DANMARKS OG GRØNLANDS GEOLOGISKE UNDERSØGELSE RAPPORT 2012/28

Analytical results from the Terne-1 and Slagelse-1 wells

TOC, XRD, trace elements and carbon isotope analysis

Niels H. Schovsbo

GEOLOGICAL SURVEY OF DENMARK AND GREENLAND
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Released 31.03.2017

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1. Introduction

This report summarises the analytical work done on a selection of samples from the Lower Palaeozoic interval in the Terne-1 and Slagelse-1 wells. The analytical data is a supplement to the data presented in the GEUS reports on the Terne-1 and Slagelse-1 wells (GEUS 2011/84 and GEUS 2011/98).

2. Samples

2.1. Slagelse-1

25 samples have been included in this report.

All cutting types (washed and unwashed) showed a mix of different lithologies. Caving of red sandstone (Triassic or Lower Permian) was present in almost all cutting samples. The red lithologies were removed from the samples prior to analysis.

In the Alum Shale interval the cuttings showed a mix between dark and green cuttings. The mix is attributed to caving of material from the Ordovician/Silurian sequence into the Alum Shale.

Only the darkest cuttings were selected for analysis in order to provide an estimate of the highest TOC content present in the sample.

Prior to analysis the cutting samples were washed with water. After drying approximately 2 g of material was picked from the 1-4 mm fraction. Any magnetic material was removed and the samples were crushed to a grain size below 250 my. No pre-treatment of the core samples was made.

Table 1. Samples analysed in the Slagelse-1 well for TOC, carbonate, sulphur, and XRD analysis.

This report	GEUS 2011/84	Material	Unit	Top(m)	Base (m)
	1	Core	Silurian		2770.8
1		Core	Silurian		2771.2
	1	Core	Silurian		2772.0
1		Core	Silurian		2773
	1	Core	Silurian		2773.5
1		Core	Silurian		2774
	1	Core	Silurian		2775.0
1		Core	Silurian		2775.8
	1	Core	Silurian		2776.4
1		Picked Cuttings	Silurian	2770	2780
	1	Core	Silurian		2813.3
	1	Core	Silurian		2814.5
	1	Picked Cuttings	Silurian	2820	2823
1		Picked Cuttings	Silurian	2829	2832
1		Picked Cuttings	Silurian	2832	2835
1		Picked Cuttings	Silurian	2838	2841
1		Picked Cuttings	Silurian	2844	2847
1		Picked Cuttings	Silurian	2850	2853
	1	Core	Silurian		2855.8
	1	Core	Silurian		2856.1

Table 1 (continued).

This report	GEUS 2011/84	Material	Unit	Top(m)	Base (m)
1		Picked Cuttings	Silurian	2859	2862
1		Picked Cuttings	Silurian	2868	2871
	1	Picked Cuttings	Silurian	2874	2877
1		Picked Cuttings	Silurian	2880	2883
	1	Picked Cuttings	Silurian	2889	2892
1		Picked Cuttings	Silurian	2892	2895
	1	Core	Ordovician		2905.3
1		Picked Cuttings	Ordovician	2909	2912
	1	Picked Cuttings	Ordovician	2912	2915
1		Picked Cuttings	Ordovician	2915	2918
	1	Picked Cuttings	Ordovician/Alum Shale		2921
	1	Picked cuttings	Alum Shale (100% Caving)		2924
1		Picked Cuttings	Alum Shale (100% Caving)	2924	2927
1		Picked Cuttings	Alum Shale (100% Caving)	2927	2930
	1	Core	Alum Shale		2932.6
	1	Core	Alum Shale		2933.0
	1	Core	Alum Shale		2933.7
	1	Core	Alum Shale		2933.8
1		Picked Cuttings	Alum Shale (Caving significant)	2934	2937
1		Picked Cuttings	Alum Shale (Caving significant)	2937	2940
1		Picked Cuttings	Alum Shale (Caving significant)	2940	2943
1		Picked Cuttings	Alum Shale (Caving significant)	2943	2946
1		Picked Cuttings	Alum Shale (Caving significant)	2946	2949
1		Picked Cuttings	Alum Shale (Caving significant)	2949	2952
1		Picked Cuttings	Alum Shale (Caving significant)	2952	2955

2.2. Terne-1

102 samples have been analysed in the Terne-1 well. The analysis include 67 determination of TOC, carbonate and total sulphur, 48 Quarts and XRD screening, 103 stable isotope measurements and 106 determinations of trace elopement composition (Table 2).

Table 2. Analytical program on the Terne-1 samples.

TOC this report	XRD this report	TOC, XRD GEUS 2011/98	$\delta^{13}C$	Trace Elements	Unit	Depth, base(m)
1	1		1	1	Rastrites F4	2813
1					Rastrites F4	2816
1				1	Rastrites F4	2819
1	1		1	1	Rastrites F4	2825
		1	1	1	Rastrites F4	2828
1					Rastrites F4	2831
1					Rastrites F4	2834
1					Rastrites F4	2837
1	1		1	1	Rastrites F4	2843
1					Rastrites F4	2855
1	1		1	1	Rastrites F3	2867
1	1		1	1	Rastrites F3	2876
		1	1	1	Rastrites F3	2894
1	1		1	1	Rastrites F3	2903
			1	1	Rastrites F3	2912
1			1	1	Rastrites F3	2918
1	1		1	1	Rastrites F3	2924
			1	1	Rastrites F3	2927
		1	1	1	Rastrites F2	2942
1	1		1	1	Rastrites F2	2954
1	1		1	1	Rastrites F1	2957
1	1		1	1	Rastrites F1	2960
			1	1	Rastrites F1	2978
		1	1	1	Rastrites F1	2981
			1	1	Lindegård	2984
1	1		1	1	Lindegård	3002
			1	1	Lindegård	3017
			1	1	Lindegård	3023
1			1	1	Dicellograptus	3026
1	1		1	1	Dicellograptus	3029
			1	1	Dicellograptus	3032
1					Dicellograptus	3035
1					Dicellograptus	3038

Table 2 (continued).

