Supplementary Material

Rapid pyrolysis products distribution of Hami lignite and its light residue

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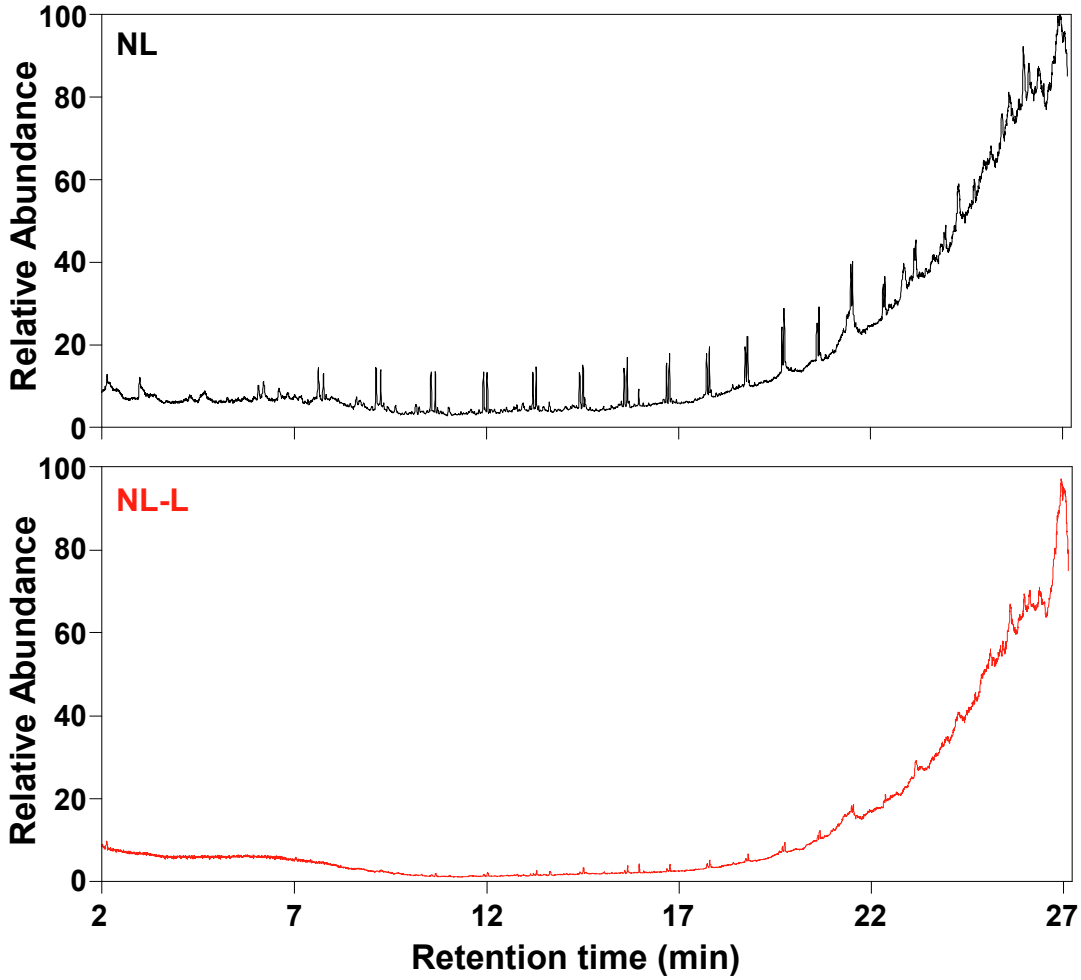

Fig. S1 Original total ion chromatograms of NL and NL-L

Table S1 N-alkanes detected in NL and NL-L

Peak	Name	RC		Peak	Name	RC	
		NL	NL-L			NL	NL-L

9	Decane	0.87		43	Nonadecane	0.94	0.28
15	Undecane	0.55		46	Eicosane	0.94	0.25
19	Dodecane	0.88		48	Heneicosane	1.45	0.32
25	Tridecane	0.68	0.10	50	Tetracosane	1.02	0.33
29	Tetradecane		0.09	53	Heptacosane	1.38	0.50
32	Pentadecane	0.85	0.16	55	Octacosane	1.65	1.03
35	Hexadecane	0.68	0.17	61	Hexatriacontane	1.48	0.56
38	Heptadecane	0.98	0.23	62	Tetratetracontane	3.11	3.09
41	Octadecane	0.89	0.20				

