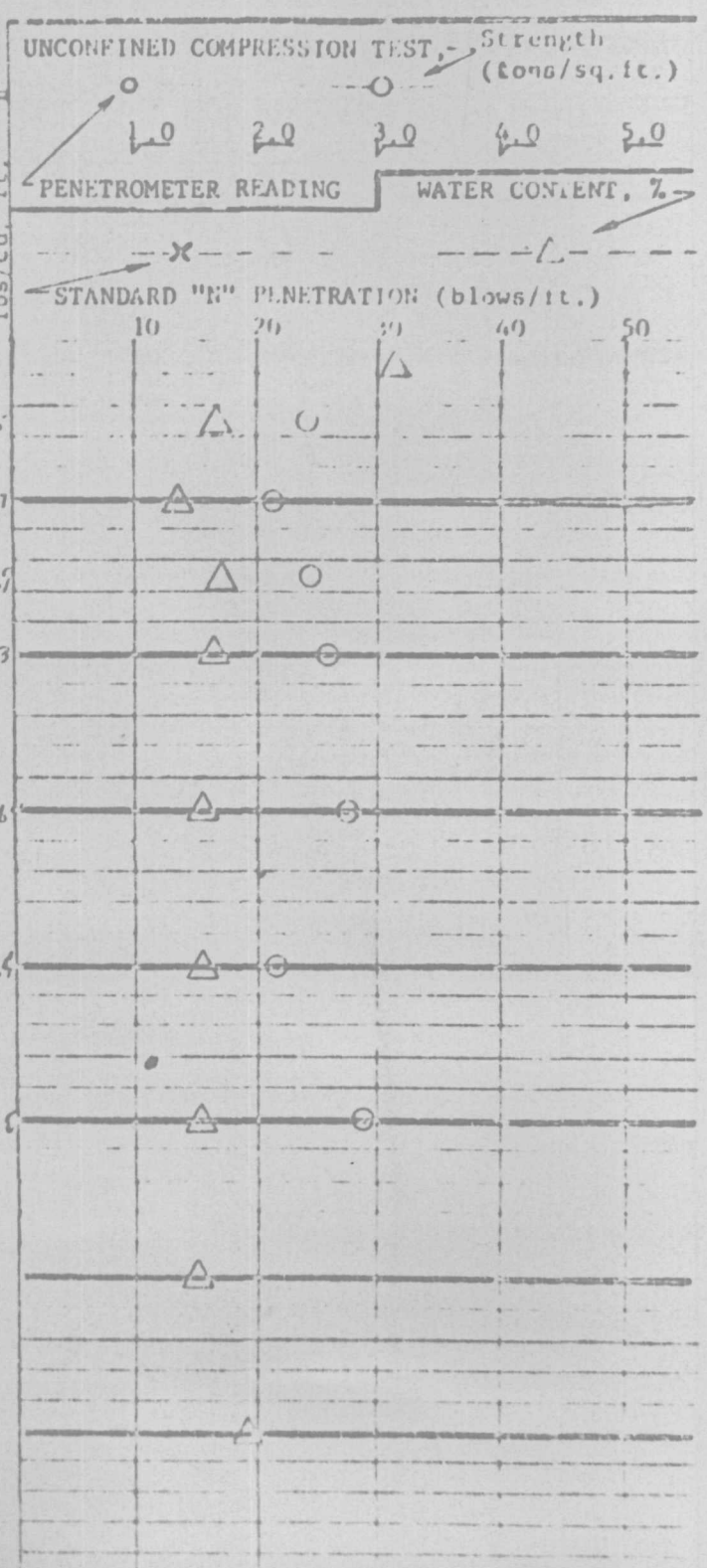
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 10
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/24/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft: 430.7 Black topsoil	
5.0			Brown clay and silt, some sand and gravel, very tough	123.1
10.0				106.9 110.3
15.0				115.6
20.0			Gray clay, some silt and sand, trace gravel, very tough	112.5
25.0				105.0
30.0				
35.0				



NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

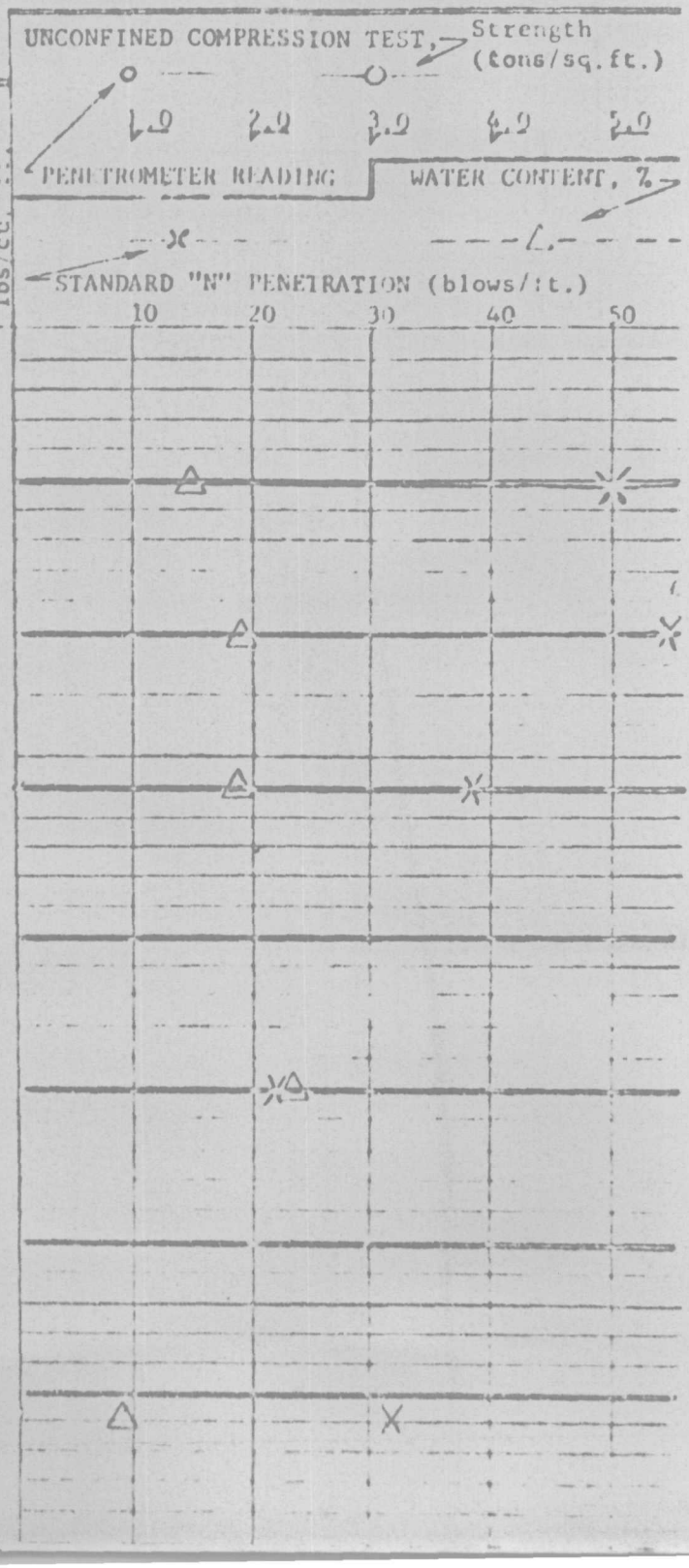
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 10
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/24/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry lbs/cu. ft.
		Existing Surface - Elev. ft:	
40.0			
45.0		Gray clay, some silt, sand and gravel, hard	
50.0			
55.0			
60.0		Gray silt, trace clay, medium dense	
65.0		Gray silt, trace clay, dense	
70.0		65.9 71 / 130.5 End of Boring	



NOAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

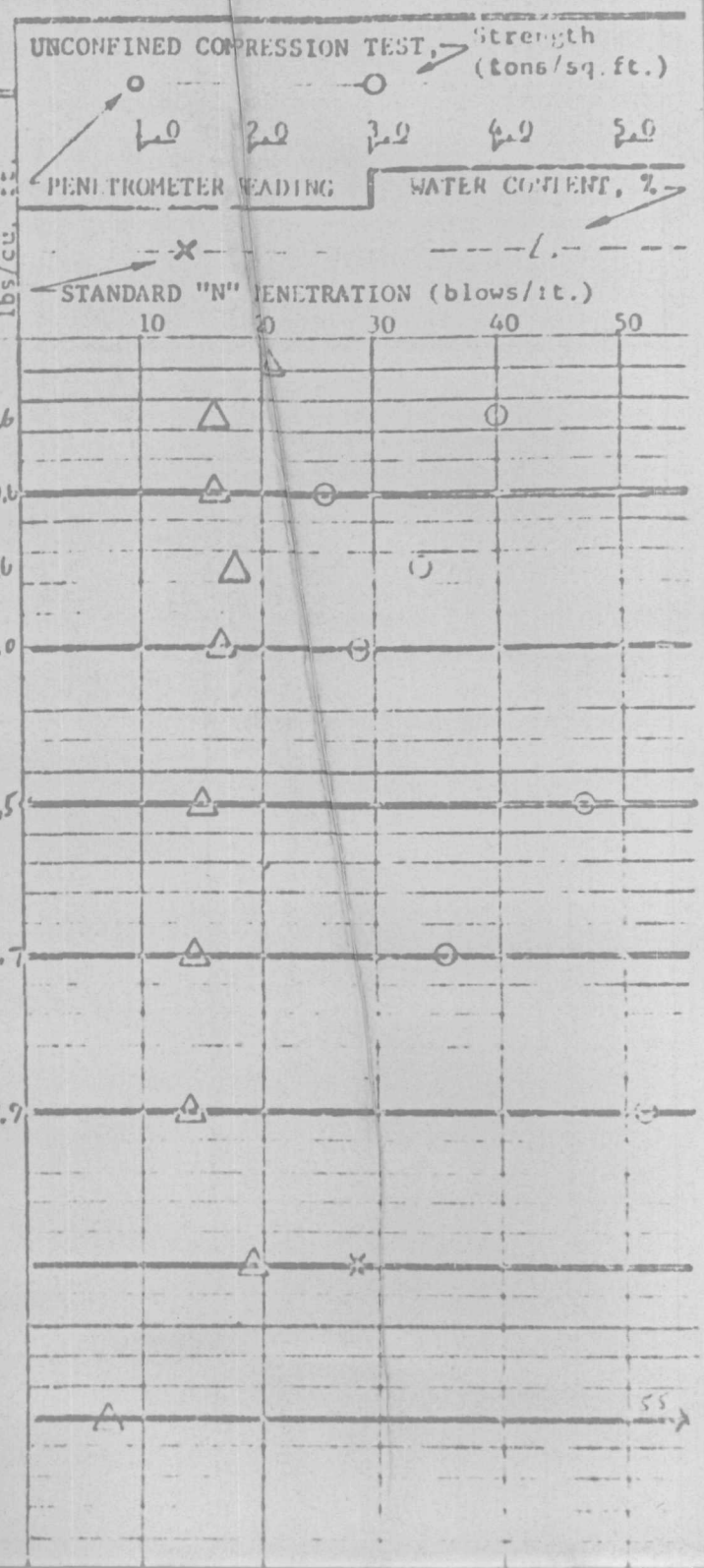
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 11
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/25/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth ft	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft: 731.3	
			Black topsoil	
5.0			Brown clay, some silt and sand, trace gravel, very tough	113.6
				120.6
				117.6
10.0			Gray clay and silt, some sand, trace gravel, very tough	113.0
15.0			Gray clay and silt, some sand, trace gravel, hard	118.5
20.0			Gray clay and silt, some sand, trace gravel, very tough	117.7
22.0				117.9
			Gray clay and silt, some sand, trace gravel, hard	
30.0				
			~~Gray fine sand, trace clay, medium dense~~	
35.0			Gray fine sand, trace clay, dense	



NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 11
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 7140 Date: 3/25/71 By: JK
Equipt. Used: CME Drill
Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)
1.0 2.0 3.0 4.0 5.0
PENETROMETER READING
WATER CONTENT, %
STANDARD "N" PENETRATION (blows/ft.)
10 20 30 40 50

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft.	
			Gray fine sand, trace clay, dense	
40.0				
45.0				
50.0			Gray silt, some clay, trace sand and gravel, medium dense	
55.0				
60.0				
65.0				
			Gray silt, some clay, trace sand and gravel, dense	
70.0				
			End of Boring	

58.

Weather Conditions: Water Level 17.0 hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

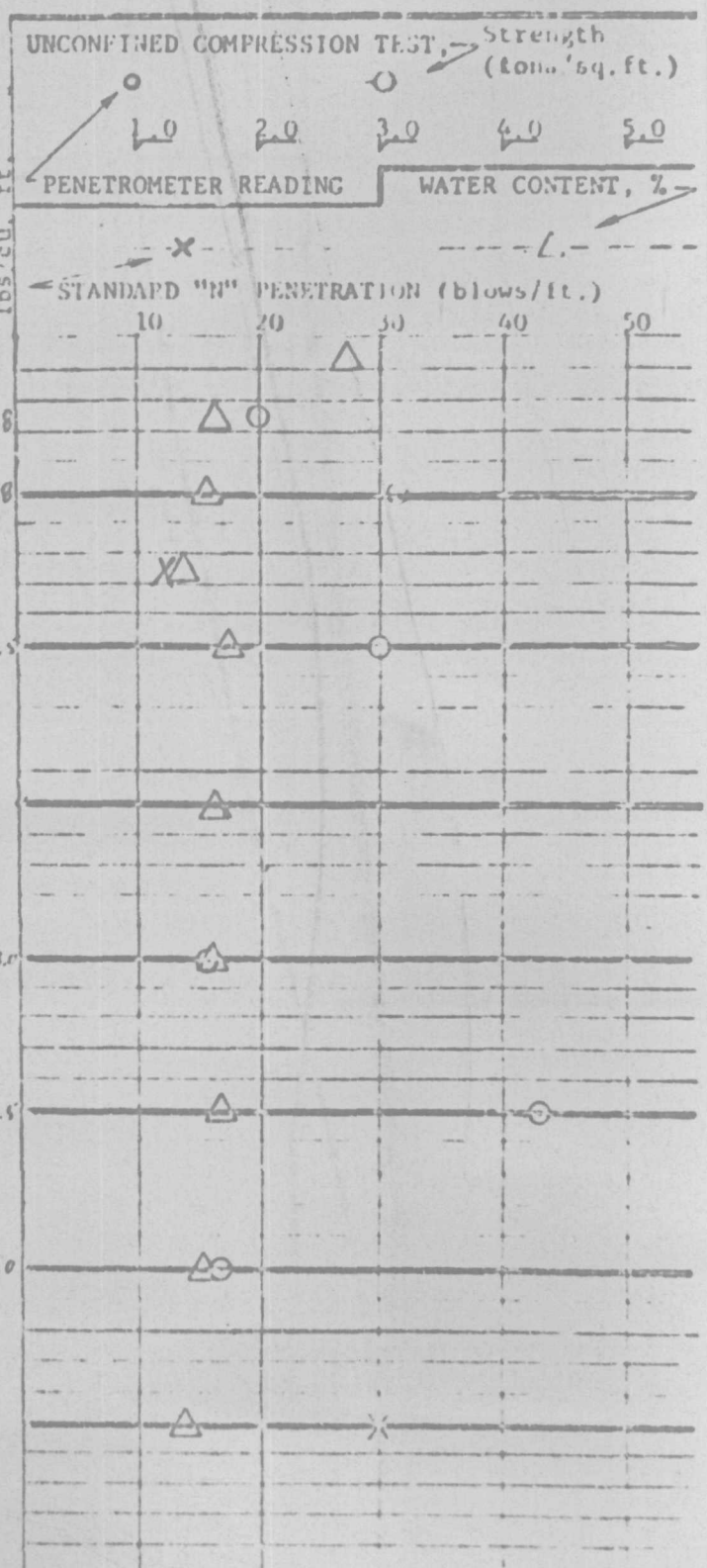
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 12
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/23/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft: 734.2	
			Black topsoil	
5.0			Brown clay and silt, some sand, trace gravel, very tough	109.8
			Brown sand and gravel, trace clay, medium dense	109.8
10.0			Brown clay and silt, some sand and gravel, very tough	107.5
15.0			Gray clay, some silt, sand and gravel, tough	
20.0				108.5
25.0			Gray clay, some silt, sand and gravel, hard	104.5
30.0			Gray clay, some silt, sand and gravel, tough	96.0
35.0			Gray sand and gravel, some silt, trace clay, medium dense	



