

Geochemical characteristics and origin of superdeep condensate in Tarim Basin, China

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Table S1 The classifications, types and concentration of diamondoid compounds in the analyzed samples.

classifications	Number	Name	Content (ppm)
adamantanes	1	adamantane	349.20
	2	1-methyladamantane	2212.31
	3	2-methyladamantane	696.69
	4	1-ethyladamantane	319.38
	5	2-ethyl-adamantane	252.71
	6	1,3-dimethyl-adamantane	1512.62
	7	1,4-dimethyl-adamantane(cis)	731.27
	8	1,4-dimethyl-adamantane(trans)	710.42
	9	1,2-dimethyl-adamantane	878.21
	10	1-ethyl-3-methyl-adamantane	446.45
	11	C ₂ -adamantane	161.40
	12	C ₂ -adamantane	184.66
	13	C ₃ -adamantane	55.94
	14	C ₃ -adamantane	65.37
	15	C ₃ -adamantane	202.55
	16	C ₃ -adamantane	165.54
	17	C ₃ -adamantane	78.03
	18	C ₃ -adamantane	49.88
	19	C ₃ -adamantane	35.33
	20	C ₃ -adamantane	52.77
	21	1,3,5-trimethyl-adamantane	510.71
	22	1,3,6-trimethyl-adamantane	495.71
	23	1,3,4-trimethyl-adamantane(cis)	508.24
	24	1,3,4-trimethyl-adamantane(trans)	454.02
	25	1,2,3-trimethyl-adamantane	407.30
	26	1-ethyl-3,5-diamethyl-adamantane	194.15
	27	C ₃ -adamantane	129.89
	28	C ₃ -adamantane	173.68
	29	C ₃ -adamantane	209.25
	30	C ₃ -adamantane	44.25
	31	C ₃ -adamantane	53.23
	32	C ₃ -adamantane	40.32
	33	C ₃ -adamantane	67.93
	34	C ₃ -adamantane	97.95
	35	C ₃ -adamantane	137.15

	36	C ₃ -adamantane	60.79
	37	1,3,5,7-tetramethyl-adamantane	65.11
	38	1,2,5,7-tetramethyl-adamantane	307.77
	39	C ₄ -adamantane	63.13
	40	C ₄ -adamantane	67.42
	41	C ₄ -adamantane	164.95
	42	C ₄ -adamantane	184.12
	43	C ₄ -adamantane	24.57
	44	C ₄ -adamantane	83.10
	45	C ₄ -adamantane	124.96
	46	C ₄ -adamantane	61.92
	47	C ₅ -adamantane	50.85
	48	C ₅ -adamantane	30.26
	49	C ₅ -adamantane	25.78
	50	1,2,3,5,7-pentamethyl-adamantane	21.81
	51	C ₅ -adamantane	31.16
	52	C ₅ -adamantane	33.42
	53	C ₅ -adamantane	49.49
diamantanes	54	diamantane	95.58
	55	4-methyldiamantane	171.26
	56	1-methyldiamantane	100.66
	57	3-methyldiamantane	37.19
	58	4,9-dimethyldiamantane	29.92
	59	1,2+2,4-dimethyldiamantane	36.30
	60	4,8-dimethyldiamantane	41.50
	61	1,4+2,4-dimethyldiamantane	52.58
	62	C ₂ -diamantane	21.30
	63	1,4,9-trimethyldiamantane	30.54
triamentanes	64	triamentane	31.16
	65	9-methyl-triamentane	28.79
ethanoadamantanes	1	ethanoadamantane	29.23
	2	C ₁ -ethanoadamantane	37.48
	3	C ₁ -ethanoadamantane	81.19
	4	C ₁ -ethanoadamantane	26.99
	5	C ₁ -ethanoadamantane	0.39
	6	C ₂ -ethanoadamantane	16.61
	7	C ₂ -ethanoadamantane	50.28
	8	C ₂ -ethanoadamantane	40.92
	9	C ₂ -ethanoadamantane	13.02
	10	C ₃ -ethanoadamantane	23.18
thiaadamantanes	1	5-methyl-2-thiaadamantane	4.84
	2	1-methyl-2-thiaadamantane	3.94

	3	5,7-dimethyl-2-thiaadamantane	2.80
	4	1,5-dimethyl-2-thiaadamantane	12.89
	5	1,3-dimethyl-2-thiaadamantane	3.41
	6	trimethyl-2-thiaadamantane	5.66
	7	trimethyl-2-thiaadamantane	5.66