



**U.S. Department of the Interior
U.S. Geological Survey**

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Los Angeles County Department of Public Works and the Water Replenishment District of Southern California

Open-File Report 2011-1274
Plate 13 of 18

lower Wilmington		upper Wilmington		Stratigraphic units		
		Benthic foraminiferal stages				
		Core				
		Depth, in meters				
Pacific	early Hallian	Mf10876	6	27.1	5.7	
		Mf10877	7	28.2	2.0	
		Mf10878	8	29.1	-	
		Mf10879	10	32.6	-	
		Mf10884	17	52.4	-	
		Mf10895	33	108.2	50.0	
		Mf10896	34	110.0	-	
		Mf10901	52	199.3	-	
		Mf10902	53	200.0	-	
		Mf10903	54	201.9	-	
Harbor	?	Mf10904	55	203.6	0.1	
		Mf10905	56	204.6	-	
		Mf10906	57	206.3	-	
		Mf10907	58	207.6	-	
		Mf10908	59	209.1	-	
		Mf10909	61	236.4	-	
		Mf10915	67	288.9	-	
		Mf10917	71	294.7	-	
		Mf10918	72	295.8	-	
		Mf10919	73	297.9	-	
Bent Springs	Wheelerian	Mf10920	74	299.0	-	
		Mf10921	75	326.8	-	
		Mf10930	86	358.6	-	
		Mf10931	87	360.1	-	
		Mf10934	90	364.8	-	
		Mf10939	95	399.9	-	
		Mf10940	96	401.3	-	
		Mf10941	99	406.1	-	
		Mf10942	101	469.9	-	
		Mf10943	102	471.1	-	
		Laboratory number				
		Core				
		Depth, in meters				
		<i>Ammonia beccarii</i> (Linne)				
		<i>Astrononion incilis</i> Lankford				
		<i>Bolivina spissa</i> Cushman				
		<i>Buccella frigida</i> (Cushman)				
		<i>Bulimina denudata</i> Cushman and Parker				
		<i>Bulimina marginata</i> d'Orbigny				
		<i>Cassidulina californica</i> Cushman and Hughes				
		<i>Cassidulina delicata</i> Cushman				
		<i>Cassidulina limbata</i> Cushman and Hughes				
		<i>Cassidulina</i> spp.				
		<i>Cassidulina tortuosa</i> Cushman and Hughes				
		<i>Cibicides lobatulus</i> (Walker and Jacob)				
		<i>Cibicides mckannai</i> Galloway and Wissler				
		<i>Cibicides mckannai suppressus</i> Martin				
		<i>Cyclammina</i> spp.				
		<i>Dentalina baggi</i> Galloway and Wissler				
		<i>Elphidiella hanna'i</i> (Cushman and Grant)				
		<i>Elphidium</i> spp.				
		<i>Epistominella pacifica</i> (Cushman)				
		<i>Glandulina laevigata</i> (d'Orbigny)				
		<i>Globulina globosa</i> (von Munster)				
		<i>Gyroidea</i> spp.				
		<i>Haplophragmoides</i> spp.				
		<i>Lagenia costata</i> (Williamson)				
		<i>Lagenia hexagona</i> (Williamson)				
		<i>Lagenia semistriata</i> Williamson				
		<i>Lagenia striata</i> (d'Orbigny)				
		<i>Lenticulina smileyi</i> (Klempel)				
		<i>Loxostomum brady'i</i> (Asano)				
		<i>Miliolina californica</i> Rhumbler				
		<i>Norionella stellata</i> Cushman and Moyer				
		<i>Planulina ornata</i> (d'Orbigny)				
		<i>Praeglobulimina affinis</i> (d'Orbigny)				
		<i>Pullenia salisburyi</i> Stewart and Stewart				
		<i>Pyrgo rotalaria</i> Loeblich and Tappan				
		<i>Quinqueloculina akneriana</i> d'Orbigny				
		<i>Quinqueloculina lamarckiana</i> d'Orbigny				
		<i>Rosalina</i> spp.				
		<i>Rotalia garveyensis</i> Natland				
		<i>Sigmomorphina fronticulariformis</i> (Galloway and Wissler)				
		<i>Sigmoilina tenuis</i> (Czjcek)				
		<i>Siphonotextularia flintii</i> (Cushman)				
		<i>Trifarina angulosa</i> (Williamson)				
		<i>Trifarina carinata</i> (Cushman)				
		<i>Trifarina semitrigona</i> (Galloway and Wissler)				
		<i>Uvigerina juncea</i> Cushman and Todd				
		Total benthic foraminifers				
		Diversity				

[Abundances indicate the percentage of the total benthic foraminiferal fauna or absent (-)]

Distribution of Benthic Foraminifers in the Long Beach Water Treatment Plant Core Site and Monitoring Well, Long Beach, California

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Year 31

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