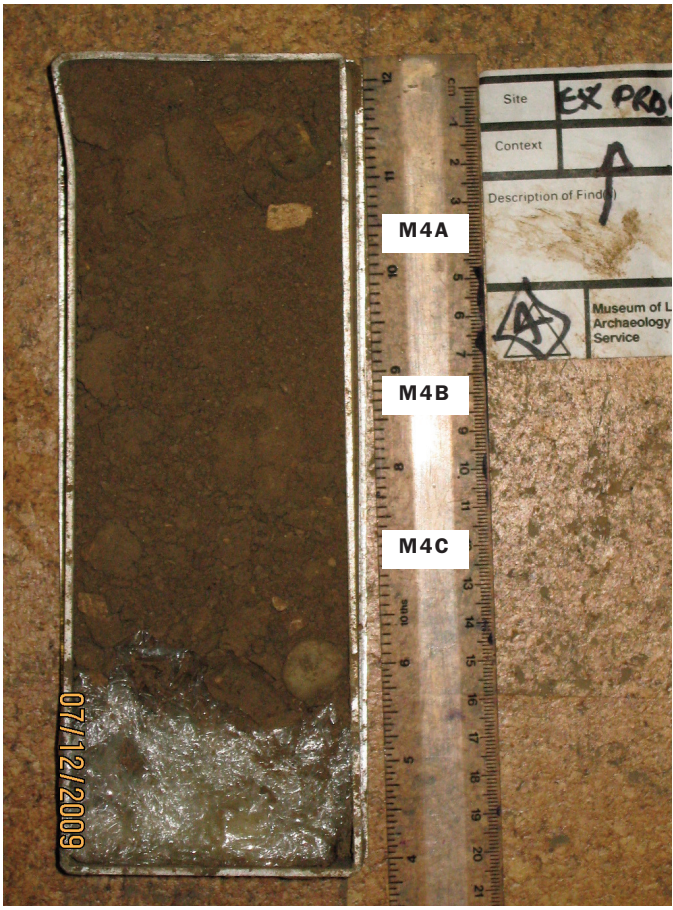
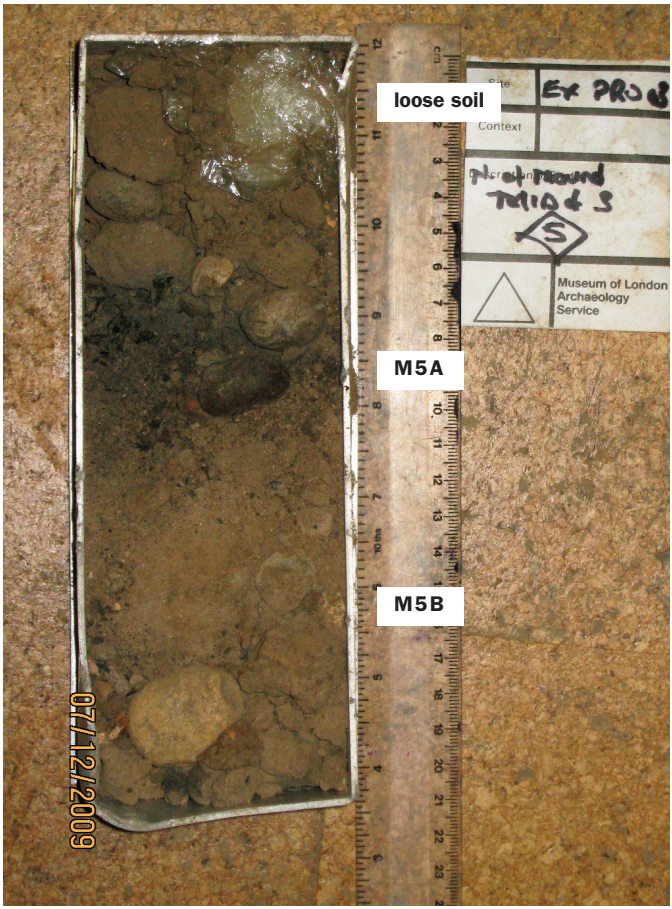
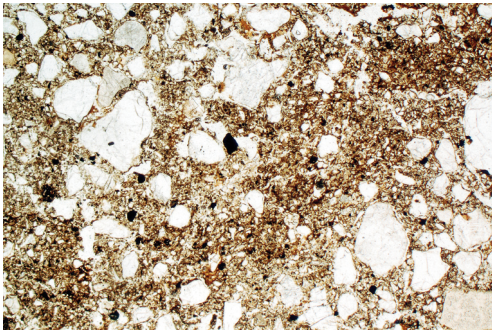


Data Fig 2 Monolith 4 through mound contexts [39] and [40], showing location of thin sections M4A–M4C

