

Table S1. Palynomorphs assemblage associated with NMR9991-16680. R, reworked

Dinoflagellate cysts	Total abundance
<i>Achomosphaera andalousiensis</i>	5
<i>Achomosphaera</i> spp.	1
<i>Amiculosphaera umbracula</i>	1
<i>Barssidinium graminosum</i>	38
<i>Bitectatodinium tepikiense</i>	1
<i>Cribroperidinium</i> spp.	1
Dinocyst indet.	1
<i>Enneadocysta pectiniformis</i>	1R
<i>Glaphyrocysta</i> spp.	1R
<i>Habibacysta tectata</i>	9
<i>Hystrichosphaeropsis obscura</i>	2
<i>Lejeunecysta</i> spp.	1
<i>Lingulodinium machaerophorum</i>	10
<i>Melitasphaeridium choanophorum</i>	2
<i>Operculodinium centrocarpum</i>	3
<i>Operculodinium piaseckii</i>	1
<i>Operculodinium</i> spp.	2
<i>Polysphaeridium</i> spp.	1
<i>Reticulosphaera actinocoronata</i>	4
<i>Selenopemphix armageddonensis</i>	2
<i>Selenopemphix brevispinosa</i>	2
<i>Selenopemphix dionaeacysta</i>	5
<i>Selenopemphix</i> spp.	1
<i>Spiniferites</i> spp.	62
<i>Tectatodinium pellitum</i>	2
<i>Trinovantedinium</i> spp.	1
Sporomorphs	
Bisaccates	12
Sporomorphs (excl. bisaccates)	5
Miscellaneous fossils	
Foraminifera	17
<i>Paralecaniella</i> spp.	1