TOC this report	XRD this report	TOC, XRD GEUS 2011/98	$\delta^{13}C$	Trace Elements	Unit	Depth, base(m)
1					Dicellograptus	3044
			1	1	Dicellograptus	3047
1					Dicellograptus	3050
1	1		1	1	Dicellograptus	3053
			1	1	Dicellograptus	3056
1					Dicellograptus	3059
			1	1	Dicellograptus	3062
		1	1	1	Dicellograptus	3065
1					Dicellograptus	3068
1					Dicellograptus	3074
1	1		1	1	Dicellograptus	3083
1					Dicellograptus	3080
			1	1	Almelund	3092
1			1	1	Almelund	3098
			1	1	Almelund	3101
			1	1	Almelund	3113
			1	1	Almelund	3116
			1	1	Almelund	3119
1	1		1	1	Almelund	3122
				1	Tøyen	3128
			1	1	Tøyen	3131
		1	1	1	Tøyen	3140
1	1		1	1	Tøyen	3143
1	1		1	1	Tøyen	3155
			1	1	Tøyen	3164
	1		1	1	Tøyen	3167
		1	1	1	Alum, L. Ordovician	3170
1			1	1	Alum, L. Ordovician	3173
			1	1	Alum, L. Ordovician	3176
	1			1	Alum, L. Ordovician	3179
		1	1	1	Alum, L. Ordovician	3182
1					Alum, L. Ordovician	3185
1	1		1	1	Alum, L. Ordovician	3188
			1	1	Alum, L. Ordovician	3191
1			1	1	Alum, L. Ordovician	3194
		1	1	1	Alum, L. Ordovician	3197
1	1		1	1	Alum, L. Ordovician	3200
1	1		1	1	Alum, L. Ordovician	3203
			1	1	Alum, Furongian	3206

Table 2 (continued).

TOC this report	XRD this report	TOC, XRD GEUS 2011/98	$\delta^{13}C$	Trace Elements	Unit	Depth, base(m)
1	1		1	1	Alum, Furongian	3209
		1	1	1	Alum, Furongian	3212
1	1		1	1	Alum, Furongian	3215
1	1		1	1	Alum, Furongian	3218
1	1		1	1	Alum, Furongian	3221
1	1		1	1	Alum, Furongian	3224
		1	1	1	Alum, Furongian	3227
1	1		1	1	Alum, Furongian	3230
1	1		1	1	Alum, Furongian	3233
1	1		1	1	Alum, Furongian	3236
1	1		1	1	Alum, Furongian	3239
		1	1	1	Alum, Furongian	3242
1	1		1	1	Alum, Furongian	3245
1	1		1	1	Alum, Furongian	3248
		1	1	1	Alum, Furongian	3251
1	1		1	1	Alum, Furongian	3254
		1	1	1	Alum, Furongian	3257
1	1		1	1	Alum, Furongian	3260
1	1		1	1	Alum, Furongian	3263
			1	1	Alum, Furongian	3266
1	1		1	1	Alum, Furongian	3269
		1	1	1	Alum, Furongian	3272
1	1		1	1	Alum, Middle Cambrian	3275
1	1		1	1	Alum, Middle Cambrian	3278
			1	1	Alum, Middle Cambrian	3281
		1	1	1	Alum, Middle Cambrian	3284
1	1		1	1	Alum, Middle Cambrian	3287
		1	1	1	Alum, Middle Cambrian	3290
1			1	1	Alum, Middle Cambrian	3293
1	1		1	1	Alum, Middle Cambrian	3296
	1		1	1	Alum, Middle Cambrian	3299
1	1		1	1	Alum, Middle Cambrian	3302
		1	1	1	Alum, Middle Cambrian	3305
1			1	1	Alum, Middle Cambrian	3308
			1	1	Alum, Middle Cambrian	3311
1	1		1	1	Alum, Middle Cambrian	3314
		1	1	1	Alum, Middle Cambrian	3317
1	1		1	1	Alum, Middle Cambrian	3320
1	1		1	1	Alum, Middle Cambrian	3323

Table 2 (continued).

TOC this report	XRD this report	TOC, XRD GEUS 2011/98	$\delta^{13}C$	Trace Elements	Unit	Depth, base(m)
		1	1	1	Alum, Middle Cambrian	3329
1	1		1	1	Alum, Middle Cambrian	3332
1			1	1	Alum, Middle Cambrian	3335
1	1		1	1	Alum, Middle Cambrian	3338
1			1	1	Alum, Middle Cambrian	3341
			1	1	Alum, Middle Cambrian	3344
			1	1	Alum, Middle Cambrian	3347
			1	1	Alum, Middle Cambrian	3350
			1	1	Hardeberga	3353

3. TOC, carbonate and TS measurements

The total carbon (TC) and total sulphur (TS) contents were measured on a LECO CS-200 carbon/sulphur analyser. Approximately 0.05 g of dried rock powder was placed together with iron accelerator material in an oven and heated to 1300°C, the evolved gasses were measured by infrared absorption. Reproducibility of the standards is better than 0.1%. The carbonate content was measured on sample splits by titration and the carbonate content (TCC) was used to correct the TC to TOC using the formula:

$$TOC\ (wt.\%) = TC\ (wt.\%) - TCC\ (wt.\%)$$

Total sulphur (TS) content was measured by combustion of the samples in a LECO-type oven. All measurements were made at the Institute of Geography and Geology, University of Copenhagen.

3.1. Slagelse-1

Table 3. TOC, TC and total sulphur analysis from the Slagelse-1 well.

This report	Material	Unit	Base (m)	TOC (%)	TC (%)	TS (%)	Carbonate (%)	Pyrite (%)
	Core	Silurian	2770.8	0.6	0.80	0.05	1.6	0.10
1	Core	Silurian	2771.2	0.0	0.25	0.12	4.2	0.22
	Core	Silurian	2772.0	0.1	0.26	0.32	1.1	0.60
1	Core	Silurian	2773	0.0	0.30	1.30	2.6	2.44
	Core	Silurian	2773.5	0.1	0.20	0.12	0.7	0.23
1	Core	Silurian	2774	0.0	0.32	0.35	3.6	0.65
	Core	Silurian	2775.0	0.1	0.25	0.19	1.2	0.35
1	Core	Silurian	2775.8	0.1	0.52	0.57	3.7	1.06
	Core	Silurian	2776.4	0.1	0.19	0.97	0.4	1.82
1	Picked Cuttings	Silurian	2780	0.0	0.35	0.23	3.3	0.43
	Core	Silurian	2813.3	0.0	0.10	0.47	0.4	0.89
	Core	Silurian	2814.5	0.1	0.12	0.34	0.4	0.65
	Picked Cuttings	Silurian	2823	0.1	0.42	0.38	2.7	0.72
1	Picked Cuttings	Silurian	2832	0.2	0.56	0.20	3.3	0.38
1	Picked Cuttings	Silurian	2835	0.0	0.41	0.22	3.3	0.41
1	Picked Cuttings	Silurian	2841	0.1	0.72	0.29	4.8	0.53
1	Picked Cuttings	Silurian	2847	0.0	0.49	0.21	4.3	0.39
1	Picked Cuttings	Silurian	2853	0.3	0.70	0.25	3.3	0.46
	Core	Silurian	2855.8	0.2	0.24	0.03	0.7	0.05
	Core	Silurian	2856.1	0.2	0.29	0.04	0.8	0.08
1	Picked Cuttings	Silurian	2862	0.0	0.44	0.19	3.3	0.36
1	Picked Cuttings	Silurian	2871	0.0	0.56	0.30	4.9	0.57
	Picked Cuttings	Silurian	2877	0.1	0.40	0.22	2.7	0.41
1	Picked Cuttings	Silurian	2883	0.0	0.39	0.29	3.2	0.54

Table 3 (continued).

