[补充信息]

原位接枝纳米炭黑水包油型破乳剂制备与性能评价

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[Supplementary Information]

Synthesis and Performance Evaluation of In-situ Grafted Carbon Black Nanoparticle as Demulsifier for Treating Crude Oil-in-water Emulsions

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图 S1 模拟地层水的成分

Table S1 Composition of the synthetic formation water

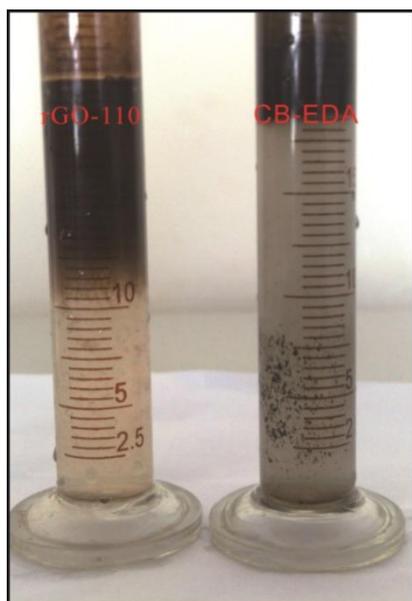| Composition	NaCl	CaCl$_2$	MgCl$_2$	Na$_2$SO$_4$	NaHCO$_3$
Content (mg L^{-1})	17817	11477.4	993.6	2230	212

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图 S1　最佳剂量破乳剂加入后静置 30min 后油水分离情况（a）GO（b）CB-EDA

Fig.S1　Demulsification process after the addition of water and various demulsifiers at optimal dosage after settling for 30 min：（a）GO（b）CB-EDA
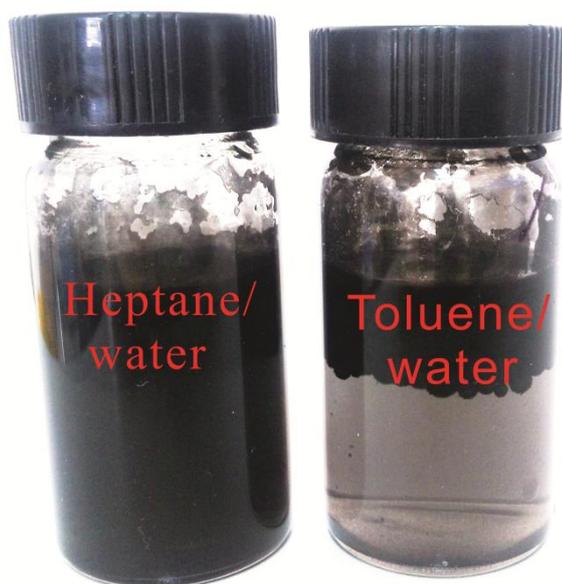

图 S2　氨基化功能炭黑稳定的乳状液（a）己烷与水（b）甲苯与水

Fig.S2　The emulsion stabled by CB-EDA (a) hexane and water (b) toluene and water

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