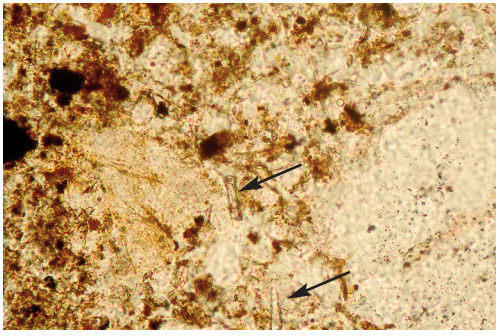


Data Fig 3 Monolith 5 through mound contexts [44] (including burnt layer) and [48], showing location of thin sections M5A and M5B

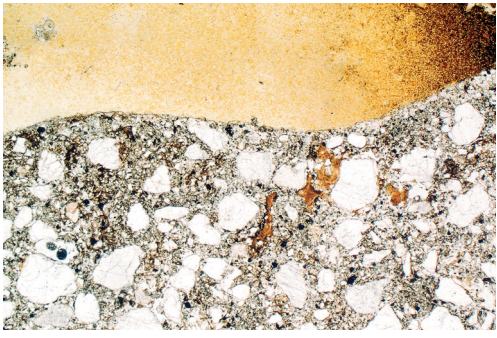
a



b

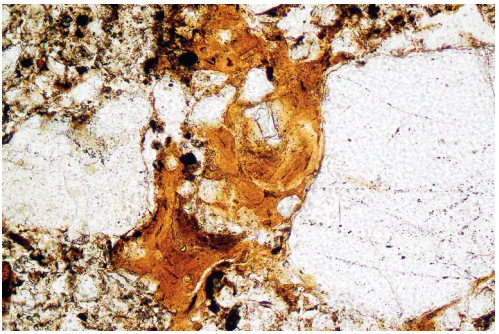


c

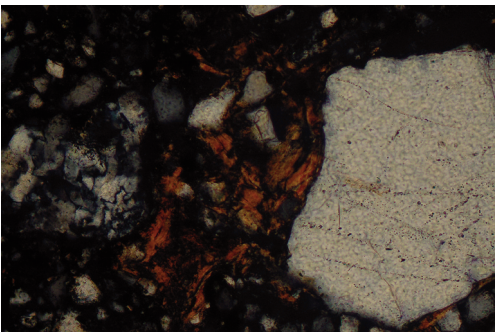


Data Fig 4 a – Photomicrograph of M5B, [48]: fine humic soil concentrations; b – detail of humic soil – now mainly oxidised/ ferruginised – containing phytoliths (under plane polarised light (PPL), frame W ~0.47mm); c – photomicrograph of [48]: humic soil below flint