Water Conditions: Water Level ___ hrs. after test

N VAK, DEMPSEY & ASSOCIA S, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

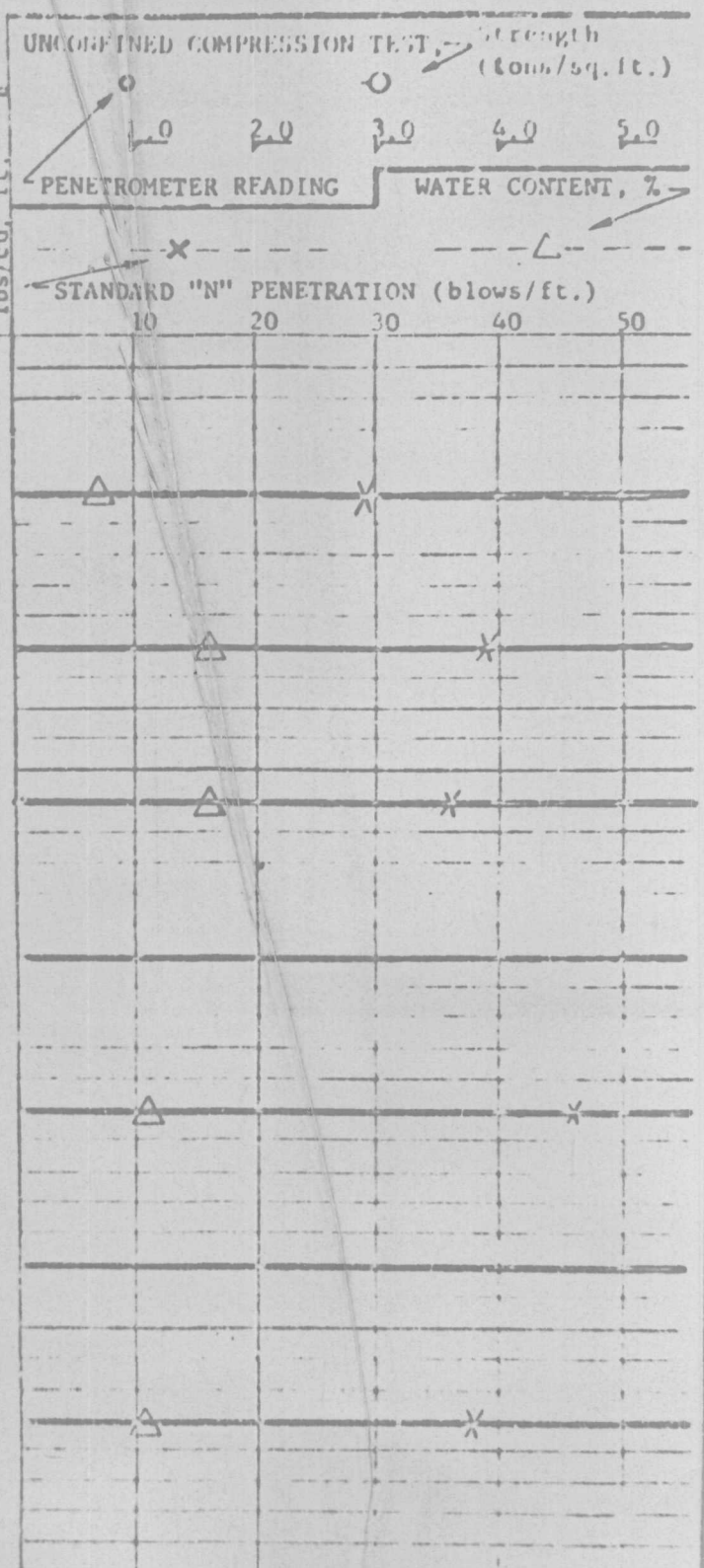
1532 DES PLAINES AVENUE o DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 12
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj.No. 3140 Date: 3/23/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40.0			Gray sand and gravel, some silt, trace clay, medium dense	
45.0			Gray clay, some silt, sand and gravel, medium dense	
50.0				
55.0			Gray clay, some silt, sand and gravel, dense	
60.0				
65.0				
70.0				
			End of Boring	



