

54-F-209C

Hwy. #401

WESTMINISTER #19



"Franki Piles carry more tons per Pile"

44-F-207C

CABLEGRAMS:
"FRANKIPILE"

FRANKI

COMPRESSED PILE COMPANY OF CANADA LIMITED

1835 YONGE STREET



TELEPHONE:
Hudson 8-9009

TORONTO 7, ONT.

Our Reference:
PC 301 OF 7754
September 10th, 1954.

SOIL INVESTIGATION REPORT
for
DEPARTMENT OF HIGHWAYS OF ONTARIO
(M. M. Dillon, Consulting Engineers.)
at
WESTMINSTER #19, HIGHWAY 401

As requested, we carried out a soil investigation at the site of a proposed Overhead Crossing at the junction of Highways 401 and 4.

REPORT OF INVESTIGATION:

Nine percussion tests were made at the locations shown on the location sketch. The results of these tests are shown on the accompanying diagrams and are summarized as follows.

S U M M A R Y

HOLE No:	Ground Surface	2,000 lbs per sq.ft.	4,000 lbs per sq. ft.	6,000 lbs per sq.ft.	Refusal
1	23.8	22	21	20	16
2	23.4	17	18	17	15
3	23.6	17	16	15	12
4	23.0	18	17	16	8
5	23.9	17	16	14	8
6	24.7	17	16	14	9
7	20.0	16	15	14	3
8	22.3	17	16	13	5
9	22.6	17	15	14	8

The elevations, ground surface were supplied by the Department of Highways, Division Engineers office. Two Auger borings were made at the location of holes #3 and #7.

LOG OF AUGER BORINGS

Hole # 3

Ground Surface Elevation: 23.6

0' - 2'	Dry brown loam top soil
2' - 7'	Moist medium brown sandy clay
7' - 8'	Stiff brown silty clay
8' - 14'	Dirty stiff brown silty clay

Hole # 7

Ground Surface Elevation: 20.0

0' - 2'	Soft moist brown sandy clay
2' - 7'	Very stiff brown silty clay with pebbles
7' - 17'	Stiff grey silty clay

DISCUSSION:

An examination of the percussion test diagrams and auger borings shows that the site is quite uniform and there is a layer of very stiff clay near the surface but that in some holes there is an indication of somewhat softer clay beneath this upper hard layer.

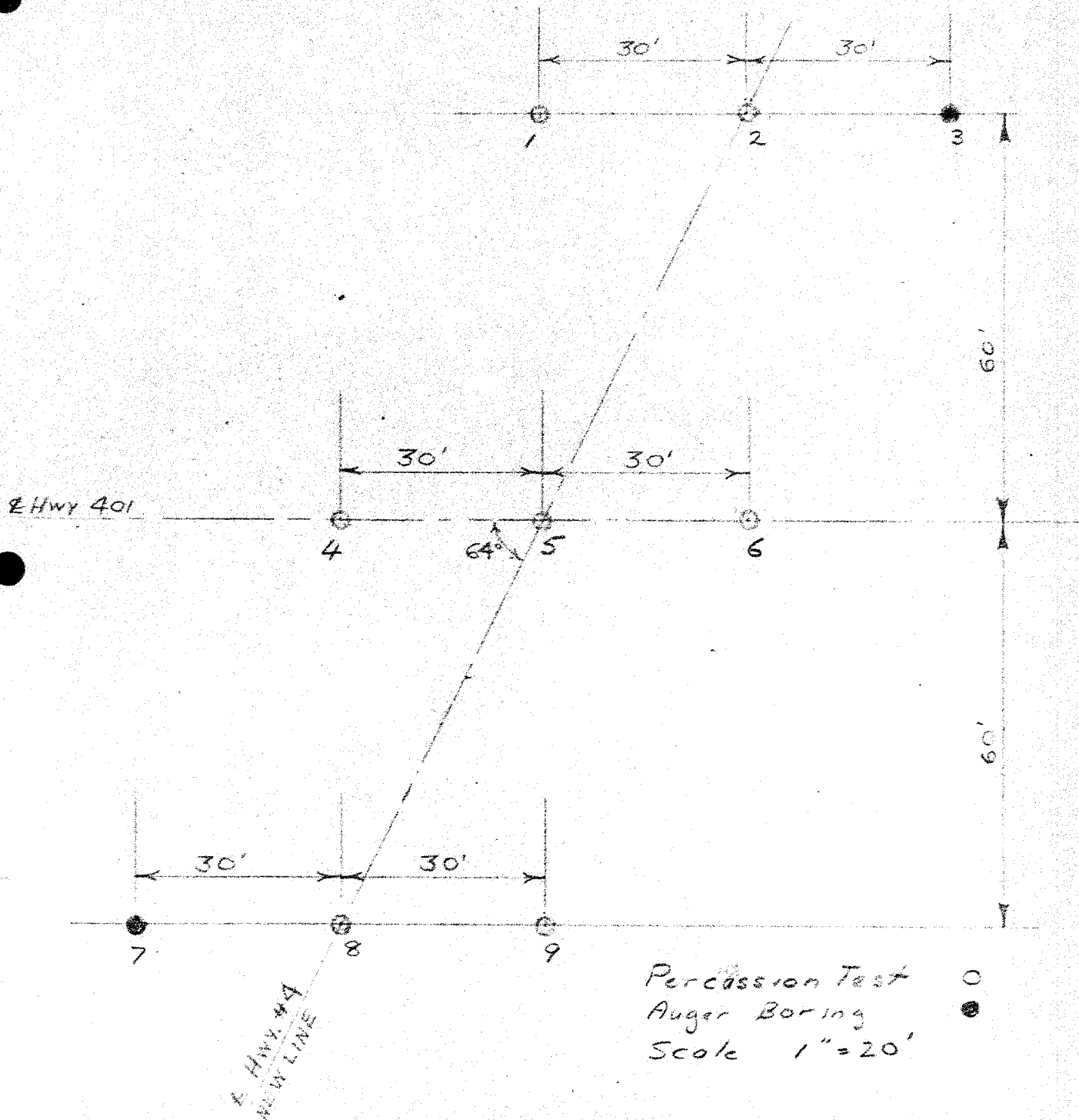
It is considered that a loading of 2 tons per square foot can be used safely at the elevations given. Owing to the somewhat softer clay beneath, it is considered that the soil loading should not exceed this value.

