

Table DR1. Cretaceous penetrations drilled by industry in the deep-water (>300 m) Gulf of Mexico, listing environment at the time of deposition, thickness of the KPgB deposit (m), measured depth below kelly bushing (sea level + 24 m) to top of the KPgB deposit (m), and the amount of time missing underneath the deposit (m.y.)

Well	Paleoenvironment	Deposit Thickness	Depth to Deposit	Time Missing
DC 268 #1†	Upper Slope	13	4495	NA
DC 269 #1†	Upper Slope	21	4328	NA
DC 353 #1†	Upper Slope	20	5253	NA
DC 486 #1†	Upper Slope	20	5295	NA
DC 927 #1	Upper Slope	12	5350	30
MC 84 #1	Upper Slope	27	4562	30
MC 379 #1	Salt Carapace	46	5220	9
MC 392 #1A	Upper Slope	27	5512	26
MC 392 #1S†	Upper Slope	27	5470	NA
LL 399 #1	Upper Slope	16	6903	24
AT 26 #1	Structural High	0	4940	30
AT 63 #4*†	Lower Slope	>40	8454	NA
AT 182 #1	Structural High	24	7590	64
AT 182 #1St	Structural High	0	8020	51
AT 336 #1	Structural High	23	5925	85
AT 398 #1*	Lower Slope	>15	9160	NA
EW 922 #1	Salt Carapace	67	4430	33
GC 653 #3†	Lower Slope	90	8378	NA
GC 826 #3*†	Lower Slope	>18	7621	NA
GC 847 #1*	Lower Slope	>55	9562	NA
WR 52 #1*†	Lower Slope	>30	9126	NA
WR 584 #1*†	Lower Slope	>21	9410	NA
GB 754 #1	Salt Carapace	21	2190	20
GB 840 #1*	Salt Carapace	>15	3330	NA
KC 102 #1†	Lower Slope	90	9850	NA
KC 596 #1	Lower Slope	100	8740	10
KC 681 #1*	Lower Slope	>30	8382	NA
KC 774 #1	Salt Carapace	85	5835	10
KC 875 #1†	Salt Carapace	27	3165	NA
KC 875 #2†	Salt Carapace	23	3220	NA
KC 919 #1*†	Lower Slope	>20	8513	NA
KC 919 #2†	Salt Carapace	15	3543	NA
AC 557 #1	Lower Slope	204	5160	10

NA – not available. \*Partial penetration of the KPgB deposit. † Biostratigraphic data has not been released.

Table DR2. Area (km<sup>2</sup>) and upper and lower average thicknesses (m) used to estimate volume (km<sup>3</sup>) of the K/Pg boundary deposit.

Region	Area	Lower Thickness	Upper Thickness	Lower Volume	Upper Volume
GoM Basin floor	305,000	90	200	27,450	61,000
GoM Lower Slope	300,000	25	100	7,500	30,000
GoM Upper Slope	824,000	10	30	8,240	24,720
Cuba (massive)	42,000	25	250	1,050	10,500
Cuba (breccia)		50	50	1,050	2,100
Atlantic Slope	3,900,000	0.1	16.5	390	64,350
Southern Caribbean	2,800,000	0.1	1	280	2,800
Chicxulub Basin	71,000	100	400	7,100	28,400
Western Yucatan	80,000	50	300	4,000	24,000
GoM / Florida Shelf	2,262,000	0.5	5	1,131	11,310
Atlantic Shelf	800,000	0.05	.2	40	160
Total	11,384,000			58,231	259,340

Area and thickness estimates are from Sharpton et al. (1996) (Chicxulub Basin), Grajales-Nishimura et al. (2000) (western Yucatan), Norris et al. (2000) (Atlantic slope), and thickness estimates are from Smit et al. (1996) (GoM shelf), Tada et al. (2003) (Cuba), Bralower et al. (1998) (southern Caribbean), Miller et al. (2010) (Atlantic shelf), and Klaus et al. (2000). All other area estimates are based on a 65.5 Ma paleogeographic reconstruction (Blakey, 2011).

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