APPENDIX 1

Chemical composition of Lower Silurian black shales from the Prague Basin (Bohemian Massif)

				Ti	Fe	V	Cr	Co	Ni	Zr	Mo	Th	U	Sc	S tot	$\delta^{13}C_{org}$	TOC	Y	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	V/Cr	V/Sc	Th/U	Co/Ni	S/TOC
	Lithology	Zone	(m)																																		
Sample				ppm											wt.%	‰	wt.%	ppm														ppm					
RA-4	black shale	linnaei	8.20	11856	46530	394	377	30	154	189	3	21	13	23	0.8	-27.74	2.7	38.3	54.5	95.3	12.73	54.9	11.32	2.86	6.72	1.60	7.47	1.38	4.18	0.56	3.68	0.53	1.0	17.2	1.6	0.2	0.3
RA-6	black clayey shale	linnaei	7.95	9705	62010	333	285	129	307	137	3	13	7	19	2.6	-28.65	2.8	25.5	44.2	86.7	10.59	44.5	7.59	1.88	4.97	1.04	4.70	0.89	2.99	0.38	2.61	0.38	1.2	17.8	1.7	0.4	0.9
RA-8	black claystone	rastrum	7.40	7220	66735	842	236	82	361	145	15	14	19	21	4.8	-30.03	5.1	93.4	74.2	113.3	16.57	72.5	14.57	4.28	10.15	2.71	14.41	2.81	7.89	1.01	6.27	0.91	3.6	40.0	0.7	0.2	0.9
RAB-7	black shale	sedgwickii	6.70	8035	82800	808	333	22	245	136	19	10	15	20	9.0	-28.15	6.2	87.4	58.3	92.3	14.44	64.6	13.81	3.76	9.05	2.33	11.65	2.32	6.74	0.84	5.32	0.79	2.4	39.7	0.7	0.1	1.4
RAB-9	black shale	sedgwickii	6.57	9185	49365	1289	380	31	238	144	34	7	25	21	4.5	-28.48	6.1	64.8	43.5	81.3	10.22	44.6	9.44	2.94	6.57	1.69	9.09	1.84	5.30	0.68	4.36	0.64	3.4	61.7	0.3	0.1	0.7
RA-9	micaceous black shale	sedgwickii	6.48	9140	44933	1180	366	32	234	154	39	8	24	26	3.9	-27.89	5.7	64.9	51.2	92.6	11.22	47.5	9.67	2.89	6.89	1.74	9.09	1.85	5.43	0.71	4.58	0.69	3.2	46.1	0.3	0.1	0.7
RA-10	micaceous black shale	sedgwickii	6.35	7885	66690	1069	316	25	251	132	18	7	17	32	6.9	-28.97	6.6	76.7	55.2	84.3	12.14	52.1	10.57	3.24	7.50	1.87	9.86	2.04	6.02	0.81	5.28	0.76	3.4	33.7	0.4	0.1	1.0
RA-11	grey siltstone/micaceous sandstone	sedgwickii	6.24	6760	82305	146	198	15	73	160	5	5	5	25	8.2	-14.59	0.6	28.9	37.0	77.6	8.28	35.2	6.97	1.83	4.86	1.10	5.14	0.96	2.95	0.38	2.62	0.38	0.7	5.8	1.0	0.2	13.9
RA-12	micaceous black shale	sedgwickii	6.18	8480	40847	215	218	19	108	151	2	6	4	30	2.9	-23.96	3.2	39.3	46.3	91.3	10.94	47.5	10.38	2.71	6.92	1.62	7.53	1.39	4.16	0.53	3.48	0.51	1.0	7.2	1.3	0.2	0.9
RAB-15	black shale	sedgwickii	6.03	6625	99360	140	181	24	224	106	10	5	3	26	11.3	-27.68	3.9	37.4	38.6	66.2	8.83	37.9	7.05	2.00	5.25	1.20	6.09	1.21	3.67	0.50	3.30	0.50	0.8	5.5	1.7	0.1	2.9