Weather Conditions:

Water Level 16.0' ft. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

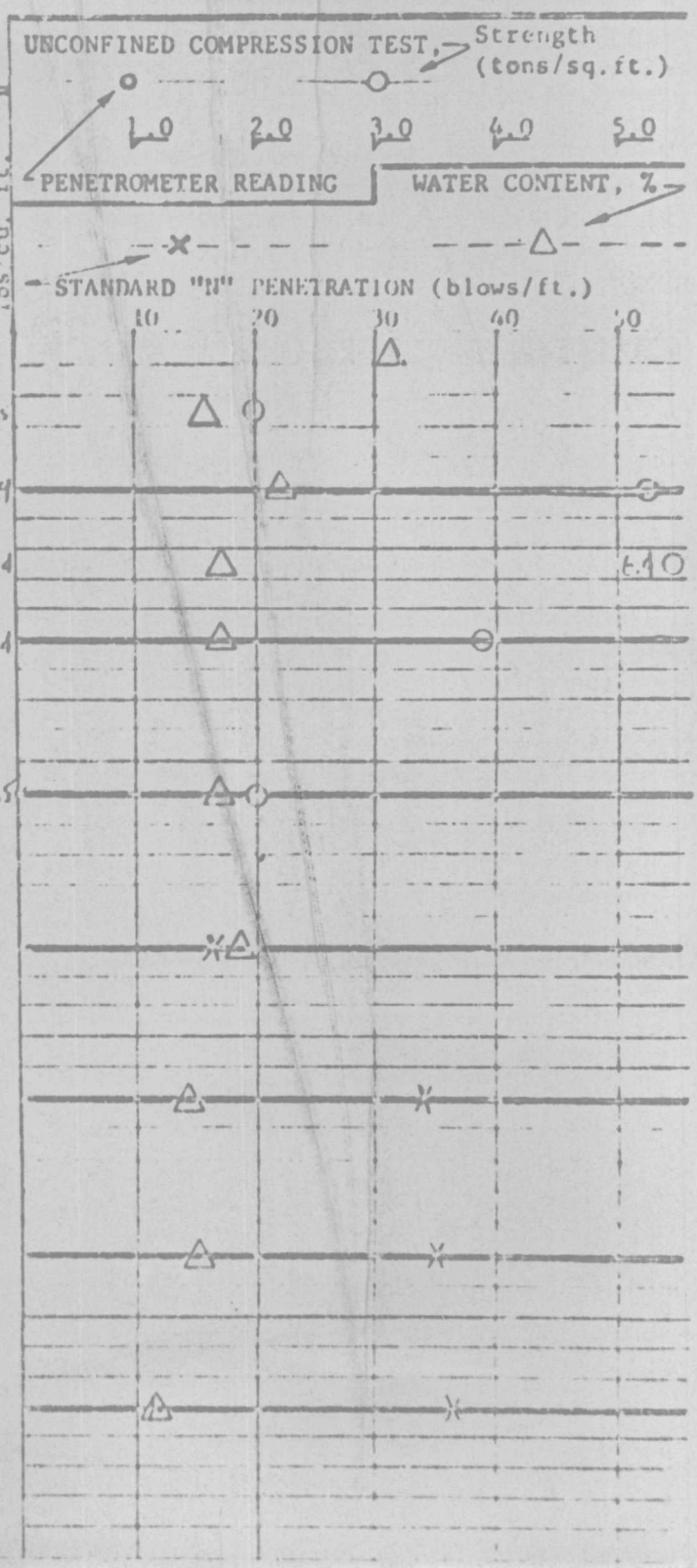
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO. 13
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/26/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
			Black topsoil	
			Brown clay and silt, some sand, trace gravel, very tough	106.5
5.0			Brown clay and silt, some sand, trace gravel, hard	102.9
				110.4
10				108.4
15			Gray clay and silt, some sand, trace gravel, very tough	107.5
20				
25.0			Gray clay, some silt, trace sand and gravel, hard	
30.0				
35.0			Gray clay and sand, some silt, trace gravel, hard	



NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

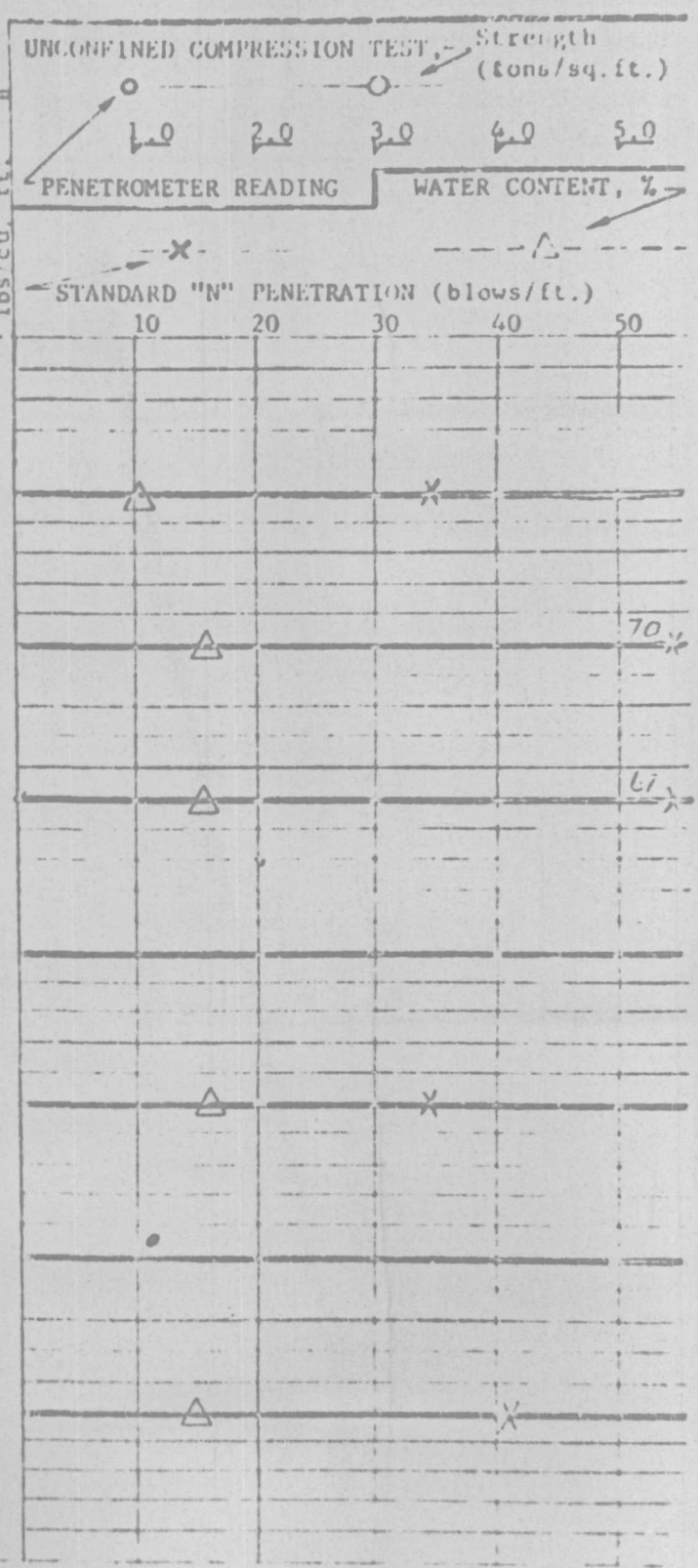
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO. 13
CLIENT VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/26/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40.0			Gray clay and sand, some silt, trace gravel, hard	
45.0				
50.0			Gray clay and silt, some sand, trace gravel, hard	
55.0				
60.0				
65.0			Gray clay and silt, some sand, trace gravel, hard	
70.0				
			End of Boring	



Weather Conditions:

Water Level 12.0' hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

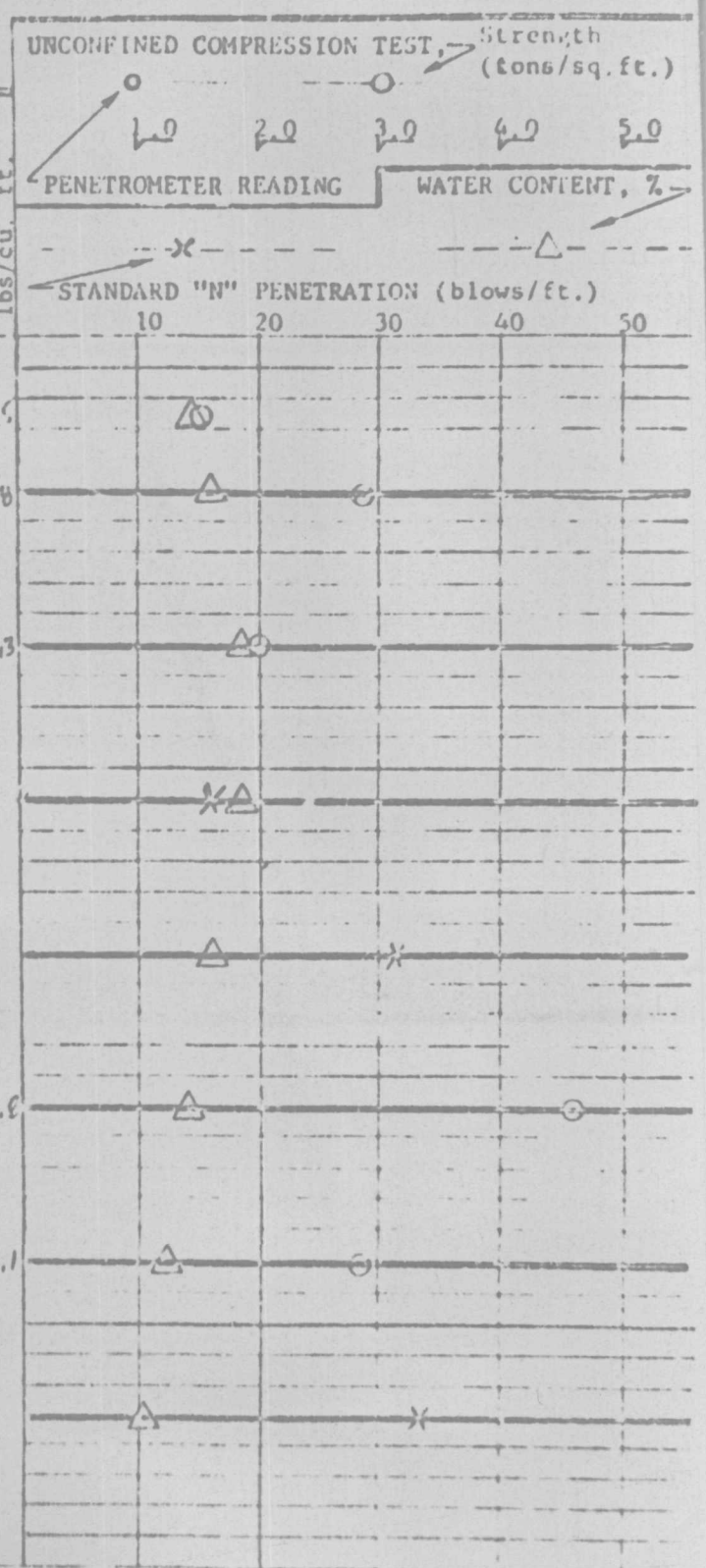
1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 14
CLIENT VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE, Water Reservoir