This report	Material	Unit	Base (m)	TOC (%)	TC (%)	TS (%)	Carbonate (%)	Pyrite (%)
	Picked Cuttings	Silurian	2892	0.1	0.40	0.55	2.7	1.02
1	Picked Cuttings	Silurian	2895	0.0	0.52	0.27	5.2	0.51
	Core	Ordovician	2905.3	0.1	0.27	0.05	1.7	0.09
1	Picked Cuttings	Ordovician	2912	0.0	0.39	0.18	3.7	0.34
	Picked Cuttings	Ordovician	2915	0.1	0.37	0.33	2.5	0.61
1	Picked Cuttings	Ordovician	2918	0.1	0.41	0.98	2.9	1.83
	Picked Cuttings	Ordovician/Alum Shale	2921	0.1	0.34	0.21	2.2	0.40
	Picked cuttings	Alum Shale (100% Caving)	2924	0.1	0.38	0.28	2.4	0.52
1	Picked Cuttings	Alum Shale (100% Caving)	2927	0.1	0.44	0.42	3.1	0.79
1	Picked Cuttings	Alum Shale (100% Caving)	2930	0.2	0.63	0.35	3.8	0.66
	Core	Alum Shale	2932.6	6.9	7.18	5.40	2.0	10.10
	Core	Alum Shale	2933.0	8.6	8.65	2.98	0.1	5.57
	Core	Alum Shale	2933.7	8.5	8.44	3.28	0.0	6.14
	Core	Alum Shale	2933.8	8.3	8.13	3.72	0.0	6.96
1	Picked Cuttings	Alum Shale (Caving significant)	2937	2.3	3.05	1.29	6.3	2.42
1	Picked Cuttings	Alum Shale (Caving significant)	2940	3.2	3.91	1.34	5.7	2.50
1	Picked Cuttings	Alum Shale (Caving significant)	2943	2.6	3.20	1.18	4.8	2.21
1	Picked Cuttings	Alum Shale (Caving significant)	2946	2.1	2.36	1.12	2.2	2.10
1	Picked Cuttings	Alum Shale (Caving significant)	2949	2.7	3.13	1.48	3.7	2.77
1	Picked Cuttings	Alum Shale (Caving significant)	2952	2.0	3.07	1.07	9.3	2.00
1	Picked Cuttings	Alum Shale (Caving significant)	2955	0.1	0.46	0.36	2.6	0.68

3.2. Terne-1

Table 4. TOC, carbonate and total sulphur analysis from the Terne-1 well.

This report	Unit	Depth bottom (m)	TOC (%)	TC (%)	TS (%)	Carbonate (%)
1	Rastrites F4	2813	1.2	1.6	2.0	3.4
1	Rastrites F4	2816	1.3	1.6	2.1	3.7
1	Rastrites F4	2825	1.5	2.0	3.2	4.3
	Rastrites F4	2828	1.5	2.0	2.2	4.3
1	Rastrites F4	2331	1.0	1.5	2.7	6.0
1	Rastrites F4	2834	0.7	1.2	2.6	5.7
1	Rastrites F4	2837	0.9	1.2	2.5	3.8
1	Rastrites F4	2843	0.7	1.3	2.0	4.7
1	Rastrites F4	2855	0.7	1.5	1.2	9.4
1	Rastrites F3	2867	0.0	0.6	0.3	5.8
1	Rastrites F3	2876	0.2	1.0	0.8	6.7
	Rastrites F3	2894	0.0	0.8	0.7	7.0
1	Rastrites F3	2903	0.1	1.0	0.6	7.6
1	Rastrites F3	2918	0.4	1.2	1.3	6.9
1	Rastrites F3	2924	0.3	1.0	1.1	5.8
	Rastrites F2	2942	1.3	2.0	1.9	5.7
1	Rastrites F2	2954	0.9	1.5	1.5	5.1
1	Rastrites F1	2957	1.2	2.0	1.9	6.6
1	Rastrites F1	2960	1.3	2.0	1.4	5.6
	Rastrites F1	2981	1.5	2.2	1.7	5.6
1	Lindegård	3002	0.4	1.1	1.5	5.5
1	Dicellograptus	3026	1.4	1.9	1.4	4.8
1	Dicellograptus	3029	1.5	2.1	1.1	4.9
1	Dicellograptus	3035	1.1	1.5	0.8	5.2
1	Dicellograptus	3038	1.2	1.6	0.8	4.3
1	Dicellograptus	3044	1.0	1.5	1.3	5.9
1	Dicellograptus	3050	1.2	1.6	1.3	5.0
1	Dicellograptus	3053	1.1	1.6	1.4	4.8
1	Dicellograptus	3059	1.3	1.7	2.2	5.2
	Dicellograptus	3065	0.8	1.4	1.1	4.5
1	Dicellograptus	3068	1.1	1.6	1.0	5.2
1	Dicellograptus	3074	1.1	1.6	1.2	6.0
1	Dicellograptus	3083	0.8	1.5	1.0	5.3
1	Dicellograptus	3080	0.9	1.3	1.1	4.7
1	Almelund	3098	0.8	1.5	1.2	6.5
1	Almelund	3122	0.8	1.4	0.8	5.2
	Tøyen	3140	1.5	1.9	2.4	3.4
1	Tøyen	3143	0.6	2.3	1.2	14.3

Table 4 (continued).