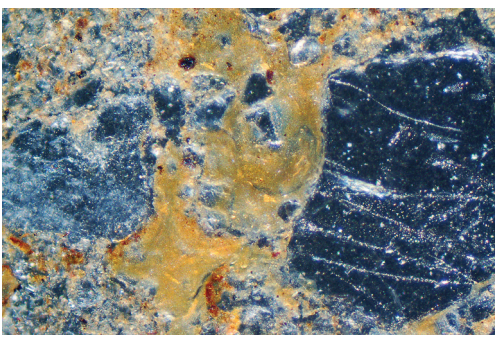
a



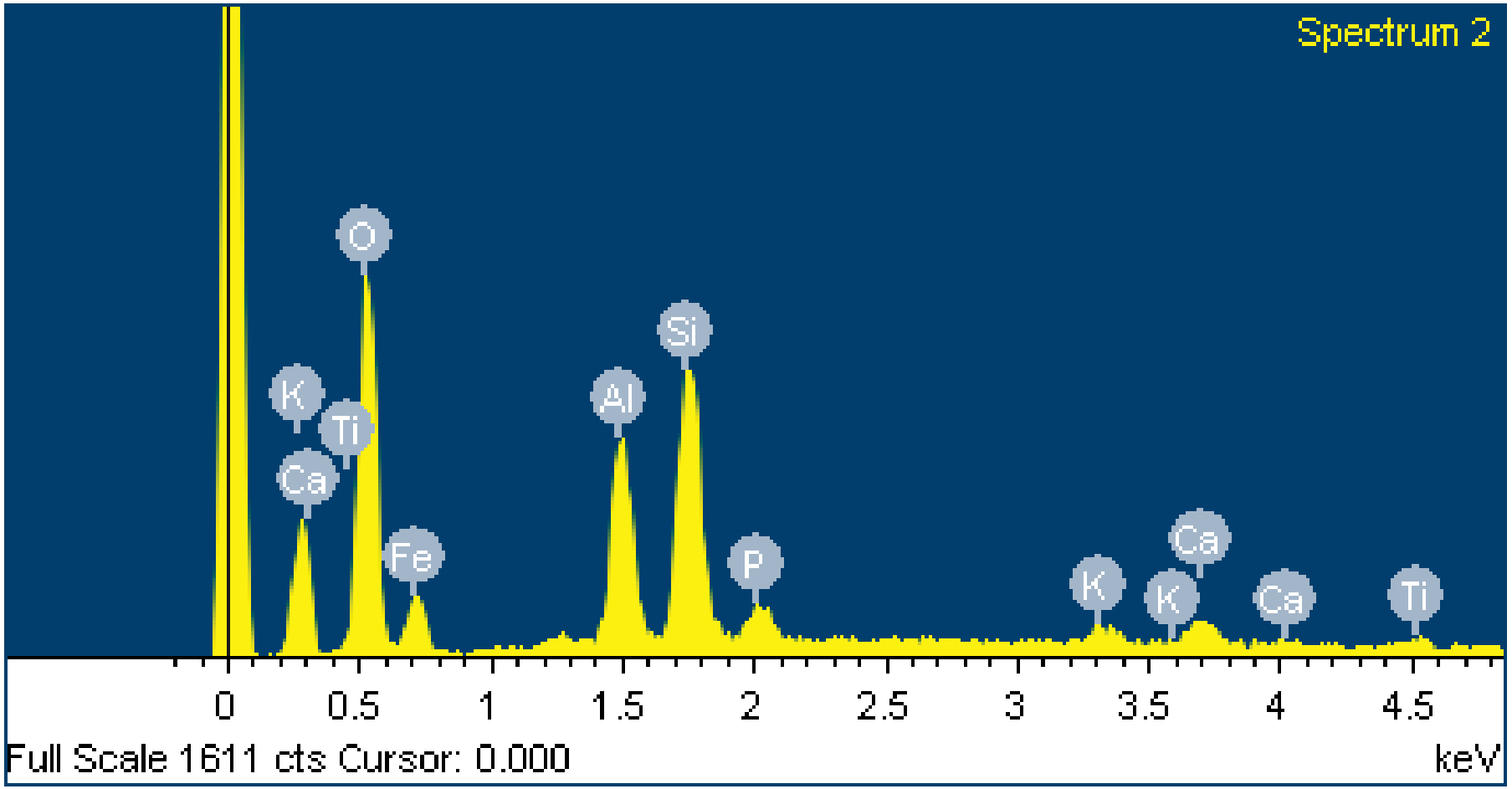
b



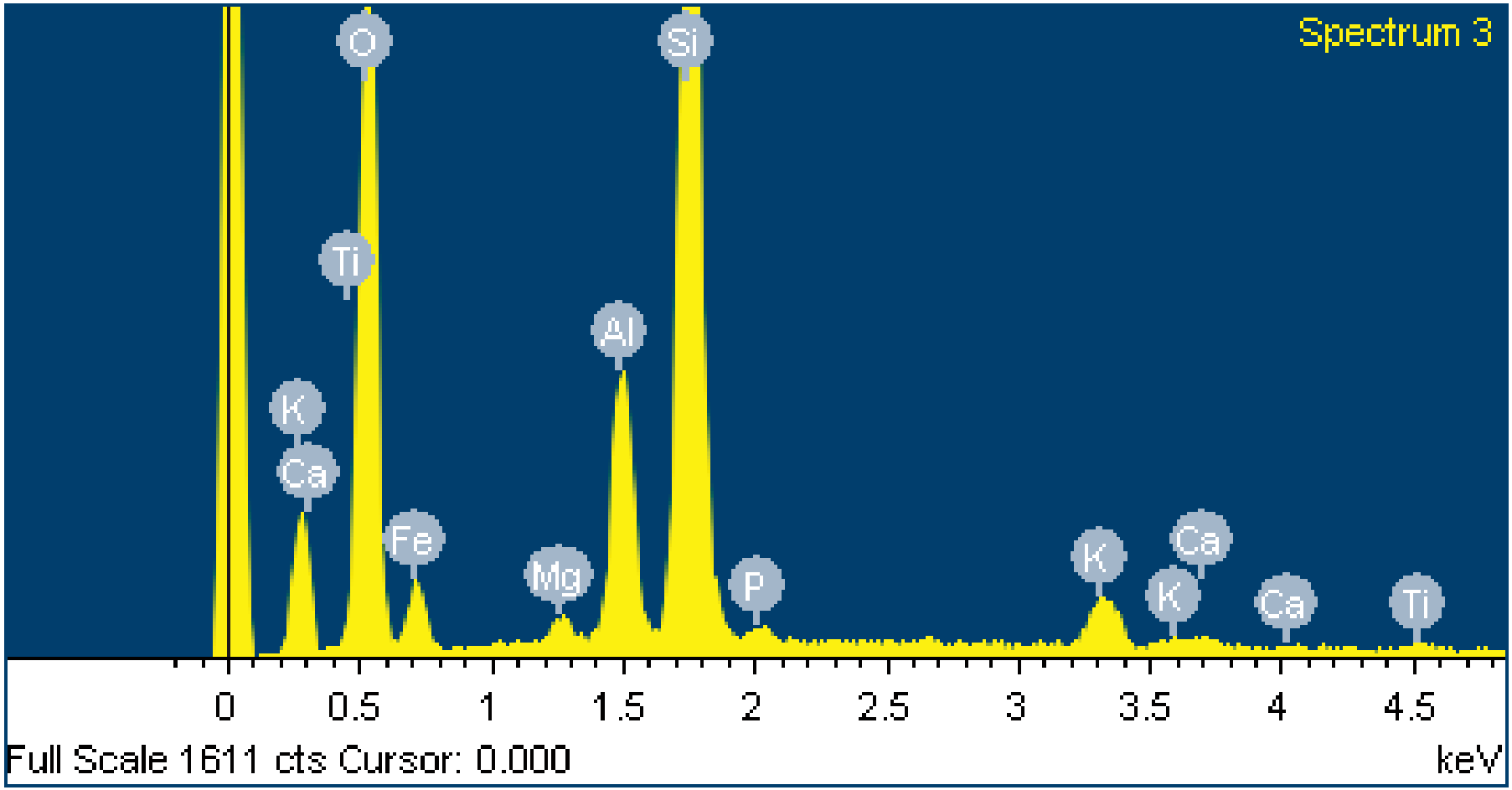
c



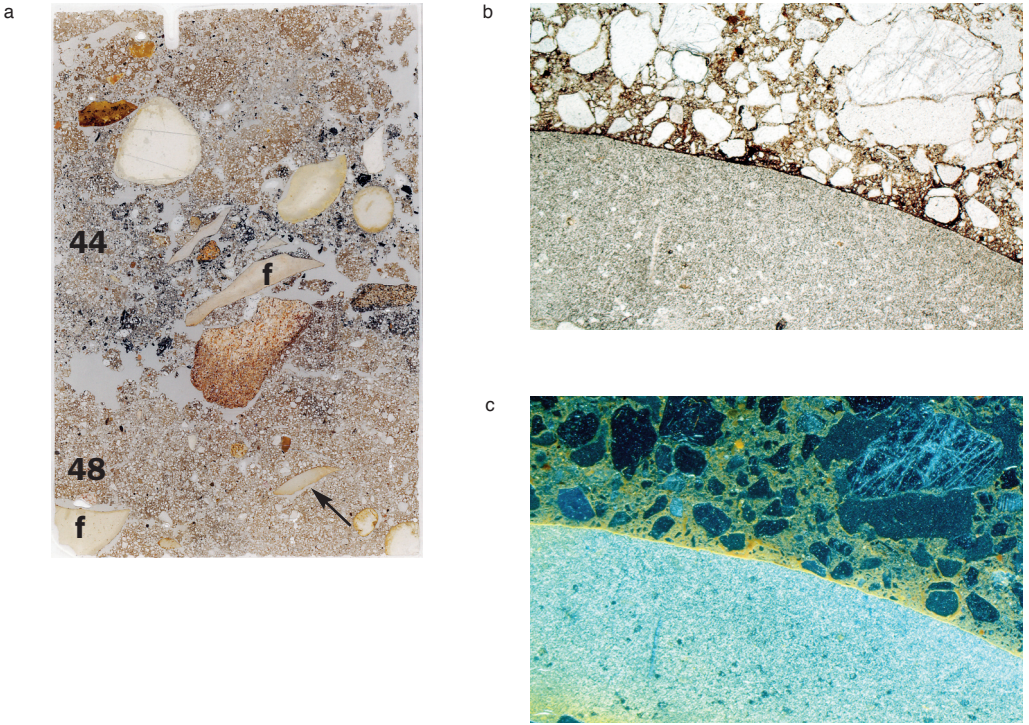
Data Fig 5 a – Detail of Data Fig 4c: microlaminated brown clay void coatings and infills, with minor iron staining (PPL, frame W ~0.90mm); b – as (a) under crossed polarised light (XPL), showing oriented clay; c – as (a) under oblique incident light (OIL); EDS found 0.46–0.50% P with 4.50–22.7% Fe, respectively (Data Fig 6)



Data Fig 6 EDS X-ray study of M5B: example of brown clay coatings, X-ray spectrum