RAB-16	siliceous black shale	sedgwickii	5.90	6630	62010	208	184	24	147	150	2	5	3	27	5.7	-26.90	3.3	38.0	37.4	63.8	8.32	34.4	6.11	1.69	4.66	1.08	5.59	1.20	3.94	0.58	3.87	0.61	1.1	7.6	2.0	0.2	1.7
RAB-17	siliceous black shale	sedgwickii	5.75	7950	31068	287	214	20	103	159	1	6	3	30	1.3	-27.25	2.7	41.7	47.5	84.7	10.65	43.6	7.98	2.11	6.05	1.39	6.82	1.38	4.36	0.61	4.07	0.58	1.3	9.7	2.1	0.2	0.5
RA-13	micaceous black shales rich in graptolite	sedgwickii	5.50	6740	45945	335	187	23	134	139	5	5	5	29	4.4	-29.39	4.1	39.4	48.5	72.2	9.63	41.6	8.65	2.43	6.03	1.36	6.55	1.33	4.11	0.55	3.77	0.56	1.8	11.7	1.0	0.2	1.1
RA-50	micaceous siltstone with pyrite and poor in graptolite	sedgwickii	5.3	6570	63765	182	187	18	147	124	5	6	5	23	5.3	-29.10	3.8	82.4	64.9	112.9	16.68	74.5	16.28	4.68	11.51	2.88	14.07	2.72	7.65	0.93	5.82	0.82	1.0	7.9	1.3	0.1	1.4
RA-14	pyrite-rich and graptolite-poor shale	sedgwickii	5.10	4150	87390	143	114	38	161	98	13	4	3	23	9.2	-26.43	3.6	31.5	29.7	57.3	7.36	32.2	6.81	1.74	4.56	1.11	5.45	1.05	3.32	0.44	2.95	0.46	1.3	6.3	1.0	0.2	2.6
RA-15	siliceous black shale	convolutus	4.50	3019	22379	982	106	15	116	84	22	3	13	20	1.2	-28.69	3.7	30.0	23.9	48.3	6.00	26.1	5.62	1.87	4.01	0.96	4.88	0.96	2.89	0.39	2.56	0.38	9.3	49.7	0.2	0.1	0.3
RA-16	siliceous black shale	convolutus	4.08	3190	27909	399	90	25	149	72	44	3	12	20	2.3	-29.43	2.6	29.5	24.3	50.8	6.32	28.2	6.17	1.88	4.14	1.01	5.05	0.96	2.83	0.35	2.44	0.35	4.4	19.6	0.2	0.2	0.9
RA-19	siliceous black shale	convolutus	3.92	3783	29525	329	117	26	136	85	31	3	25	19	2.4	-27.78	2.7	52.5	31.1	62.5	8.06	38.6	9.40	3.59	6.26	1.68	8.70	1.66	4.55	0.54	3.47	0.50	2.8	17.3	0.1	0.2	0.90
RA-20	siliceous black shale	convolutus	3.48	3098	26249	530	120	15	146	87	23	3	11	19	2.2	-28.34	4.1	32.8	26.0	48.1	6.74	30.4	6.82	1.95	4.59	1.15	5.87	1.13	3.33	0.42	2.78	0.41	4.4	28.6	0.3	0.1	0.55
			Av.	6843	54622	516	221	32	181	129	15	7	11	24	4.7	-27.34	3.9	49.2	44	78	10	45	9	3	6	2	8	2	5	1	4	1	3	22.8	1.0	0.2	1.2
			Min.	3019	22379	140	90	15	73	72	1	3	3	19	0.8	-30.03	0.6	25.5	24	48	6	26	6	2	4	1	5	1	3	0	2	0	1	5.5	0.1	0	0.3
			Max.	11856	99360	1289	380	129	361	189	44	21	25	32	11.3	-14.59	6.6	93.4	74.2	113.3	16.7	74.5	16.3	4.7	11.5	2.9	14.4	2.8	7.9	1.0	6.3	0.9	9.3	61.7	2.1	0.4	13.9