This report	Unit	Depth bottom (m)	TOC (%)	TC (%)	TS (%)	Carbonate (%)
1	Tøyen	3155	0.9	2.0	1.0	8.9
1	Alum, L. Ordovician	3170	3.0	3.5	1.2	4.3
1	Alum, L. Ordovician	3173	2.6	3.3	2.4	5.8
	Alum, L. Ordovician	3182	2.7	3.2	1.3	4.0
1	Alum, L. Ordovician	3185	2.4	3.2	1.5	6.6
1	Alum, L. Ordovician	3188	5.0	5.5	1.2	4.0
1	Alum, L. Ordovician	3194	4.4	5.0	1.6	4.4
	Alum, L. Ordovician	3197	4.8	5.5	1.7	5.3
1	Alum, L. Ordovician	3200	5.4	6.1	1.9	6.2
1	Alum, L. Ordovician	3203	6.3	6.7	2.5	3.9
1	Alum, Furongian	3209	7.2	7.5	3.5	2.8
	Alum, Furongian	3212	6.6	7.4	4.6	6.5
1	Alum, Furongian	3215	8.2	8.6	4.3	2.9
1	Alum, Furongian	3218	10.7	12.7	2.7	17.1
1	Alum, Furongian	3221	13.7	14.3	3.0	4.7
1	Alum, Furongian	3224	12.2	12.6	3.5	2.7
	Alum, Furongian	3227	9.9	11.4	3.6	12.8
1	Alum, Furongian	3230	9.2	11.5	3.6	18.6
1	Alum, Furongian	3233	9.3	11.5	3.8	17.9
1	Alum, Furongian	3236	10.2	11.8	3.3	13.5
1	Alum, Furongian	3239	10.3	11.4	5.5	9.5
	Alum, Furongian	3242	7.5	11.0	2.9	29.4
1	Alum, Furongian	3245	7.6	9.4	4.3	15.4

Table 4 (continued).

This report	Unit	Depth bottom (m)	TOC (%)	TC (%)	TS (%)	Carbonate (%)
1	Alum, Furongian	3248	7.9	8.8	4.5	8.0
	Alum, Furongian	3251	7.6	9.2	4.7	12.9
1	Alum, Furongian	3254	6.5	8.4	2.1	15.8
	Alum, Furongian	3257	11.1	12.0	3.5	7.1
1	Alum, Furongian	3260	10.7	11.2	3.6	4.6
1	Alum, Furongian	3263	9.4	10.1	4.2	5.7
1	Alum, Furongian	3269	7.1	8.1	4.0	8.3
	Alum, Furongian	3272	7.7	8.8	3.8	9.1
1	Alum, Middle Cambrian	3275	6.9	8.2	3.7	10.7
1	Alum, Middle Cambrian	3278	7.2	7.7	4.3	4.0
	Alum, Middle Cambrian	3284	6.8	7.9	4.3	8.6
1	Alum, Middle Cambrian	3287	5.5	6.6	4.3	8.9
	Alum, Middle Cambrian	3290	6.6	7.1	4.1	4.1
1	Alum, Middle Cambrian	3293	5.2	6.2	4.3	9.1
1	Alum, Middle Cambrian	3296	4.2	5.4	4.2	10.2
1	Alum, Middle Cambrian	3302	6.6	7.1	2.8	4.4
	Alum, Middle Cambrian	3305	5.6	6.2	3.6	5.5
1	Alum, Middle Cambrian	3308	5.6	6.5	3.3	7.0
1	Alum, Middle Cambrian	3314	5.5	6.1	2.2	5.4
1	Alum, Middle Cambrian	3317	5.7	6.5	2.6	5.9
1	Alum, Middle Cambrian	3320	5.5	7.6	2.4	17.3
1	Alum, Middle Cambrian	3323	6.3	7.2	2.7	8.1
1	Alum, Middle Cambrian	3329	2.7	4.1	2.0	11.8
1	Alum, Middle Cambrian	3332	1.8	3.7	0.8	15.6
1	Alum, Middle Cambrian	3335	3.1	3.7	1.7	5.2
1	Alum, Middle Cambrian	3338	2.8	4.0	1.9	9.5
1	Alum, Middle Cambrian	3341	6,8	7,9	1,8	12,7

4. XRD analysis

The XRD powder diffraction patterns were obtained on randomly oriented samples using CoKα-radiation. Merck quartz 1.07536 ground dawn to <0.063 micron was used as standard. The analysis was made at GEUS clay laboratory.

The XRD spectra were investigated for the main mineral groups present. Identified mineral groups includes kaolinite, mica, clay, quartz, calcite, dolomite/ankerite and pyrite/marcasite.

The results of the mineralogical screening of the samples are presented in Tables 5 and 6. In the tables the reflection areas of the minerals are presented.

4.1. Slagelse-1

Table 5. Identified minerals on the XRD spectra in the Slagelse-1 well. Quartz content (% Q) was determined from running an external standard. Numbers refers to peak heights measured on the XRD spectra.

					Kaolinite	Mica	Clay	Q	Pyr./ Marca.
This report	Material	Unit	Base (m)	% Q	7 Å	5 Å	4.48 Å	4.26 Å	1.63 Å
	Core	Silurian	2770.8	45	93	8	17	185	
1	Core	Silurian	2771.2	19	61	21	33	77	
	Core	Silurian	2772.0	20	46	15	37	99	
1	Core	Silurian	2773	21	66	16	32	90	
	Core	Silurian	2773.5	19	67	15	33	56	
1	Core	Silurian	2774	31	83	13	28	109	
	Core	Silurian	2775.0	23	68	16	36	88	
1	Core	Silurian	2775.8	59	91	14	30	100	
	Core	Silurian	2776.4	31	56	13	35	113	
1	Picked Cuttings	Silurian	2780	28	79	18	29	99	
	Core	Silurian	2813.3	31	90	16	32	124	
	Core	Silurian	2814.5	24	82	15	35	87	
	Picked Cuttings	Silurian	2823	22	59	17	30	97	
1	Picked Cuttings	Silurian	2832	29	69	15	30	109	
1	Picked Cuttings	Silurian	2835	27	81	20	29	106	
1	Picked Cuttings	Silurian	2841	28	58	12	32	117	
1	Picked Cuttings	Silurian	2847	23	65	15	29	81	
1	Picked Cuttings	Silurian	2853	32	79	16	29	137	
	Core	Silurian	2855.8	52	113	12	23	150	
	Core	Silurian	2856.1	27	97	20	32	75	
1	Picked Cuttings	Silurian	2862	26	86	19	27	119	
1	Picked Cuttings	Silurian	2871	23	71	16	32	91	
	Picked Cuttings	Silurian	2877	24	66	16	29	103	
1	Picked Cuttings	Silurian	2883	24	76	18	28	89	

Table 5 (continued).

