EARLY-PLEISTOCENE TIDAL AND FLUVIATILE ENVIRONMENTS IN THE SOUTHERN NETHERLANDS AND NORTHERN BELGIUM

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APPENDIX

LEGEND OF THE LITHOLOGY IN BORINGS AND EXPOSURES

SAND
- very coarse (vc) (> 300 μm)
- medium coarse (mc) (210-300 μm)
- medium fine (mf) (150-210 μm)
- very fine (vf) (105-150 μm)
- extremely fine (ef) (< 105 μm)
- clay
- silt
- peat
- gyttja
- sandy
- very sandy
- clayey
- very clayey
- humose
- very humose
- silty
- very silty
- peaty

SAMPLES:
- heavy minerals
- grain-size
- gravel
- pollen
- macro remains
- paleomagnetism
- cation exchange capacity

- reworked organic material
- fine gravel
- clay-pebbles
- silt-pebbles
- peat-pebbles
- glimmers (muscovite)
- glauconite
- rooted
- marine shell-fragments
- very calcareous
- calcareous
- non-calcareous
- erosive boundary
- fining-up sequence
- coarsening-up sequence
- involutions
- wedge structures
LEGGEND OF HEAVY MINERALS
- garnet
- epidote
- saussurite
- alterite
- hornblende
- chloritoid
- volcanic minerals
- other minerals
- topaz
- staurolite
- metamorphic minerals
- tourmaline

LEGGEND OF GRAIN-SIZE
- > 420 μm
- 300-420 μm
- 212-300 μm
- 150-212 μm
- 105-150 μm
- 75-105 μm
- 53-75 μm
- 16-53 μm
- 2-16 μm
- 0-2 μm

LEGGEND OF POLLEN DIAGRAMS

MAIN DIAGRAM:
1. Tertiary trees
2. Warmth-loving trees of relatively dry soil
3. Warmth-loving trees of relatively wet soil
4. "Indifferent trees"
5. Terrestrial herbs, excl. Ericales
6. Ericales
ACHTMAAL

X = 4°33′59″OL
Y = 51°26′19″NB
H = 12.5 m +N.A.P.
APPELENBERG

X = 5°06'26" OL
Y = 51°25'21" NB
H = 29 m +N.A.P.
BAVEL

X = 4°50'14'' OL
Y = 51°35'00'' NB
H = 4 m +N.A.P.
BEERSE BLAK

X = 4°49'03''OL
Y = 51°20'20''NB
H = 27.5 m +N.A.P.

Beers-Blak

8-11 Twente Formation
5-7 Gilze Member-Kedichem Formation
1-4 Turnhout Member-Tegelen Formation

top 1.5m removed
N 310°E
1.5m

(N4°E)  N15°E  (N346°E)

(N 346°E)  Lacquer peel

7 m
-MF

1 2 3 4 5 6 10 11 12 13 14 15 16 17 18 19 20

disturbed
BEERSE DAKT

X = 4°52'05'' OL
Y = 51°19'55''NB
H = 28 m +N.A.P.
CASTELRE

X = 4°46'50".0L
Y = 51°25'40".0NB
H = 14.5 m +N.A.P.

GALDERSE MEREN

X = 4°45'20".0L
Y = 51°31'33".0NB
H = 6.2 m +N.A.P.
CHAAM KAPEL

\( \alpha = 4^\circ 50' 56'' \text{OL} \)
\( \beta = 51^\circ 30' 15'' \text{NB} \)
\( H = 11.5 \text{ m } +\text{N.A.P.} \)
GHIL

X = 4°55'53"OL
Y = 51°24'29"NB
H = 25 m +N.A.F.
GILZE

X = 4°56'16"0L
Y = 51°31'45"NB
H = 16 m +N.A.P.
KALMTHOUTSE HOEK

X = 4°24'42"O L
Y = 51°26'02"N B
H = 14 m + N.A.P.
KINDERLAAN

X = 5°09'20"OL
Y = 51°26'47"NB
H = 20 m +N.A.P.

MEERLE

X = 4°47'57"OL
Y = 51°26'26"NB
H = 15 m +N.A.P.

W. = WEICHSELIAN
MEERLE SLIKGAT

X = 4°49'18" OL
Y = 51°28'35" NB
H = 13 m +N.A.P.
16-18 Twente Formation
15 Gilze Member-Kedichem Form.
11-14 Turnhout Member
5-10 Beersse Member
1-4 Rijkevorsel Member

Merkplas Stratificatie

pollendiagram MS 0

X = 4°49'51" OL.
Y = 51°21'45" NB.
H = 25 m M.A.P.
NIEUWMOER

X = 4°30'22'' OL
Y = 51°26'32'' NB
H = 14 m +N.A.P.
OSSENDRECHT

X = 4°20'44"OL
Y = 51°23'51"NB
H = 24 m +N.A.P.
OSSENDRECHT MOLENKIND

X = 4°20'29"OL
Y = 51°23'30"NB
H = 13 m +N.A.P.

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OSSENGOOR

X = 4°54'02"OL
Y = 51°31'19"NB
H = 16 m +N.A.P.
RAVELS

X = 4°58'26"'0L
Y = 51°21'47"'NB
H = 26.5 m -N.A.P.
SNIJDERS-CHAAM

X = 4°51'51" OL
Y = 51°31'51" NB
H = 9 m +N.A.P.
WEELDE

X = 4°57'58''NL
Y = 51°24'45''NB
H = 30 m +N.A.P.

WITTE BERGEN

X = 4°53'09''NL
Y = 51°26'12''NB
H = 21.5 m +N.A.P.
WERNHOUT MAALBERGEN

X = 4°40'00"OL
Y = 51°26'16"NB
H = 13 m +N.A.P.
WOENSRECHT HOOGHUIS

X = 4°18'33" OL
Y = 51°26'20" NB
H = 8 m +N.A.P.

WOENSRECHT HOOGHUIS (not to scale)
1 Hoogerheide Member
2-4 Woensrecht Member
5 Twente Formation
6 ploughed layer

WOENSRECHT - HOOGHUIS (detail)

(N130°E)

lacquer peel
WH 3
WORTEL

X = 4°47'59""0L
Y = 51°24'20""NB
H = 17 m +N.A.P.
WOUWSE PLANTAGE

$X = 4^\circ 23' 30'' OL$
$Y = 51^\circ 28' 51'' NB$
$H = 10 m +N.A.P.$
ZWART WATER

X = 4°56'27"0L
Y = 51°22'29"NB
H = 27.5 m +N.A.P.
ZWART GOOR

X = 4°53'38"0L
Y = 51°23'06" NB
H = 24 m +N.A.P.

W. = WEICHSELIAN