Proj. No. 3140 Date: 3/26/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft: 735.8	
			Brown clay and silt, some sand and gravel, tough	128.5
5.0			Brown clay and silt, some sand and gravel, very tough	119.8
10.0			Brown clay and silt, some sand and gravel, tough	125.3
15.0			Brown sand, some silt, medium dense	
20.0			Gray fine sand, some silt, dense	
25.0			Gray clay and sand, some silt, trace gravel, hard	116.6
30.0			Gray clay and sand, some silt, trace gravel, very tough	113.1
35.0			Gray fine sand, medium dense	



Weather Conditions: Water Level ___ ft. hrs. after test

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 14

CLIENT VILLAGE OF ARLINGTON HEIGHTS

LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/26/71 By: JK

Equipt. Used: CME Drill

Comments:

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING

WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40.0			Gray sand and coarse gravel, medium dense	
45.0			Gray sand and gravel, trace clay, dense	
50.0				
55.0				
60.0			Gray clay and silt, trace sand, very dense	
65.0				
70.0				
			End of Boring	

666/71 = 737

Weather Conditions:

Water Level 21.0' hrs. after test

Sheet No. 2 of 2

NOVAK, DEMPSEY & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 15
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/29/71 By: JK
Equipt. Used: CME Drill

Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs. cu. ft.
			Existing Surface - Elev. ft: 735.8	
			Black topsoil	
5.0			Brown clay, some silt and sand, trace gravel, hard	108.5
			Gray clay, some silt, trace sand and gravel, hard	101.5
10.0				118.1
15.0				112.9
20.0				115.2
			Gray clay, some silt, trace sand and gravel, very tough	
25.0				113.0
30.0				115.7
35.0				118.4

UNCONFINED COMPRESSION TEST, Strength (tons/sq. ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING

WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Weather Conditions: Water Level ____ hrs. after test

Page No. 1 of 2

NC AK, DEMPSEY & ASSOCIA .S, INC.

Quality Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1532 DES PLAINES AVENUE • DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 15
CLIENT: VILLAGE OF ARLINGTON HEIGHTS
LOCATION SITE: Water Reservoir

Proj. No. 3140 Date: 3/30/71 By: JK
Equipt. Used: CME Drill
Comments:

Depth, ft.	Sample Range	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
40				113.5
			Gravel and sand, some silt, trace clay, loose	
45				
50				
55.0			Gray clay and silt, trace sand and gravel, hard	
60.0				
65.0				
70.0				
			End of Boring	

UNCONFINED COMPRESSION TEST, Strength (tons/sq.ft.)

1.0 2.0 3.0 4.0 5.0

PENETROMETER READING

WATER CONTENT, %

STANDARD "N" PENETRATION (blows/ft.)

10 20 30 40 50

Weather Conditions

Water Level 14.0' hrs. after test

Page

NO[illegible]K, [illegible]MPSEY & ASSOCIATE[illegible] INC.

[illegible] Control Consultants

Analysis, Testing, Research and Development of Construction Materials

1732 DES PLAINES AVENUE o DES PLAINES, ILLINOIS

SOIL BORING LOG

BORING NO: 16

CLIENT: VILLAGE OF ARLINGTON HTS.