There is a possibility that the somewhat softer clay found at depth might consolidate slightly in time causing some minor but uniform settlement.

W. H. T. Wilson

W. H. T. Wilson, P. Eng.

LOCATION SKETCH



FRANKI COMPRESSED PILE COMPANY OF CANADA LTD
for
DEPARTMENT OF HIGHWAYS OF ONTARIO
at
WESTMINSTER #19, HIGHWAY 401

PC 301
September 3, 1954.

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

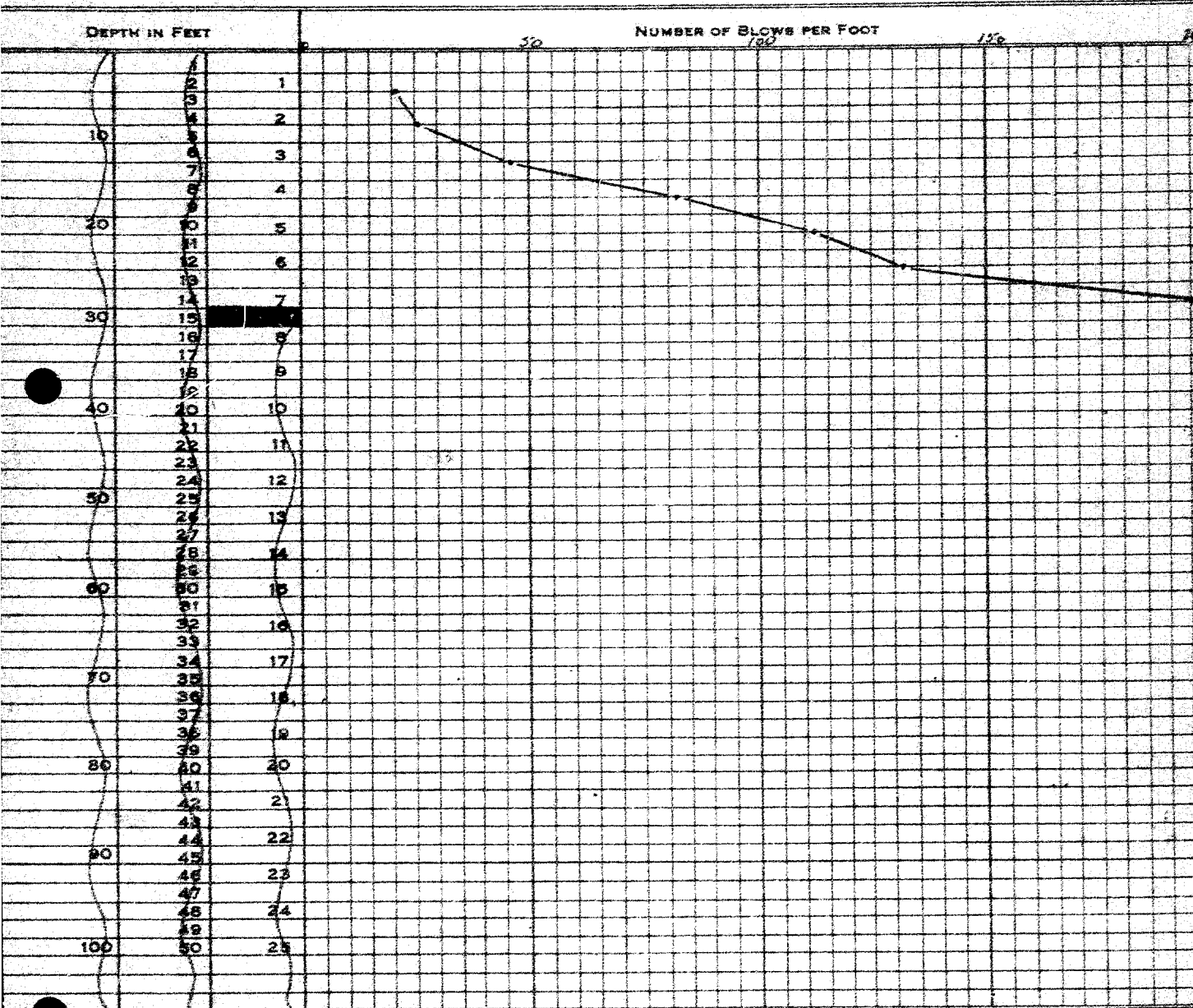
DATE AUGUST 31, 1954

TEST NO.: 1

WEIGHT OF HAMMER 225#

JOB NO. PC 301

DROP: 3 Ft.



