



UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

Centro de Ciências Exatas

Departamento de Química

April30, 2014

Dear Editor,

Following the policy of Industrial & Engineering Chemistry Research, then we introduced a paragraph named *supporting Information* after the acknowledgment paragraph. Besides, in the last line of the paragraph was mentioned "This information is available free of charge via the Internet at <http://pubs.acs.org/>."

I'd like to inform that the **Tables 3 and 5 below** (original paper) were includes in supporting Information (see such Tables in this file) as S1 and S2, respectively.

Yours sincerely,

Prof. Dr. Lúcio Leonel Barbosa
e-mail: luciolbar@gmail.com



UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

Centro de Ciências Exatas

Departamento de Química

Table S1. Primary characterization of 50 crude oil in order of increasing dynamic viscosity.

Oil	μ(mPa.s)	API	Oil	μ (mPa.s)	API	Oil	μ (mPa.s)	API
1	23.75	26.5	18	47.14	28.2	35	336.17	19.4
2	29.38	30.6	19	47.79	28.1	36	358.56	19.0
3	30.60	29.2	20	46.51	28.3	37	361.17	19.0
4	30.85	29.1	21	46.49	28.3	38	393.14	19.2
5	30.86	29.1	22	49.87	28.3	39	789.39	17.5
6	32.05	29.1	23	50.83	26.6	40	789.14	17.6
7	32.36	29.0	24	53.47	27.9	41	116.70	22.4
8	33.46	28.8	25	56.30	27.3	42	420.73	19.0
9	33.64	29.0	26	56.36	27.4	43	798.30	16.8
10	33.66	29.1	27	101.13	22.4	44	1049.29	17.2
11	34.06	28.9	28	102.66	22.3	45	1275.32	17.6
12	38.35	28.5	29	112.38	22.5	46	1416.32	17.0
13	41.48	28.7	30	123.03	22.0	47	1414.96	17.3
14	42.47	28.4	31	128.17	22.1	48	1425.04	17.2
15	45.43	28.1	32	259.07	19.7	49	1768.89	17.2
16	45.73	27.4	33	320.60	19.1	50	1801.09	17.2
17	46.01	28.5	34	323.20	19.2	-	-	-

Table S2. NMR parameters of the measurements for the distilled water and crude oil via FID and CPMG pulse sequences.

Parameters	FID		CPMG	
	Water	Crude Oil	Water	Crude Oil
P90	8.2 μ s	8.2 μ s	8.2 μ s	8.2 μ s
P180	Not apply	Not apply	16.4 μ s	16.4 μ s
RD	15 s	4 s	15 s	4 s
NS	4	4	4	4
NECH	-	-	32,678	512 – 4,096
SI	8192	512 – 4096	1	1
TAU	-	-	200 μ s	200 μ s
Echo Time	-	-	400 μ s	400 μ s
T (minutes)	0.56min	16.0-16.1s	1.87min	0.27-0.38 min



UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO

Centro de Ciências Exatas

Departamento de Química