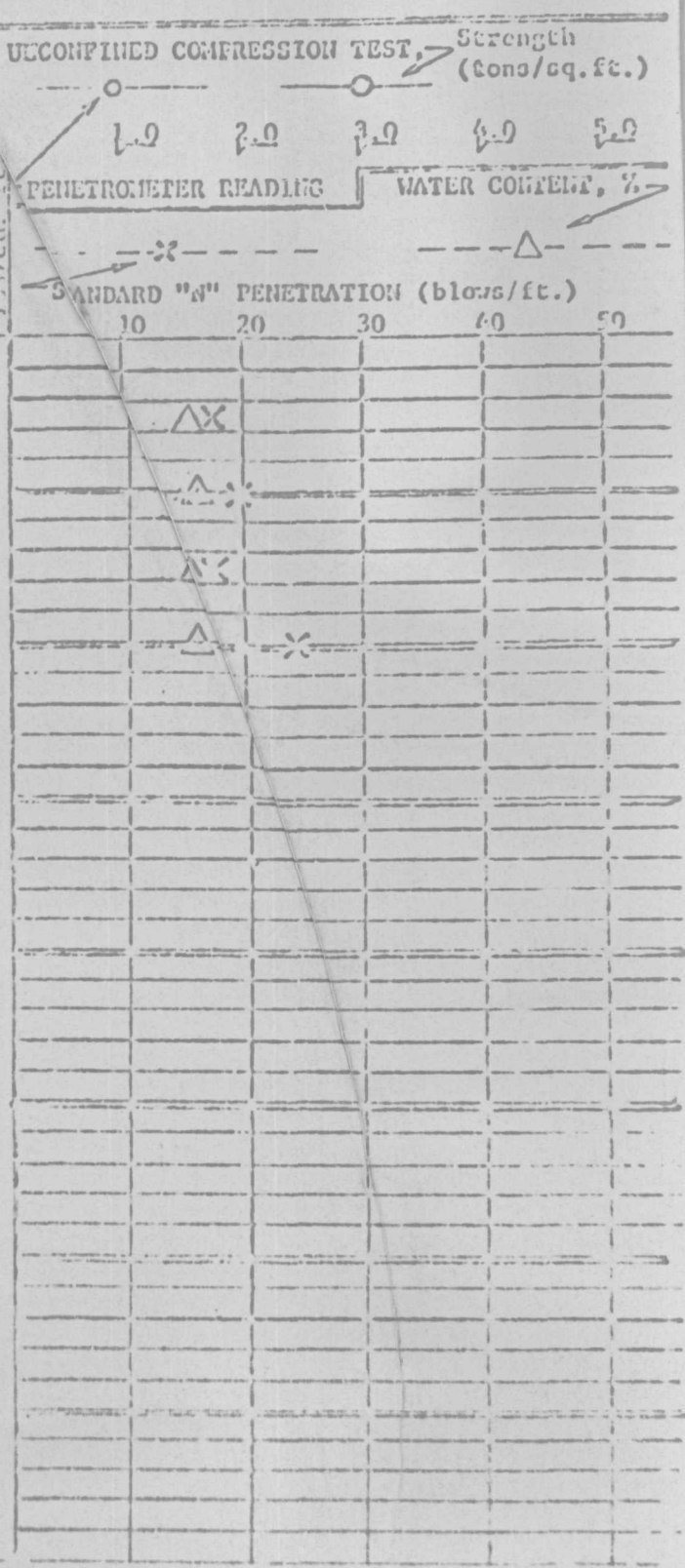
LOCATION DESC: Water Reservoir

Proj. No. 2140 Date: 4/6/71 By: [illegible]

Equipt. Used: CME Drill

Comments:

Depth, ft.	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
		Existing Surface - Elev. ft:	
		A. See below	
5.0		Brown silt, some clay, some fine sand, trace gravel, medium dense	
		Brown silt, some coarse sand, trace clay and gravel, medium dense	
10.0		Gray clay and silt, some fine sand, trace gravel, very tough	
15.0		End of Boring	
		A. Brown clay, some silt, trace fine sand and gravel fill	
20.0			
25.0			
30.0			



Weather Conditions: Water Level ____ @ ____ Hrs. after test

Page No. ____ of ____

MC[illegible]AK, DEMICHELE & ASSOCIATES, INC.

Quality Control Consultants

Analysis, Testing, Research & Development of Construction Materials

[illegible] DES PLAINES AVENUE o DES PLAINES, ILLINOIS

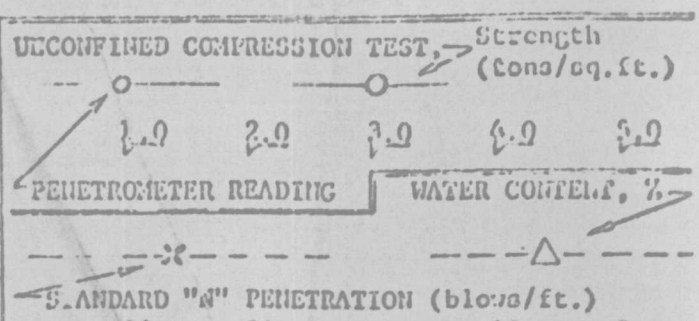
SOIL BORING LOG

BORING NO: 17
CLIENT: VILLAGE OF ARLINGTON HTS.
LOCATION SITE: Water Reservoir

Proj. No. 3740 Date: 4/6/71 By: JK
Equipt. Used: CME Drill

Comments:

Depth, ft.	Sample Number	Sample Recovery	DESCRIPTION OF MATERIAL	Unit Dry Wt. lbs/cu. ft.
			Existing Surface - Elev. ft:	
	1		Brown clay, some silt, trace sand and gravel fill	
5.0	2		Brown silt, some clay, trace fine sand and gravel, medium dense	
	3		Brown silt, some fine sand, trace clay and gravel, medium dense	
10	4		Gray clay, some silt, trace fine sand and gravel, very tough	
15			End of Boring	
20.0				
25.0				
30.0				



Weather Conditions: Water Level @ Hrs. after test