Ground Surface Elevation 23.8
Refusal Elevation 16
Number of Blows 200 for 7"

Signed *W. T. Wilson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

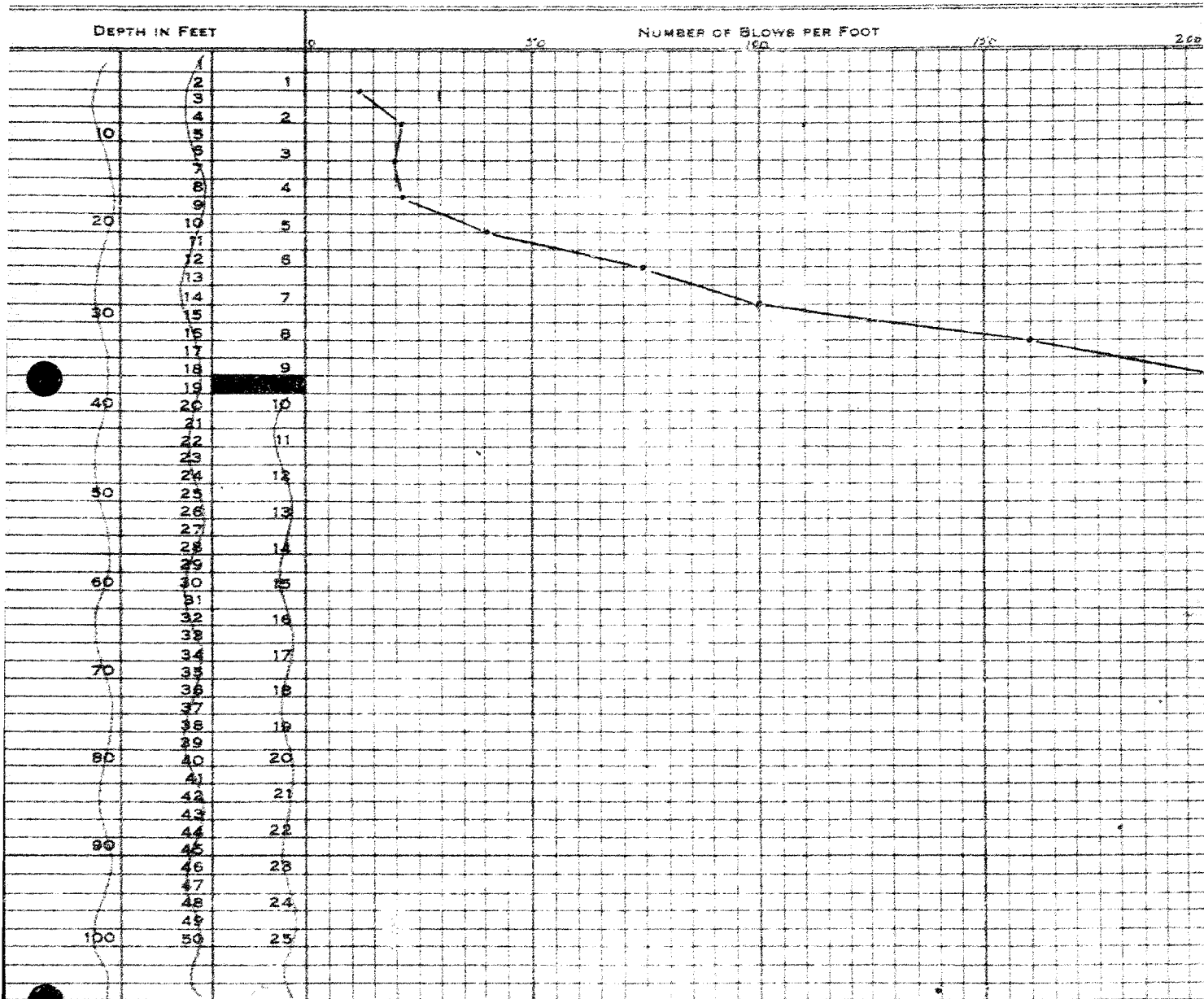
JOB NO. PG 301

DATE AUGUST 31, 1954.

TEST NO.: 2

WEIGHT OF HAMMER 225#

DROP: 3 Ft.