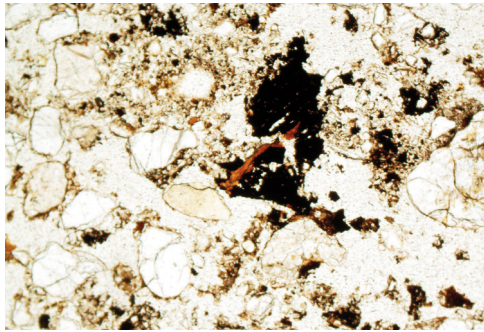


Data Fig 7 EDS X-ray study of M5A: example of reddish clay infills within charcoal, X-ray spectrum

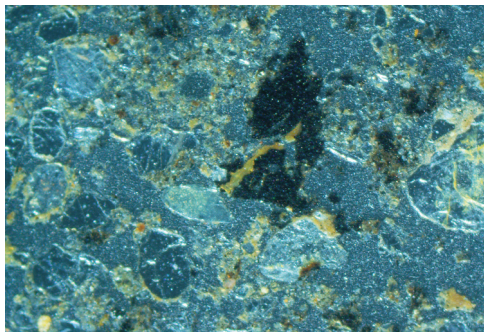


Data Fig 8 a – Scan of M5A, junction of [48], showing some possible heating effects, and [44] with a basal layer of burnt stones and charcoal [45]; fire-cracked flints ('f') occur; a flint sherd is marked by an arrow (see (b)–(c)) (PPL, frame W ~50mm); b – photomicrograph of M5A, [48]: compacted soil on upper surface of flint sherd; dark brown clay void coatings occur in this fine soil (PPL, frame W ~4.62mm); c – as (b) under OIL, showing iron-stained brown clay-rich zone