					Kaolinite	Mica	Clay	Q	Pyr./ Marca.
This report	**Material**	**Unit**	**Base (m)**	**% Q**	**7 Å**	**5 Å**	**4.48 Å**	**4.26 Å**	**1.63 Å**
	Picked Cuttings	Silurian	2892	23	71	16	31	74	
1	Picked Cuttings	Silurian	2895	24	70	32	27	85	
	Core	Ordovician	2905.3	35	89	12	30	113	
1	Picked Cuttings	Ordovician	2912	34	93	14	34	102	
	Picked Cuttings	Ordovician	2915	26	92	15	30	76	
1	Picked Cuttings	Ordovician	2918	24	73	15	34	91	
	Picked Cuttings	Ordovician/Alum Shale	2921	23	93	18	31	100	
	Picked cuttings	Alum Shale (100% Caving)	2924	28	68	13	29	89	
1	Picked Cuttings	Alum Shale (100% Caving)	2927	29	77	14	32	103	
1	Picked Cuttings	Alum Shale (100% Caving)	2930	26	75	17	29	90	
	Core	Alum Shale	2932.6	22		13	24	58	
	Core	Alum Shale	2933.0	29		21	34	77	
	Core	Alum Shale	2933,7	29		17	35	92	
	Core	Alum Shale	2933,8	25		19	36	94	
1	Picked Cuttings	Alum Shale (Caving significant)	2937	26	61	20	28	79	
1	Picked Cuttings	Alum Shale (Caving significant)	2940	25	67	24	25	81	11
1	Picked Cuttings	Alum Shale (Caving significant)	2943	25	60	19	27	90	
1	Picked Cuttings	Alum Shale (Caving significant)	2946	26	52	16	26	88	
1	Picked Cuttings	Alum Shale (Caving significant)	2949	28	48	19	25	94	
1	Picked Cuttings	Alum Shale (Caving significant)	2952	25	67	14	24	83	
1	Picked Cuttings	Alum Shale (Caving significant)	2955	25	83	20	28	106	

4.2. Terne-1

Table 6. Identified minerals on the XRD spectra in the Terne-1 well. Quartz content (% Q) was determined from running an external standard. Numbers refers to peak heights measured on the XRD spectra.

			Kaolinite	Mica	Clay	Quartz	Plagio	Calcite	Pyrite/ Marcasite	Dolo/ Anke
This report	Depth (m)	%Q	7 Å	5 Å	4.48 Å	4.26 Å	4.03 Å	3.03	1.63 Å	2.89 Å
1	2813	27	22	14	26	109	9		20	
1	2825	36	22	10	26	106	17		26	
	2828	19	25	13	24	92	15		19	
1	2843	26	28	12	26	117	15		16	
1	2867	42	55	17	32	141	32			
1	2876	24	46	15	28	113	8		6	
	2894	24	37	12	39	83	15		7	
1	2903	20	43	14	25	90	16		7	
1	2924	30	28	10	22	104	18		9	
	2942	24	24	10	26	87	17		14	
1	2954	21	35	12	27	86	16		10	
1	2957	35	24	12	29	101	20		11	
1	2960	20	23	12	26	92	15		12	
	2981	20	22	12	29	97	13		13	
1	3002	19	37	15	28	91	16		14	18
1	3029	21	36	12	26	92	15		9	
1	3053	22	37	15	27	95	23		8	
	3065	22	39	13	28	97	22		7	
1	3083	27	25	11	25	109	15	46	7	
1	3122	23	38	10	26	107	19		7	
	3140	28	33	12	23	120	17		7	
1	3143	25	33	12	23	69	13	42		
1	3155	22	34	15	23	104	15		7	
1	3167	21	30	10	22	97	14	23	6	
	3170	33	26	13	22	117	15		8	
1	3179	22	26	15	25	99	12		10	
	3182	29	30	13	27	115	17		8	
1	3188	21	21	15	27	95	16		11	21
	3197	25	24	17	27	102	15		11	25
1	3200	24	28	18	25	106	12		15	
1	3203	26	22	19	28	100	15		10	
1	3209	24	22	18	26	83	10		23	
	3212	21	11	20	27	83	13		17	29

Table 6 (continued).

			Kaolinite	Mica	Clay	Quartz	Plagio	Calcite	Pyrite/ Marcasite	Dolo/ Anke
This report	Depth (m)	%Q	7 Å	5 Å	4.48 Å	4.26 Å	4.03 Å	3.03	1.63 Å	2.89 Å
1	3215	26		16	25	89	10		55	
1	3218	40	14	16	23	73	15		18	114
1	3221	25		20	24	80	13		23	30
1	3224	25		20	27	99	12		20	
	3227	18	17	19	20	65		41	21	29
1	3230	19	19	19	21	56	7		22	44
1	3233	36	25	17	21	57	11	67	22	52
1	3236	22	21	16	20	61	11		17	32
1	3239	18	16	15	21	63	9		31	
	3242	10	13	14	17	43		119	20	71
1	3245	30	17	17	22	55	12	67	31	41
1	3248	19		17	22	70			25	43
	3251	19	11	14	22	72			29	52
1	3254	19	10	17	20	64	10		21	79
	3257	14	18	21	22	65			22	45
1	3260	18	19	23	27	62	11		23	
1	3263	37	16	24	26	72	10		34	32
1	3269	20	11	19	28	72			30	
	3272	24	13	20	24	80			24	55
1	3275	21	10	20	26	80	9		22	87
1	3278	23	17	23	27	89	12		27	35
	3284	23	11	22	26	73			29	40
1	3287	19	16	20	26	76	8		44	47
	3290	22	18	27	28	79			28	
1	3296	17	21	15	23	57	9		23	42
1	3299	16	17	17	21	65	7	40	20	47
1	3302	22	18	19	27	68	10		19	
	3305	20	26	18	24	65			29	41
1	3314	21	31	20	29	93	12	31	18	
	3317	22	31	18	23	57			20	26
1	3320	18	36	20	23	62	8	80	20	
1	3323	19	33	25	25	82	10	39	19	
	3329	18	34	20	21	89		60	9	
1	3332	21	31	13	21	73	13	102		
1	3338	29	23	14	23	77	16	50	18	

5. Trace element measurements

Trace elements were determined by ICP-MS apparatus. Approximately 0.5 g of dried rock powder was treated with 3 ml concentrated hydrochloric acid and 3 ml nitric acid, heated to 110°C, and evaporated to dryness. The samples were dissolved in 1 ml concentrated nitric acid, evaporated to dryness at 130°C, re-dissolved with 1 ml concentrated nitric acid and 20 ml distilled water, and placed on a heating plate at 130°C for 2 hours. After cooling, the samples were diluted with distilled water and the water phases were transferred to the analytical step.