Ground Surface Elevation 23.4

Refusal Elevation 15

Number of Blows 230

Signed *W. H. Wilson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

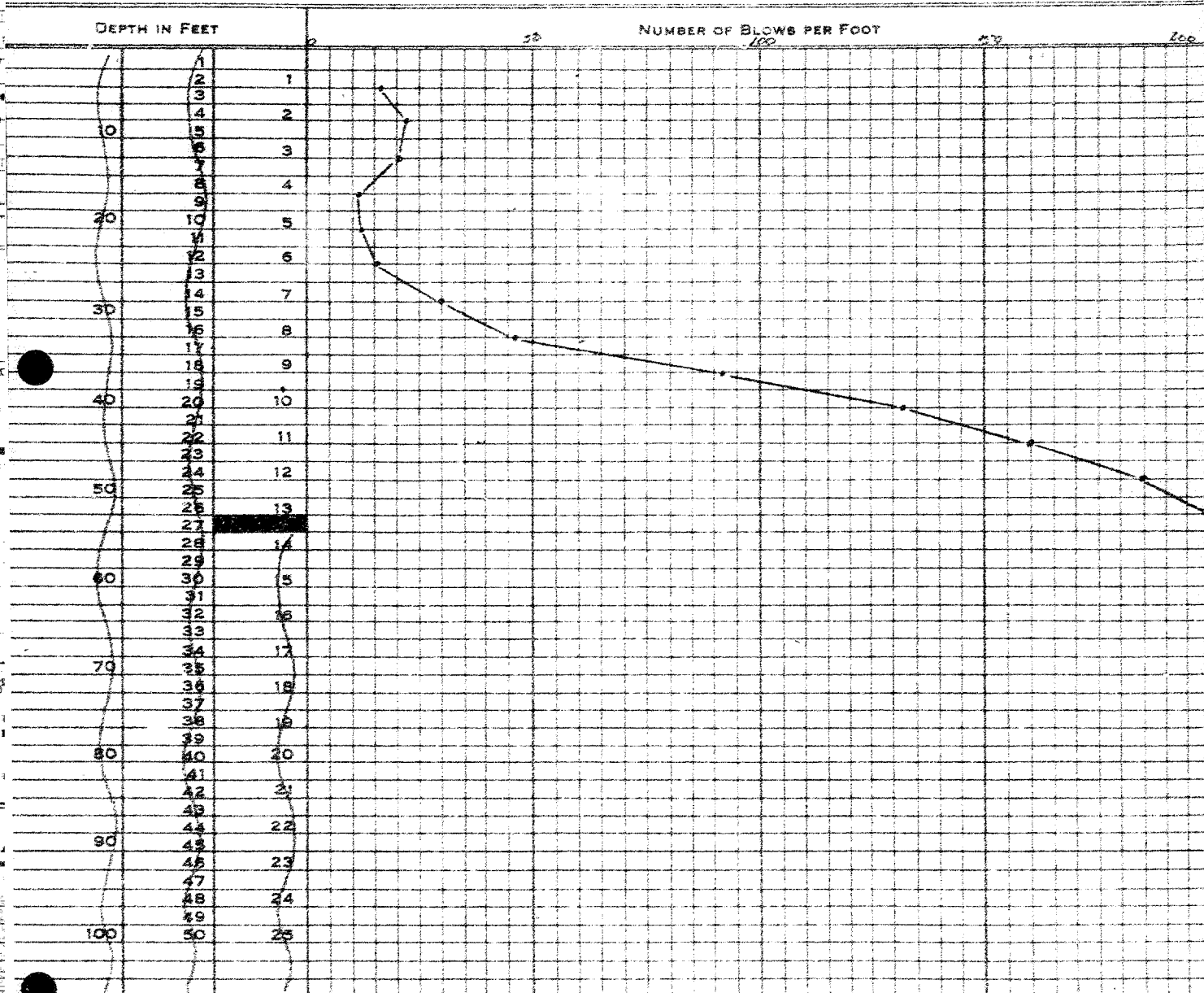
JOB NO. PC 301

DATE AUGUST 31, 1954.

TEST NO.: 3

WEIGHT OF HAMMER 225#

DROP: 3 Ft.



Ground Surface Elevation 23.6

Refusal Elevation 12

Number of Blows 200 for 10"