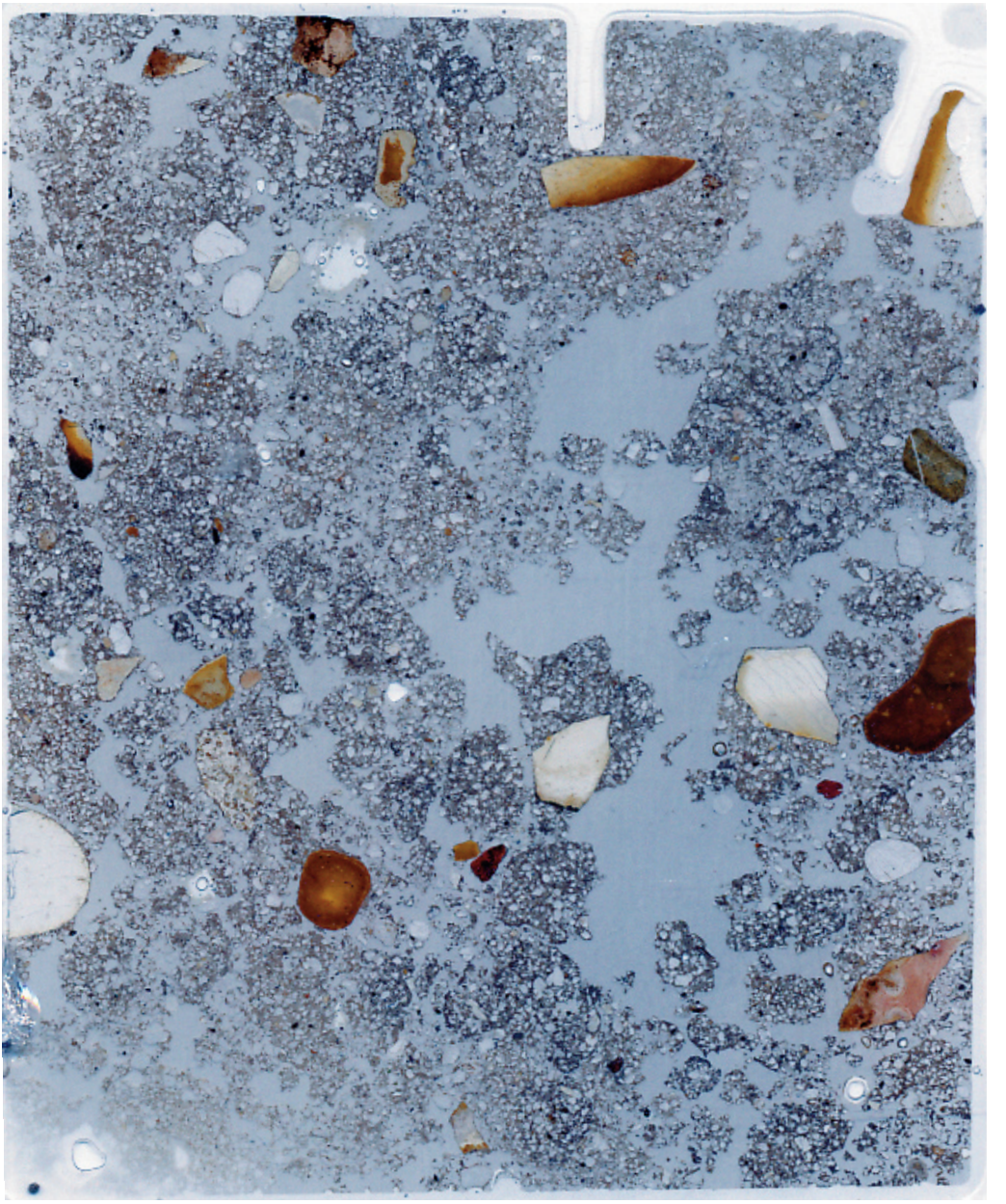
a



b

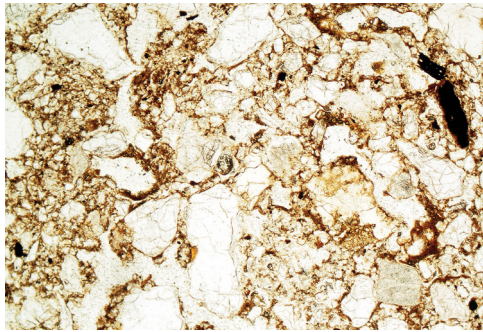


Data Fig 9 a – Photomicrograph of M5A, [45] (see Data Fig 8a): burnt debris layer; stained charcoal includes reddish clay infills (0.49–0.52% P, 5.96–8.87% Fe) (Data Fig 7; Table 21) (PPL, frame W ~2.38mm); b – as (a) under OIL

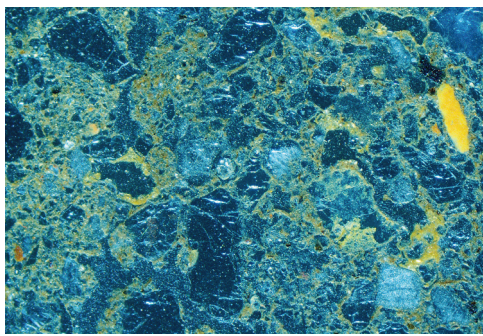


Data Fig 10 Scan of M4C, [40]: strongly biologically fragmented soil clasts and flints; frame W ~50mm

