Table 3. Stratigraphic, geochemical, and thermal maturation data used to construct the burial history chart (fig. 8) for the Qingshankou-Putaohua/Shaertu petroleum system in the Qijia-Gulong depression, Songliao Basin, China.

[See figures 1 and 2 for location of the Qijia-Gulong depression. Geologic periods and epochs are taken from Li (1995). Present-day surface temperature ≈ 8 °C; average geothermal gradient ≈ 45 °C/km. TOC, total organic carbon; R_o, vitrinite reflectance; ss, sandstone; sh, shale; sltst, siltstone; blk sh, black shale; ls, limestone; NA, not applicable; n.d., no data]

Tops (m)	Formation (Mbr.)	Lithology	Thermal indices	Geochemical indices	Period (Epoch)	Age (Ma)
Surface-400	Taikang Daan Yian Mingshui	60% ss, 40% sh	R_o < 0.5 27 °C/km	NA	Paleogene, Neogene	65-0
	---unconformity--- (≈1,000 m of Upper Cretaceous strata removed)		NA	NA	(mid-Campanian-Maastrichtian)	75-65
(1,000 m)	Unnamed Upper Cretaceous strata	75% sh, 25% sltst	n.d.	NA	(mid-Cenomanian-mid-Campanian)	94-75
400-800	Sifangtai --unconformity	75% sh, 25% sltst	n.d.	NA	Late Cretaceous (Cenomanian)	98-94
	(≈200 m of Lower Cretaceous strata removed)		NA	NA	(late Albian)	99-98
(200 m)	Unnamed Lower Cretaceous strata	90% sh and blk sh,	n.d.	n.d.	(late Albian)	100-99
800-1,900	Nenjiang	90% sh and blk sh, 10% ls	n.d.	n.d.	Early Cretaceous (Albian)	110-100
1,900-2,100	Yaojia	80% sh, 20% ss	R_o = 0.5-2 44 °C/km	NA	Early Cretaceous (Albian)	112-110
2,100-2,500	Qingshankou	90% sh and blk sh, 10% ls	R_o = 1.3	TOC = 2.2 90% type I, 10% type II	Early Cretaceous (Aptian)	118-112
2,500-4,100	Quantou	80% sh, 20% ss	31 °C/km	NA	Early Cretaceous (Aptian)	121-118
4,100-6,000	Denglouku	70% sh, 30% ss	n.d.	NA	Early Cretaceous (Neocomian)	140-121
	---unconformity--- (≈100 m of Upper Jurassic strata removed)		NA	NA		144-140
6,000-7,100	Unnamed Upper Jurassic strata ---unconformity---	80% ss, 20% sh and coal	R_o > 2.0 37 °C/km	n.d.	Late Jurassic	155-144
7,100	Igneous and metamorphic basement rocks		NA	NA	late Paleozoic, Proterozoic	>230