Signed *W.H. Wilson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

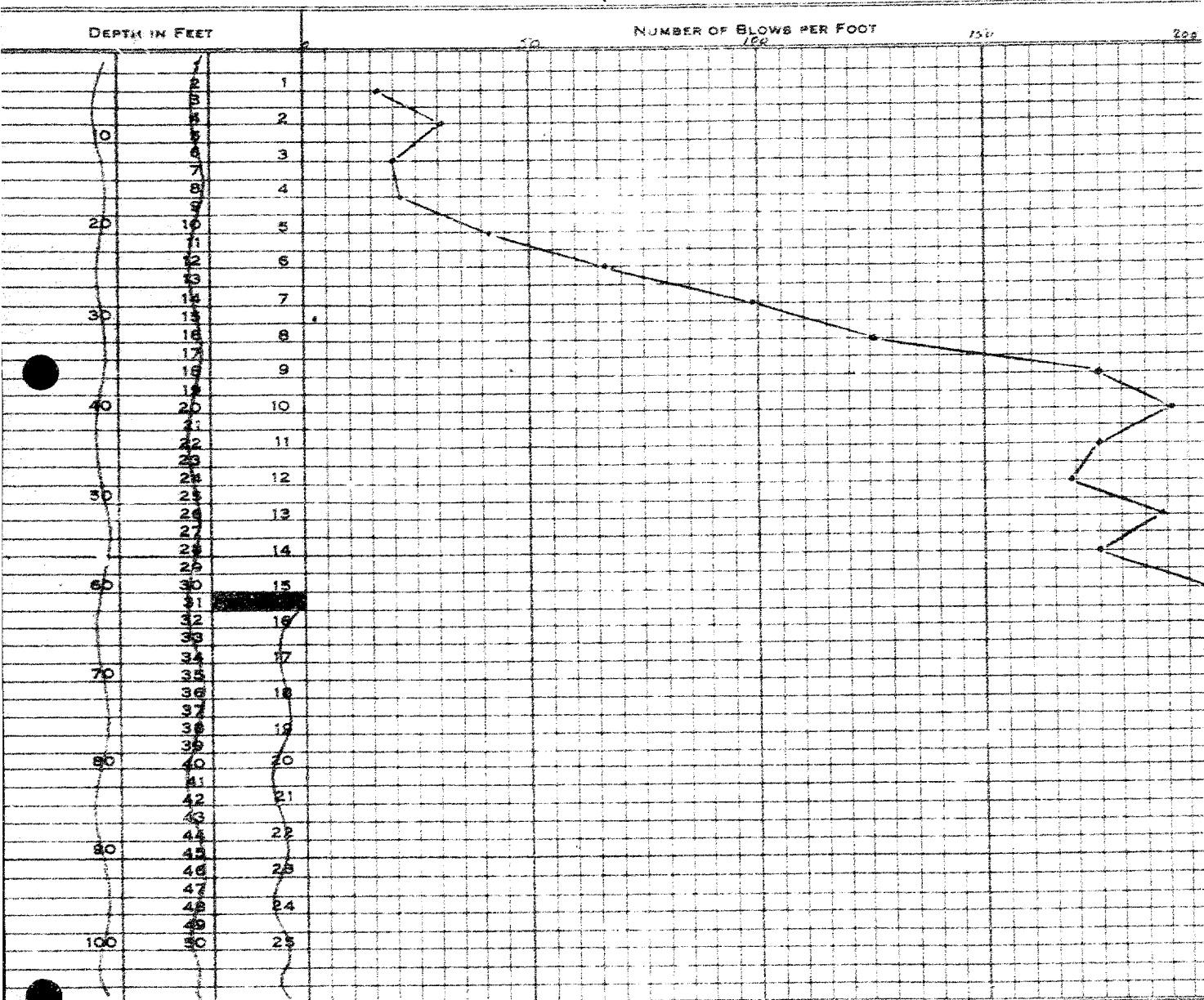
JOB NO. PC 301

DATE SEPTEMBER 1, 1954.

TEST NO.: 4

WEIGHT OF HAMMER 225#

DROP: 3 Ft.



Ground Surface Elevation 23.0

Refusal Elevation 8

Number of Blows 200 for 11"

Signed *W.H.T. Gibson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

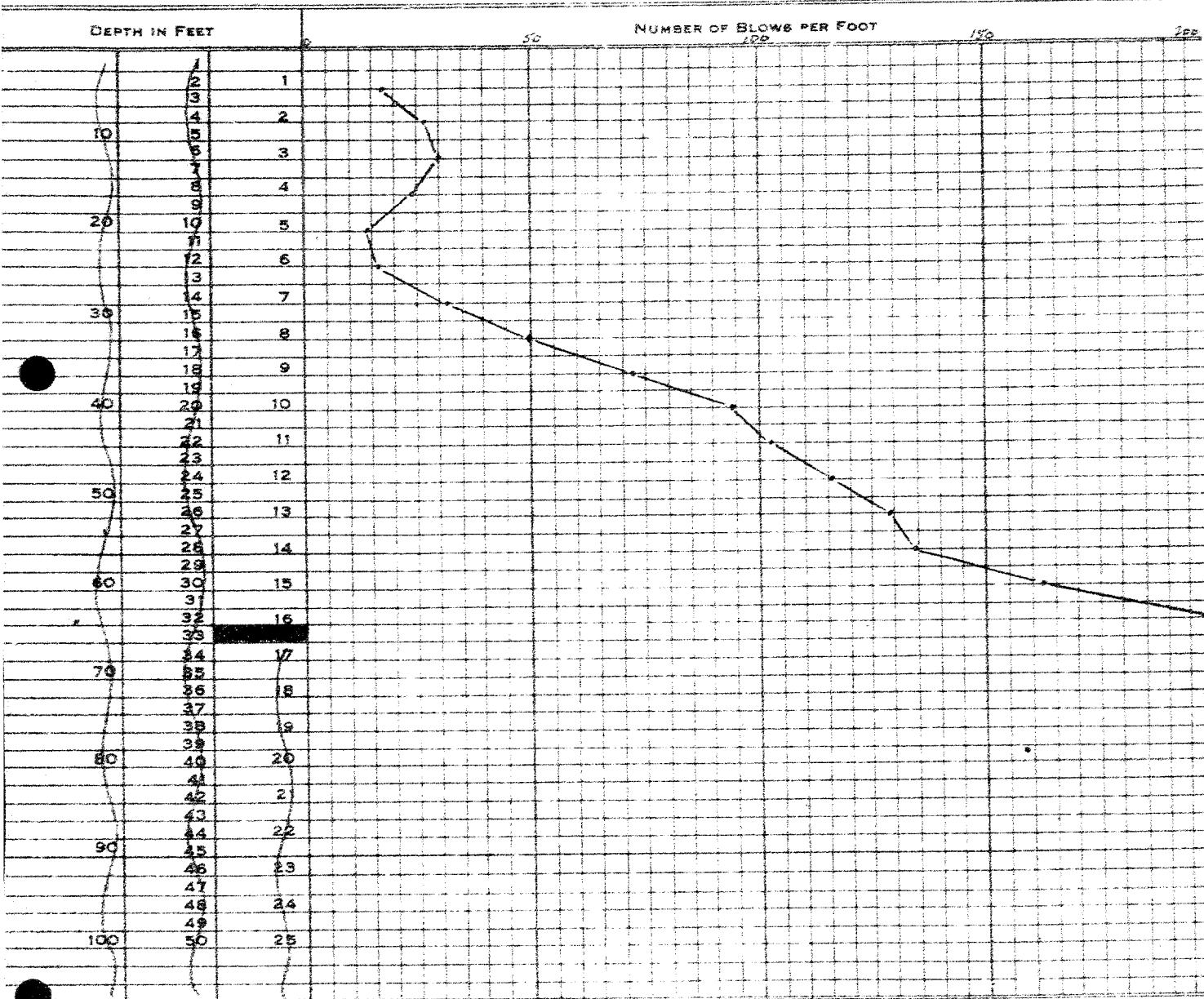
JOB NO. PC 301

DATE SEPTEMBER 1, 1954.

TEST NO.: 5

WEIGHT OF HAMMER 225#

DROP: 3 Ft.