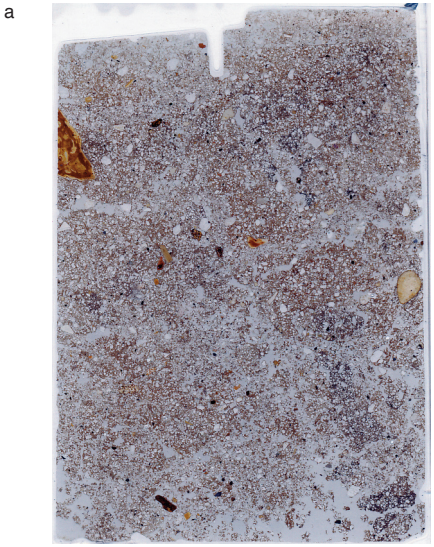
a

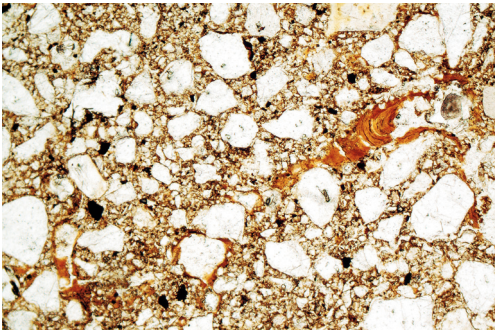


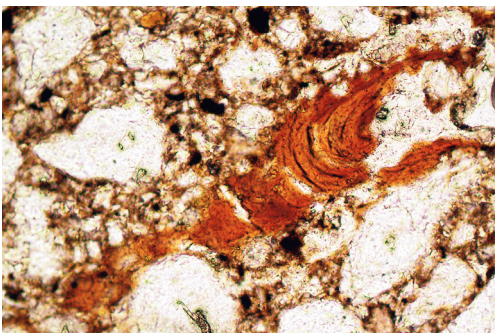
b

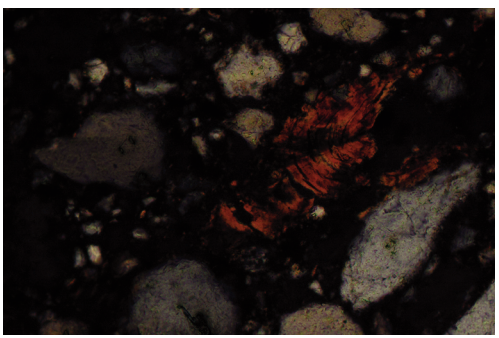


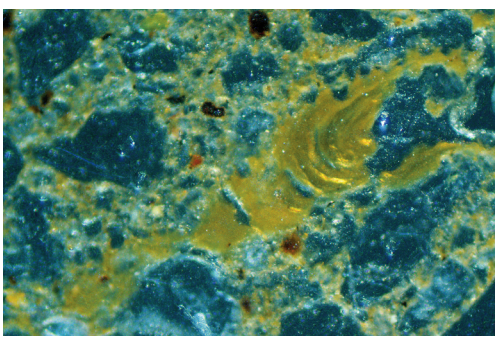
Data Fig 11 a – Photomicrograph of M4C, [39]/[40], showing dark matrix coating and infills likely associated with disturbance during construction and/or exposure during construction (PPL, frame W ~2.38mm); b – as (a) under OIL; note yellowish matrix soil concentrations



