<u>Facies</u> **Description** Association larger scale surfaces, Pelecypodichnus Pelecypodichnus observed, 3-D lunate ripples app mass but several downlapping surfaces observed, log impressions SB climbing ripples observed, gy mic and bioturbated highly disturbed **5**Olivelittes drk gy muds, no mic, fractures into shards parallel to lamination laminations more undulose, blocky fragments appear to show bioturbated surfaces silty mic muds mass with some laminations towards top three eroive based events, poss gravity flow, with suspended deposits following poss two low density grav/ turbidity current events, no erosion at base 45325 Pelecypodichnus -55 asymetric ripples, wavelength 12cm, amplitude 1.5cm veryPelecypodichnus well preserved, bivalves lived on underlying substrate. some relief on laminations, poss bioturbation, some beds appear draped over underlying beds, and slighly hummocky in appearence 20cm indurated horizon, locally forming concretionary nodules. ?FS homogeneous gy mic silt, isolated carbonaceous debris discrete sub-mm scale bioturbation, reworking of freshly inputted oxygenated sediment. out of phase climbing ripples with overlying lower phase plane draping beds isolated asymetric ripple laminations, within cm thick massive sandstone possible climbing ripples folded and slumped blue mudstones, upper part more planar due to high **MFS** shearing component. nodules with ammonoid debris observed. abundant weathered orange clay highly micaeous horizons with incipient asymetric ripple laminations, become more massive and less micaeous Pelecypodichnus Olivelittes ?FS Olivelittes 55 lower phase plane bedding, mic and carb in part, especially in top part ofindividual beds, sporadic high flow velocity followed by fall out of mica from suspension **BREAK IN EXPOSURE** massive fs, flutes and scours at base, sample in stream bed showing complex relationship of multi-phase scouring, produced by turbidity processes papery laminated black mudstone, MFS orange weathered clay, ammonoid debris,

black papery laminated mudstones