Ground Surface Elevation 23.9

Refusal Elevation 8

Number of Blows 200 for 11"

Signed *W.H.T. Gibson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

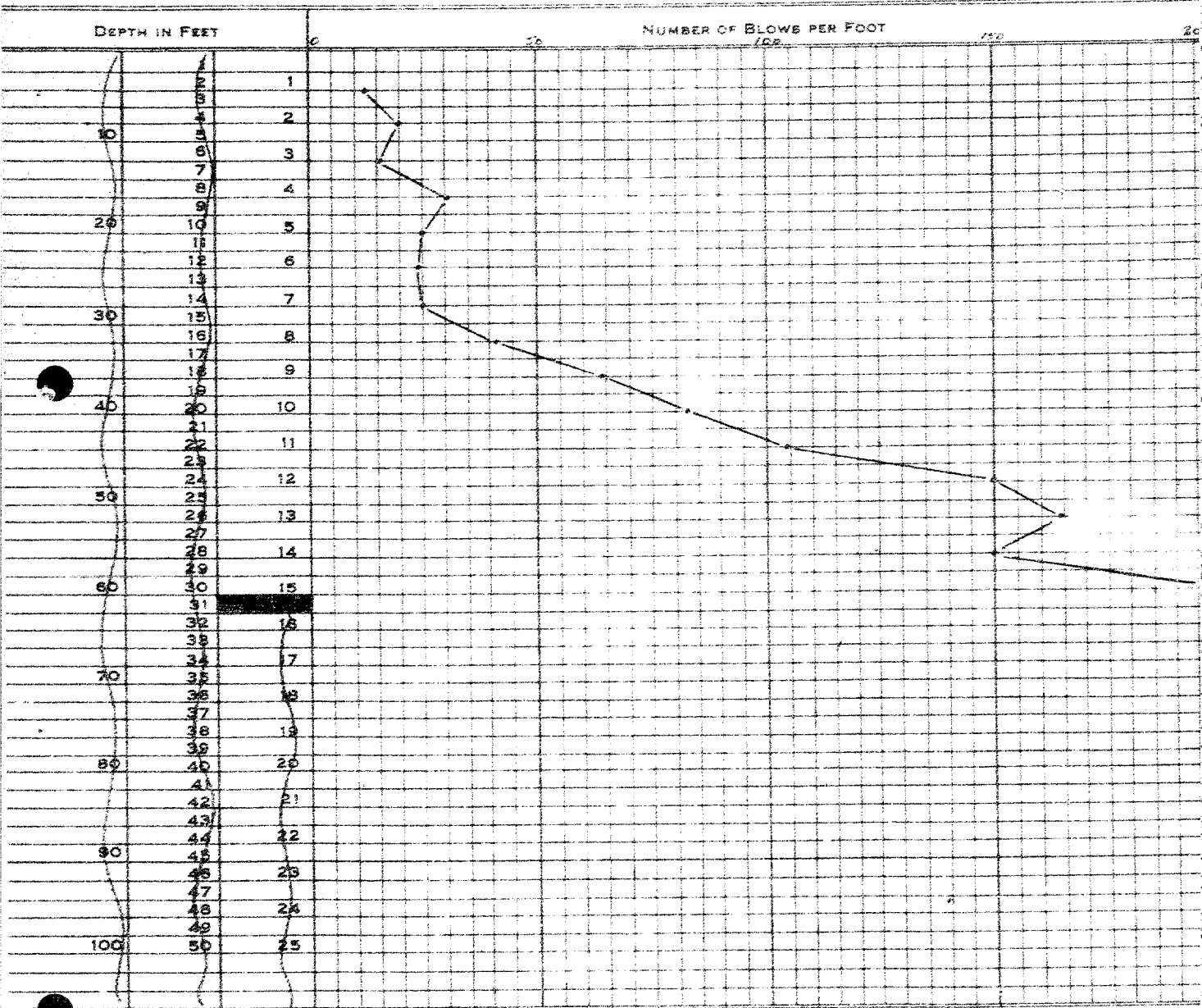
JOB NO. PC 301

DATE SEPTEMBER 1, 1954.

TEST NO.: 6

WEIGHT OF HAMMER 225#

DROP: 3 FT.



Ground Surface Elevation 24.7

Refusal Elevation 9

Number of Blows

200 for 10"