The abundances of elements were scanned on an Elan 6100 ICP-MC apparatus at the GEUS. Calibration was done using synthetic (BHVO-2. GH. BIR-1) and natural standards (Disko-1). The results of the standards analysed together with the samples are presented in Appendix A together with the full analytical results. Selected trace elements are presented in Table 7.

The mass-spectra were evaluated using two methods: REE and TotalQuant. The 'REE' method is aimed at determining the concentrations of the rare earth elements (REE) since these elements requires calibration based on multiple standards whereas the TotalQuant methods requires fewer standards to be analysed.

The REE method provides high quality quantitative results calibrated to reference samples. Elements determined by this methods in preferential used. The TotalQuant method is developed by PerkinElmer's and provide less quantified element concentrations aimed at 'fingerprinting' of the samples with as many elements as possible.

The REE method provides the concentrations of the elements (36 elements):

Sc, Ti, V, Cr, Mn, Co, Ni, Cu, Zn, Ga, Rb, Sr, Y, Zr, Nb, Cs, Ba, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, Pb, Th, U.

The TotalQuant method provides the concentrations of addtional 18 elements:

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Fe, K, Li, Mg, Mo, Na, P, S, Sb, Se, Sn, Te, Ti, Tl, Tm.

5.1. Terne-1

Table 7. Selected trace element measurements in the Terne-1 well.

Unit	Depth, base(m)	TOC	V	Cr	Ni	Ba	Th	U	V/(V+Ni)
		%	ppm	ppm	ppm	ppm	ppm	ppm	
Rastrites F4	2813	1.2	148	73	72	4491	9	5	0.67
Rastrites F4	2819		164	109	84	1890	9	6	0.66
Rastrites F4	2825	1.5	180	145	88	1512	7	6	0.67
Rastrites F4	2828	1.5	186	147	85	1560	8	6	0.69
Rastrites F4	2843	0.7	144	118	79	1295	10	4	0.65
Rastrites F3	2867	0.0	129	241	121	2034	8	2	0.52
Rastrites F3	2876	0.2	152	165	95	1530	11	3	0.61
Rastrites F3	2894	0.0	150	138	99	2219	7	3	0.60
Rastrites F3	2903	0.1	153	200	126	1765	10	3	0.55
Rastrites F3	2912	1.0	140	125	80	2981	10	4	0.64
Rastrites F3	2918	0.4	115	118	87	2719	9	3	0.57
Rastrites F3	2924	0.3	106	100	71	2706	9	4	0.60
Rastrites F3	2927	0.7	97	86	64	2921	9	3	0.60
Rastrites F2	2942	1.3	131	126	110	4416	9	5	0.54
Rastrites F2	2954	0.9	142	120	89	4154	12	6	0.61
Rastrites F1	2957	1.2	144	105	92	3988	8	6	0.61
Rastrites F1	2960	1.3	150	107	85	3867	12	7	0.64
Rastrites F1	2978		194	107	92	3471	11	10	0.68
Rastrites F1	2981	1.5	158	104	88	3445	12	7	0.64
Lindegård	2984		135	106	79	3673	13	5	0.63
Lindegård	3002	0.4	134	117	87	3887	13	4	0.61
Lindegård	3017	1.1	149	123	86	3376	13	6	0.63
Lindegård	3023		279	122	88	3075	13	8	0.76
Dicellograptus	3026	1.4	251	116	92	3287	13	8	0.73
Dicellograptus	3029	1.5	457	115	91	3486	13	13	0.83
Dicellograptus	3032	1.3	378	114	93	3132	13	8	0.80
Dicellograptus	3047	1.4	167	110	123	5908	11	6	0.58
Dicellograptus	3053	1.1	206	116	98	3879	13	7	0.68
Dicellograptus	3056	1.2	197	116	91	3484	13	7	0.69
Dicellograptus	3062	1.3	195	103	99	3522	13	6	0.66
Dicellograptus	3065	0.8	184	109	88	3447	14	5	0.68
Dicellograptus	3083	0.8	171	99	71	2727	12	6	0.71
Almelund	3092	1.5	179	94	71	2795	13	7	0.72
Almelund	3098	0.8	158	95	69	3282	12	6	0.70
Almelund	3101	1.8	130	79	58	3453	11	5	0.69
Almelund	3113		170	91	67	2926	14	6	0.72
Almelund	3116	1.0	165	88	66	3437	14	6	0.71
Almelund	3119	1.2	135	82	57	3593	13	5	0.71
Almelund	3122	0.8	181	89	62	3357	14	6	0.75
Tøyen	3128	1.6	172	86	57	4387	14	6	0.75
Tøyen	3131	1.1	188	87	66	3967	14	6	0.74
Tøyen	3140	1.5	225	84	67	3321	13	8	0.77

Table 7 (continued).

Unit	Depth, base(m)	TOC	V	Cr	Ni	Ba	Th	U	V/(V+Ni)
Tøyen	3143	0.6	177	113	90	2370	12	5	0.66
Tøyen	3155	0.9	220	104	80	2981	13	7	0.73
Tøyen	3164	1.6	221	195	83	4980	13	6	0.73
Tøyen	3167		212	111	65	8197	12	7	0.77
Alum, L. Ordovician	3170	3.0	277	73	56	3144	13	9	0.83
Alum, L. Ordovician	3173	2.6	517	106	79	4157	13	12	0.87
Alum, L. Ordovician	3176	3.6	1747	133	98	3262	14	22	0.95
Alum, L. Ordovician	3179		1933	130	102	3283	14	20	0.95
Alum, L. Ordovician	3182	2.7	1239	117	86	2949	14	15	0.94
Alum, L. Ordovician	3188	5.0	2409	116	133	3329	15	27	0.95
Alum, L. Ordovician	3191	3.8	2478	144	137	5427	14	22	0.95
Alum, L. Ordovician	3194	4.4	2349	137	128	4445	14	25	0.95
Alum, L. Ordovician	3197	4.8	2570	159	126	6886	15	31	0.95
Alum, L. Ordovician	3200	5.4	2574	138	144	3523	14	51	0.95
Alum, L. Ordovician	3203	6.3	1930	100	141	7235	14	46	0.93
Alum, Furongian	3206	5.4	1449	89	117	6185	13	40	0.93
Alum, Furongian	3209	7.2	1695	95	140	6874	14	39	0.92
Alum, Furongian	3212	6.6	1359	82	108	9131	14	38	0.93
Alum, Furongian	3215	8.2	983	79	82	10966	12	51	0.92
Alum, Furongian	3218	10.7	826	58	82	4836	11	56	0.91
Alum, Furongian	3221	13.7	949	66	93	4587	12	70	0.91
Alum, Furongian	3224	12.2	1057	69	90	4382	12	71	0.92
Alum, Furongian	3227	9.9	1148	69	134	8433	12	61	0.90
Alum, Furongian	3230	9.2	912	59	103	8471	11	62	0.90
Alum, Furongian	3233	9.3	828	54	87	9112	11	61	0.90
Alum, Furongian	3236	10.2	841	55	67	8564	10	81	0.93
Alum, Furongian	3239	10.3	761	63	110	7087	11	73	0.87
Alum, Furongian	3242	7.5	519	46	49	8231	9	41	0.91

Table 7 (continued).