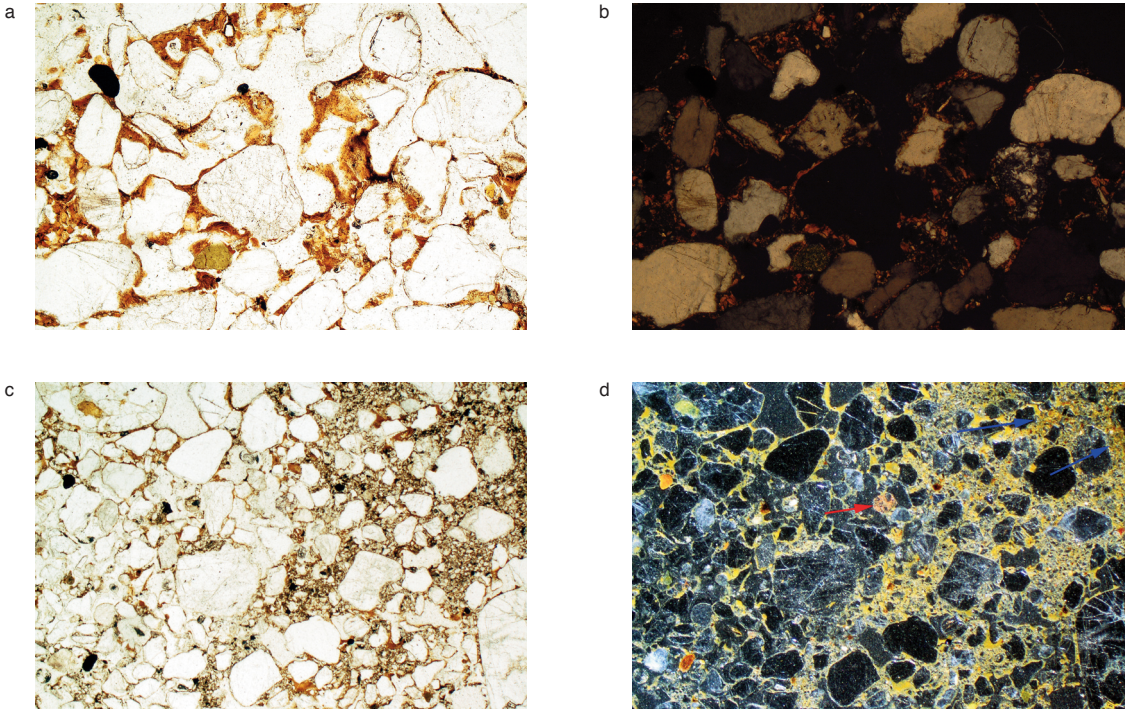




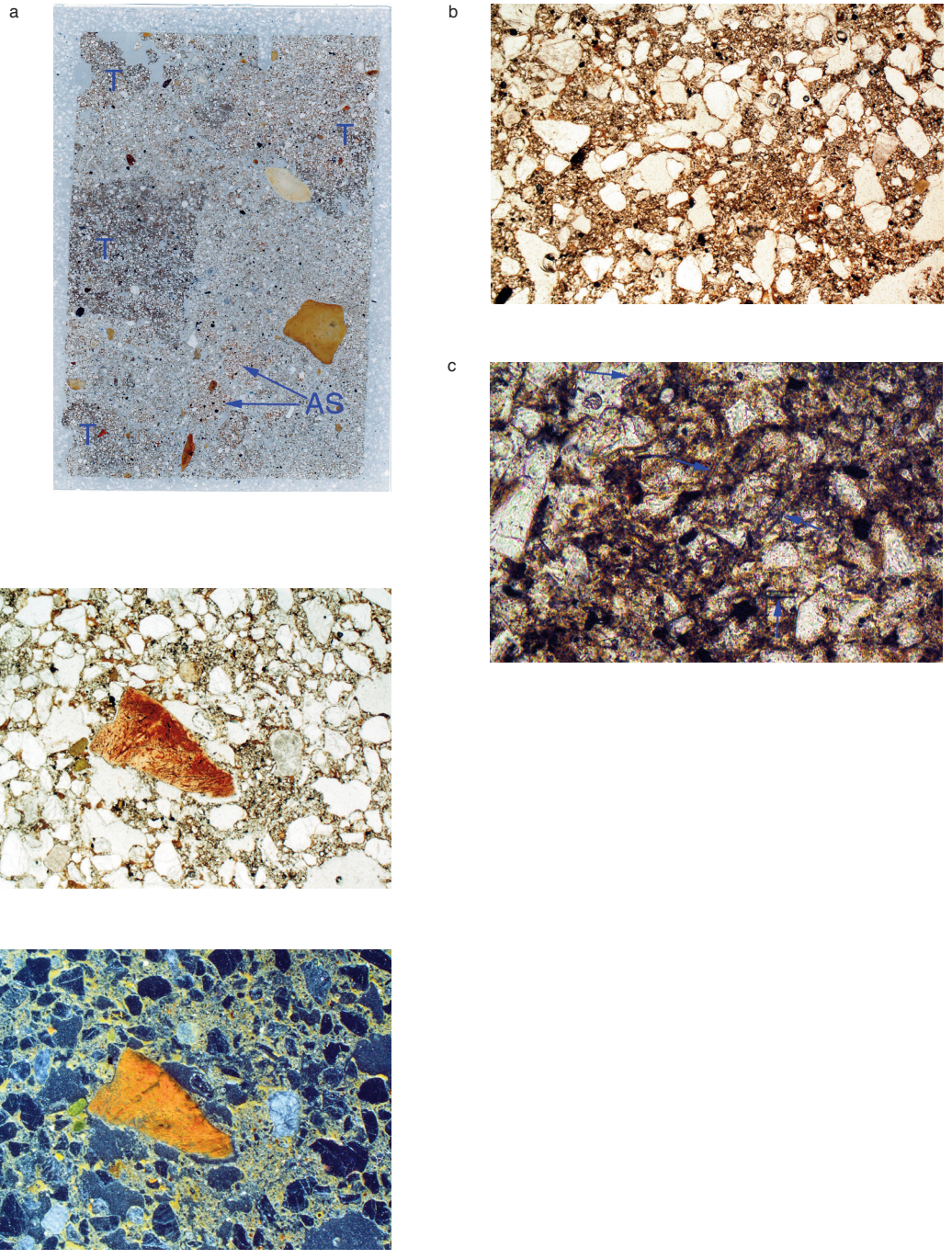




Data Fig 12 a – Scan of M4A, [39]: despite bioworking (and fragmentation) there is much intact stone-free turf soil (frame W ~50mm); b – photomicrograph of M4A, [39]: intact turf is moderately compact and humic with areas of brown clay void coatings (PPL, frame W ~2.38mm); c – detail of (b): microlaminated brown clay infilling channel within humic turf soil containing fine charcoal (PPL, frame W ~0.90mm); d – as (c) under XPL: note well oriented microlaminated clay, anomalous in turf; e – as (d) under OIL; colours under PPL and OIL suggest that iron and small amounts of phosphate are likely concentrated here (cf Data Fig 5; Data Fig 8b)



Data Fig 13 a – Photomicrograph of M8B, [37]c: 'argillic sands', Bt horizon soil material with orange-coloured clay void and grain coatings (PPL, frame W ~2.38mm); b – as (a) under XPL: note birefringent grain and void clay coatings; c – photomicrograph of M8B, [37]c: burrow-mixed argillic sands and once humic, fine charcoal-rich sandy silt loam 'turf' soil (PPL, frame W ~4.62mm); d – as (c) under OIL, showing more clayey fine turf soil, with iron staining of relict organic matter (blue arrows) and inclusion of burnt mineral grains (red arrow)



Data Fig 14 a – Scan of M8A, [37]a: collapsed turf mound, composed of turf (T) and argillic sand (AS) fragments within loose sands and gravels (frame W ~50mm); b – photomicrograph of M8A, [37]a: relict, bioworked turf fragment, fine and medium sandy silt loam (frame W ~4.62mm); c – detail of (b) showing strongly once-humic sands, with phytoliths (blue arrows) present that imply a grassland turf soil material (PPL, frame W ~0.90mm); d – photomicrograph of M8A, [37]a: turf soil containing rubefied (burnt) flint (PPL, frame W ~4.62mm); e – as (d) under OIL