Signed *W. H. T. Wilson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

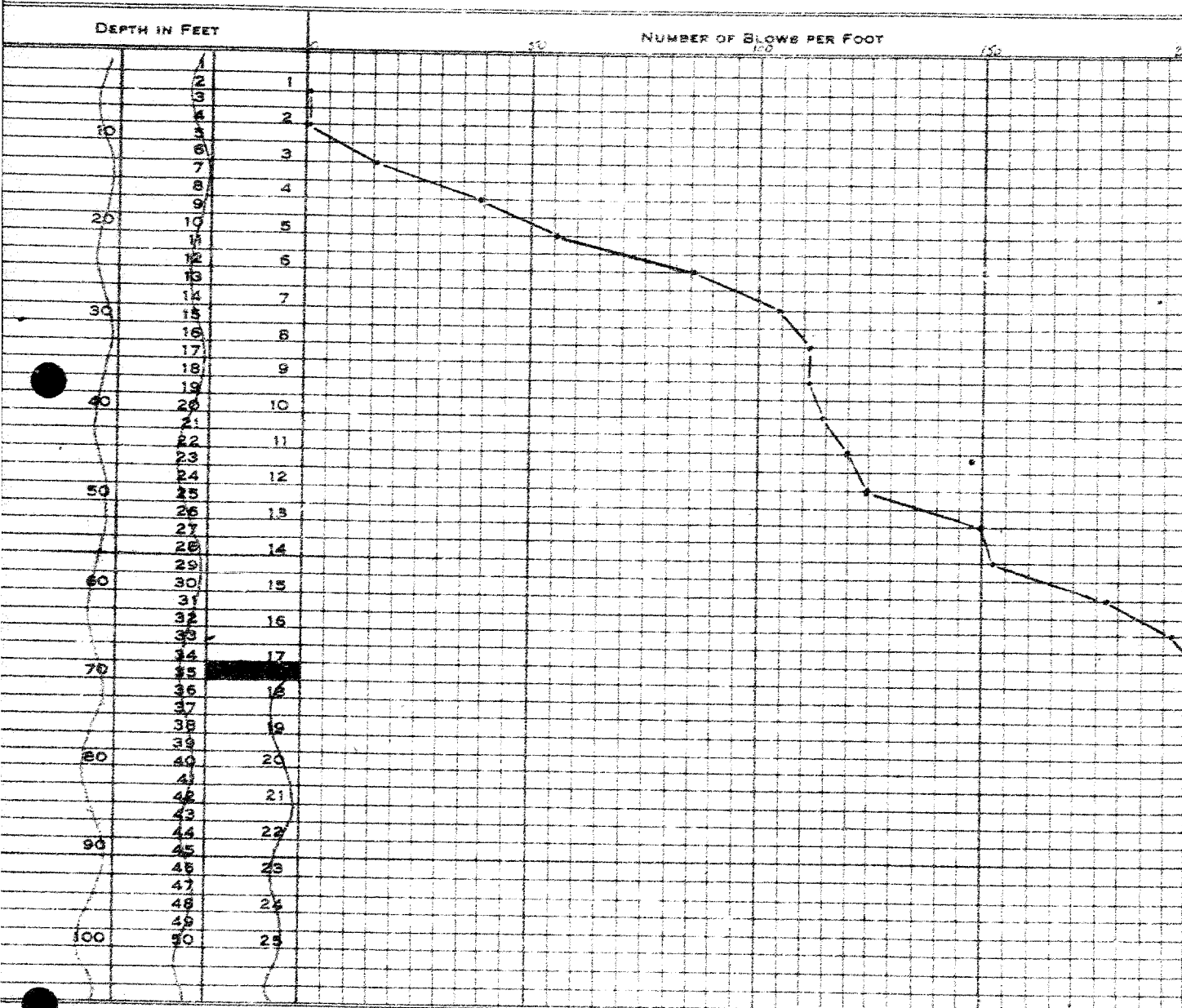
DATE SEPTEMBER 2, 1954.

JOB NO. PC 301

TEST NO.: 7

WEIGHT OF HAMMER 225#

DROP: 3 FT.



Ground Surface Elevation 20.0

Refusal Elevation 3

Number of Blows 200 for 8"

Signed *WHT Wilber*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

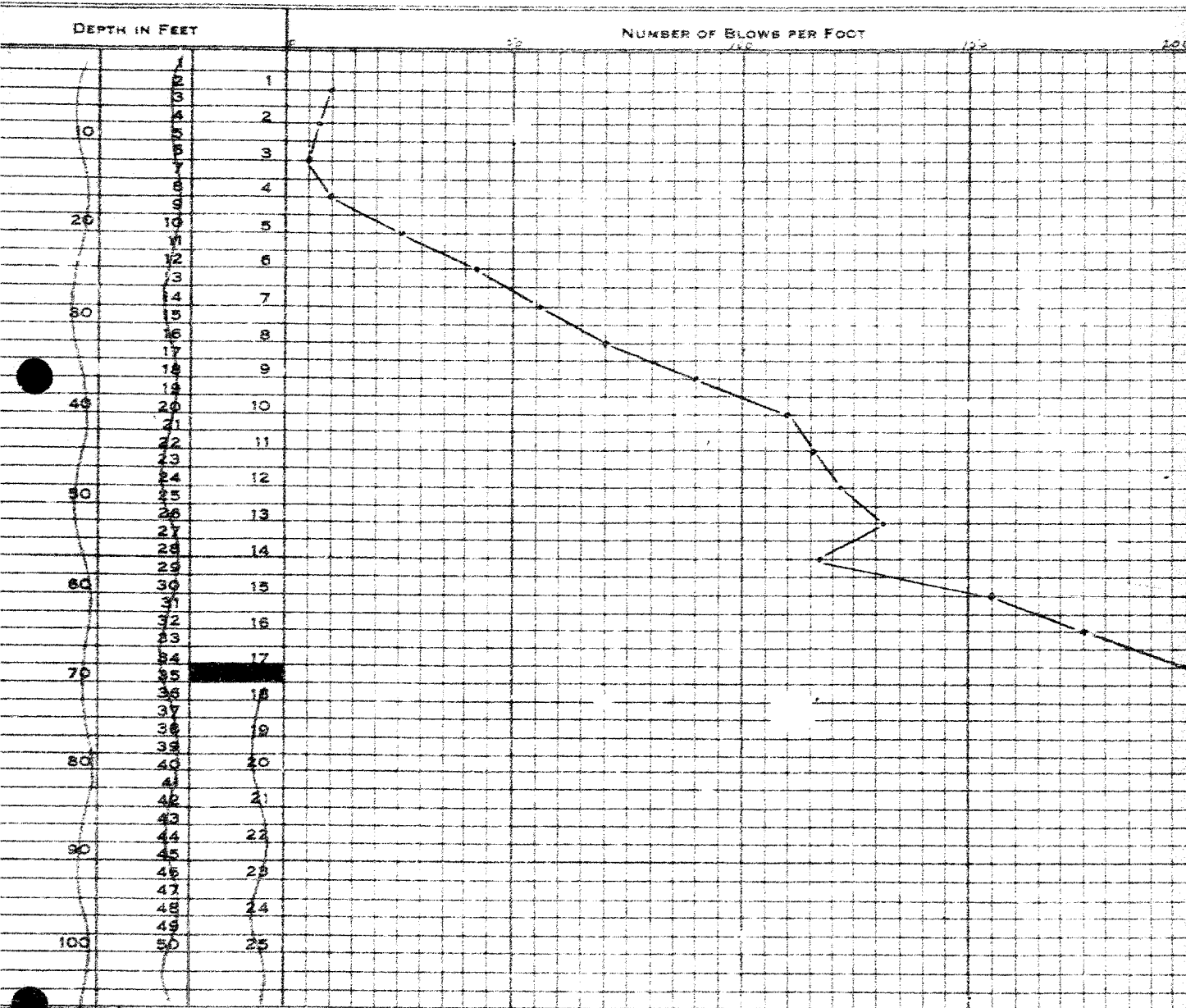
DATE SEPTEMBER 2, 1954.