Unit	Depth, base(m)	TOC	V	Cr	Ni	Ba	Th	U	V/(V+Ni)
Alum, Furongian	3245	7.6	797	61	86	9821	12	48	0.90
Alum, Furongian	3248	7.9	968	68	120	7464	11	55	0.89
Alum, Furongian	3251	7.6	839	63	126	11016	11	54	0.87
Alum, Furongian	3254	6.5	519	60	62	12013	11	42	0.89
Alum, Furongian	3257	11.1	727	62	53	6156	12	57	0.93
Alum, Furongian	3260	10.7	650	67	50	5066	12	57	0.93
Alum, Furongian	3263	9.4	467	64	51	6792	13	42	0.90
Alum, Furongian	3266	7.0	393	62	53	4526	12	30	0.88
Alum, Furongian	3269	7.1	352	67	47	6063	12	27	0.88
Alum, Furongian	3272	7.7	331	62	39	4004	12	25	0.89
Alum, Middle Cambrian	3275	6.9	376	66	49	3905	12	28	0.88
Alum, Middle Cambrian	3278	7.2	474	73	79	4356	13	31	0.86
Alum, Middle Cambrian	3281	5.9	519	75	79	2829	14	28	0.87
Alum, Middle Cambrian	3284	6.8	558	66	83	6099	13	34	0.87
Alum, Middle Cambrian	3287	5.5	594	75	82	5456	9	25	0.88
Alum, Middle Cambrian	3290	6.6	528	72	81	3575	14	27	0.87
Alum, Middle Cambrian	3293	5.2	673	78	84	6510	9	23	0.89
Alum, Middle Cambrian	3296	4.2	681	79	76	7169	9	22	0.90
Alum, Middle Cambrian	3299		1290	165	149	12401	19	46	0.90
Alum, Middle Cambrian	3302	6.6	1118	91	90	4885	9	31	0.93
Alum, Middle Cambrian	3305	5.6	1002	91	98	4327	14	26	0.91
Alum, Middle Cambrian	3308	5.6	808	90	89	3370	10	20	0.90
Alum, Middle Cambrian	3311	5.2	702	86	87	3124	9	18	0.89
Alum, Middle Cambrian	3314	5.5	775	101	88	4367	9	19	0.90
Alum, Middle Cambrian	3317	5.7	676	82	79	2746	14	20	0.89
Alum, Middle Cambrian	3320	5.5	933	85	102	3630	8	22	0.90

Table 7 (continued).

Unit	Depth, base(m)	TOC	V	Cr	Ni	Ba	Th	U	V/(V+Ni)
Alum, Middle Cambrian	3323	6.3	657	85	96	2020	9	20	0.87
Alum, Middle Cambrian	3329	2.7	388	75	70	3703	14	14	0.85
Alum, Middle Cambrian	3332	1.8	289	73	53	5302	9	9	0.85
Alum, Middle Cambrian	3335	3.1	491	85	67	8353	10	17	0.88
Alum, Middle Cambrian	3338	2.8	386	74	59	3837	9	15	0.87
Alum, Middle Cambrian	3341	2.9	1118	128	148	9315	9	50	0.88
Alum, Middle Cambrian	3344		867	108	106	8345	8	32	0.89
Alum, Middle Cambrian	3347	5.9	441	69	60	9577	8	21	0.88
Alum, Middle Cambrian	3350		539	73	54	6435	8	18	0.91
Hardeberga	3353		683	60	56	3658	10	21	0.92

6. Carbon isotope measurements

Carbon isotopes were measured at the Stable Isotope Laboratory at the Institute of Geography and Geology, University of Copenhagen. Measurements were made on decarbonised samples using a Micromass Isoprime mass-spectrometer in continuous mode flow equipped with an online Eurovector Elementary Analyzer. Organic carbon was converted to CO2 by oxidising the sample at 1400°C. Calibrations to V-PDB standard via NBS-19 were preformed. Reproducibility of replicated standards is better than 0.1‰. Data are reported using the conventional δ notation to indicate the ‰ deviation from the arbitrary V-PDB (Vienna-Pee Dee Belemnite) standard.

6.1. Terne-1

Table 8. Carbon isotope measurements from the Terne-1 well.

This report	Unit	Depth, base(m)	$\delta^{13}C$, ‰ V-PDB
1	Rastrites F4	2813	-29.5
1	Rastrites F4	2825	-29.4
1	Rastrites F4	2828	-29.7
1	Rastrites F4	2843	-29.8
1	Rastrites F3	2867	-30.3
1	Rastrites F3	2876	-31.1
1	Rastrites F3	2894	-30.8
1	Rastrites F3	2903	-29.5
1	Rastrites F3	2912	-29.5
1	Rastrites F3	2918	-29.8
1	Rastrites F3	2924	-29.8
1	Rastrites F3	2927	-29.8
1	Rastrites F2	2942	-30.4
1	Rastrites F2	2954	-29.7
1	Rastrites F1	2957	-29.7
1	Rastrites F1	2960	-29.8
1	Rastrites F1	2978	-30.5
1	Rastrites F1	2981	-30.1
1	Lindegård	2984	-29.8
1	Lindegård	3002	-29.7
1	Lindegård	3017	-29.9
1	Lindegård	3023	-30.8
1	Dicellograptus	3026	-30.3
1	Dicellograptus	3029	-30.5
1	Dicellograptus	3032	-30.6

Table 8 (continued).