Table S2 Branched alkanes detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
5	Heptane, 3-ethyl-2-methyl-	0.22	0.02
36	Dodecane, 5,8-diethyl-		0.11
52	Nonadecane,2-methyl-	1.44	0.58
59	Tetrapentaconta ne, 1,54-dibromo-		2.48
64	Octadecane, 3-ethyl-5-(2-et hylbutyl)-	1.89	2.31

Table S3 Cyclanes detected in NL and NL-L

Peak	Name	RC		Peak	Name	RC	
		NL	NL-L			NL	NL-L
2	Cyclohexane	0.81		34	Cyclotetradecane	0.56	0.06

Table S4 Alkenes detected in NL and NL-L

Peak	Name	RC		Peak	Name	RC	
		NL	NL-L			NL	NL-L
8	1-Decene	0.44		40	5-Octadecene, (E)-	0.64	0.10
14	2-Undecene,(Z)-	1.13		42	1-Nonadecene	0.8	0.18

						8	
18	2-Dodecene	0.82		45	3-Eicosene,(E)-	0.88	0.12
24	1-Tetradecene	0.88	0.10	47	1-Tetracosene	0.68	0.21
27	1-Tridecene	0.80	0.09	49	1-Docosene	0.62	0.15
31	1-Pentadecene	0.68	0.09	51	1-Hexacosene	2.34	0.98
37	1-Heptadecene	0.61	0.08	58	17-Pentatriacontene	0.81	0.36
39	1-Undecene,5-methyl-	0.39	0.25				

Table S5 Arenes detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
3	Toluene	0.97	0.18
4	Benzene, (3,3-dimethylbutyl)	0.68	0.12
6	Benzene, (2,4-dimethylpe ntyl)	0.11	0.05
10	Benzene, 1-ethyl-3-methyl	0.68	
12	Benzene,1-ethynyl-4-methyl	0.27	
17	1H-Indene, 3-methyl-	0.45	
26	Naphthalene, 1-methyl	0.29	
28	Naphthalene,1-ethyl	0.63	0.11

Table S6 Acids detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
7	2-Propenoicacid	0.18	

13	Pterin-6-carboxylic acid	0.14

Table S7 Alcohols detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
20	Z,Z-2,5-Pentadecadien-1-ol	0.24	
22	(1-Benzyl-cyclopropyl)-methanol	0.26	
33	α-Isobutyl-2,4,6-trimethylbenzyl alcohol	0.29	0.20
54	7,8-Epoxylanos tan-11-ol, 3-acetoxy	1.70	
30	Nerolidol		0.08

Table S8 Esters detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
21	2,5-Octadecadiynoic acid,methyl ester	0.25	
23	Geranyl isovalerate		0.08
44	Cyclopropanebutyric acid,2-[(2-nonylcyclopropyl)methyl]-, methyl ester		0.13
56	Ethyliso-allocholate	1.25	
57	Oleicacid, eicosyl ester	3.10	2.19
60	Oleic acid,3-(octadecyloxy)propyl ester	1.33	
65	Docosanoicacid, 1,2,3-propanetriyl ester	3.18	2.07

Table S9 Phenols detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
66	1-Hentetracontanol	3.09	8.08

Table S10 Nitrogen-containing organic compounds detected in NL and NL-L

Peak	Name	RC

		NL	NL-L
11	2-Methyl-6(S)-(3-pyridyl)tetrahydro-1,2-oxazine	0.35	
16	Benzene,1-methyl-4-[(1E)-2-nitro-1-propen-1-yl]	0.48	

Table S11 Other organics compounds detected in NL and NL-L

Peak	Name	RC	
		NL	NL-L
1	Carbon Tetrachloride		0.49