TEST NO.: 8

WEIGHT OF HAMMER 225#

JOB NO. FC 301

DROP: 3 FT.



Ground Surface Elevation 22.3

Refusal Elevation 5

Number of Blows 200 for 10"

Signed *WAT Wilson*

FRANKI PILES

MONTREAL

PERCUSSION TEST DIAGRAM

FOR: DEPARTMENT OF HIGHWAYS OF ONTARIO

AT: WESTMINSTER #19, HIGHWAY 401

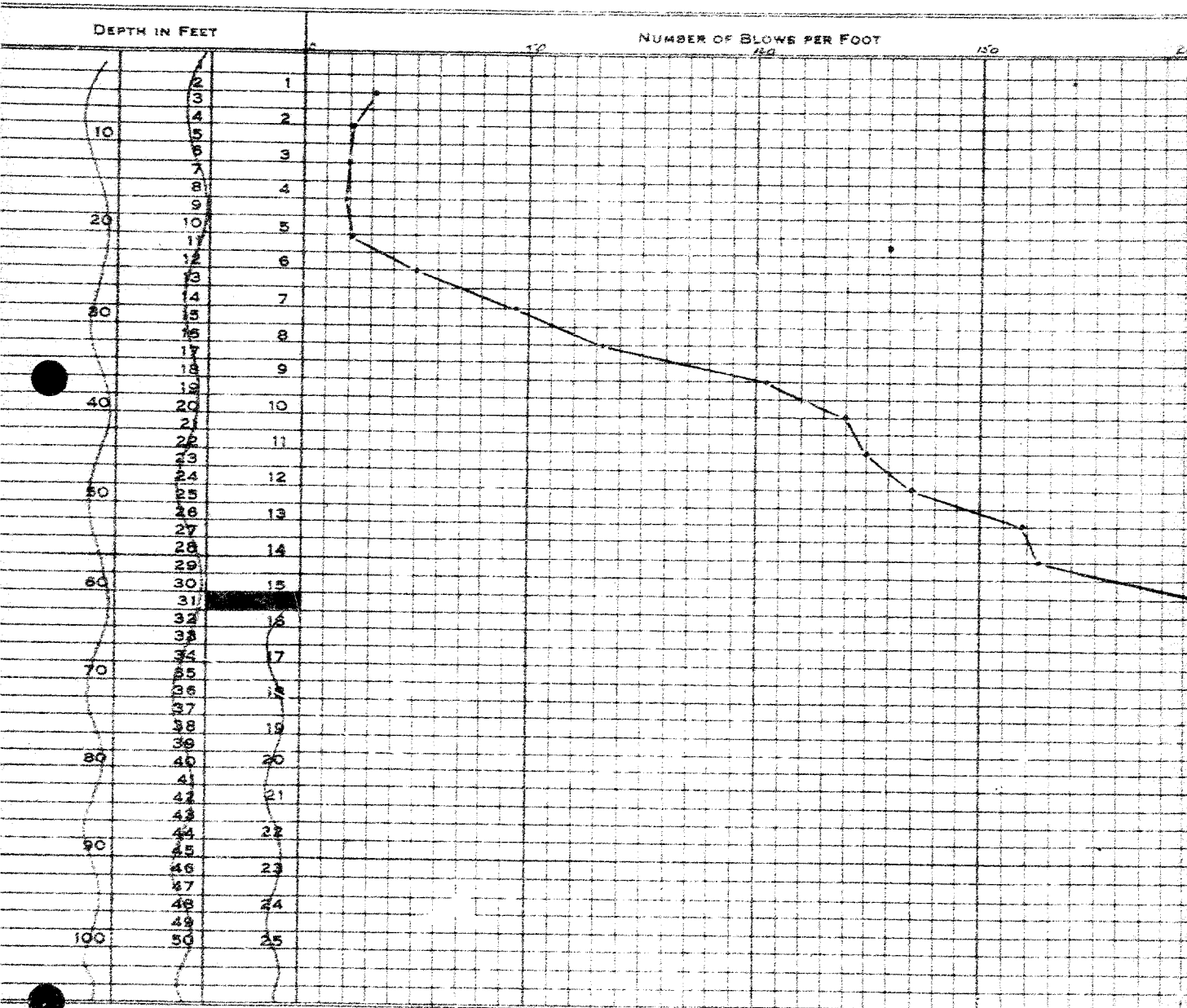
DATE SEPTEMBER 2, 1954.

TEST NO.: 9

WEIGHT OF HAMMER 225#

JOB NO. FC 301

DROP: 3 Ft.



Ground Surface Elevation 22.6

Refusal Elevation 8

Number of Blows 200

Signed W.H.T. White