This report	Unit	Depth, base(m)	$\delta^{13}C$, ‰ V-PDB
1	Dicellograptus	3047	-29.2
1	Dicellograptus	3053	-30.5
1	Dicellograptus	3056	-30.4
1	Dicellograptus	3062	-30.3
1	Dicellograptus	3065	-30.5
1	Dicellograptus	3083	-30.1
1	Almelund	3092	-30.1
1	Almelund	3098	-30.1
1	Almelund	3101	-29.9
1	Almelund	3113	-30.8
1	Almelund	3116	-30.0
1	Almelund	3119	-30.0
1	Almelund	3122	-30.4
1	Tøyen	3131	-30.1
1	Tøyen	3140	-30.1
1	Tøyen	3143	-29.8
1	Tøyen	3155	-30.4
1	Tøyen	3164	-30.0
1	Tøyen	3167	-29.5
1	Alum, L. Ordovician	3170	-29.3
1	Alum, L. Ordovician	3173	-29.8
1	Alum, L. Ordovician	3176	-30.2
1	Alum, L. Ordovician	3182	-30.0
1	Alum, L. Ordovician	3188	-29.7
1	Alum, L. Ordovician	3191	-30.0
1	Alum, L. Ordovician	3194	-30.2
1	Alum, L. Ordovician	3197	-30.0
1	Alum, L. Ordovician	3200	-30.1
1	Alum, L. Ordovician	3203	-29.3
1	Alum, Furongian	3206	-29.5
1	Alum, Furongian	3209	-29.6
1	Alum, Furongian	3212	-30.3
1	Alum, Furongian	3215	-29.4
1	Alum, Furongian	3218	-29.6
1	Alum, Furongian	3221	-29.5
1	Alum, Furongian	3224	-29.6
1	Alum, Furongian	3227	-29.7
1	Alum, Furongian	3230	-29.8
1	Alum, Furongian	3233	-29.7
1	Alum, Furongian	3236	-29.5

Table 8 (continued).

This report	Unit	Depth, base(m)	$\delta^{13}C$, ‰ V-PDB
1	Alum, Furongian	3239	-29.5
1	Alum, Furongian	3242	-29.7
1	Alum, Furongian	3245	-30.3
1	Alum, Furongian	3248	-29.8
1	Alum, Furongian	3251	-30.0
1	Alum, Furongian	3254	-29.7
1	Alum, Furongian	3257	-29.5
1	Alum, Furongian	3260	-29.1
1	Alum, Furongian	3263	-28.9
1	Alum, Furongian	3266	-29.0
1	Alum, Furongian	3269	-29.5
1	Alum, Furongian	3272	-29.3
1	Alum, Middle Cambrian	3275	-29.6
1	Alum, Middle Cambrian	3278	-29.9
1	Alum, Middle Cambrian	3281	-30.2
1	Alum, Middle Cambrian	3284	-29.7
1	Alum, Middle Cambrian	3287	-29.8
1	Alum, Middle Cambrian	3290	-29.9
1	Alum, Middle Cambrian	3293	-29.8
1	Alum, Middle Cambrian	3296	-29.9
1	Alum, Middle Cambrian	3299	-29.7
1	Alum, Middle Cambrian	3302	-29.8
1	Alum, Middle Cambrian	3305	-30.1
1	Alum, Middle Cambrian	3308	-30.5
1	Alum, Middle Cambrian	3311	-32.4
1	Alum, Middle Cambrian	3314	-30.7
1	Alum, Middle Cambrian	3317	-30.9
1	Alum, Middle Cambrian	3320	-33.0
1	Alum, Middle Cambrian	3323	-31.5
1	Alum, Middle Cambrian	3329	-31.4
1	Alum, Middle Cambrian	3332	-30.7
1	Alum, Middle Cambrian	3335	-30.7
1	Alum, Middle Cambrian	3338	-30.5
1	Alum, Middle Cambrian	3341	-31.7
1	Alum, Middle Cambrian	3344	-31.3
1	Alum, Middle Cambrian	3347	-31.3
1	Alum, Middle Cambrian	3350	-30.2
1	Hardeberga	3353	-32.0

7. Data included on CD

Attached to this report is a CD that contains the following documentation:

1. In folder *Appendix:*
    a. ICPMS-measurements presented in Appendix A
    b. XRD analysis report on 20 samples from Terne-1 well
2. In folder *Table* are Excel versions of the tables presented in the report
3. A pdf of this report: Analytical results from the Terne-1 and Slagelse-1 wells.pdf

Appendix A: ICP-MS trace element measurements

File: 'Appendix A ICP-MS trace elements measurements.xlsx' in folder Appendix

GEUS 'REE method'

Unit	Depth. base(m)	Sc	Ti	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Cs	Ba
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Rastrites F4	2813		0.37	148	73	0.07	19	72	52	84	19	125	169	24	102	12	7	4491
Rastrites F4	2819	15	0.39	164	109	0.05	19	84	59	90	20	131	106	25	110	12	7	1890
Rastrites F4	2825	17	0.42	180	145	0.05	22	88	64	74	23	153	85	27	120	14	8	1512
Rastrites F4	2828	18	0.43	186	147	0.06	21	85	63	80	23	157	105	28	126	15	8	1560
Rastrites F4	2843	17	0.45	144	118	0.06	20	79	61	66	21	139	92	24	113	13	8	1295
Rastrites F3	2867	18	0.45	129	241	0.22	29	121	66	76	23	152	81	24	129	15	7	2034
Rastrites F3	2876	19	0.50	152	165	0.18	24	95	57	135	23	144	101	26	134	15	8	1530
Rastrites F3	2894	18	0.50	150	138	0.17	24	99	61	75	23	143	109	26	136	15	7	2219
Rastrites F3	2903	20	0.50	153	200	0.19	29	126	52	78	22	137	125	28	129	15	7	1765
Rastrites F3	2912	17	0.42	140	125	0.17	21	80	59	74	20	132	113	27	120	14	7	2981
Rastrites F3	2918	16	0.37	115	118	0.16	19	87	47	66	18	108	116	25	105	12	6	2719
Rastrites F3	2924	15	0.35	106	100	0.09	17	71	44	58	18	103	100	28	108	13	6	2706
Rastrites F3	2927	14	0.32	97	86	0.10	15	64	42	77	18	97	106	29	118	13	5	2921
Rastrites F2	2942	19	0.41	131	126	0.08	21	110	62	78	23	142	122	35	141	15	7	4416
Rastrites F2	2954	19	0.45	142	120	0.07	20	89	68	86	23	152	129	40	134	16	8	4154
Rastrites F1	2957	18	0.41	144	105	0.08	22	92	66	73	22	143	143	39	134	15	7	3988
Rastrites F1	2960	18	0.43	150	107	0.07	22	85	66	78	22	144	166	46	131	15	8	3867
Rastrites F1	2978	18	0.43	194	107	0.10	19	92	76	88	21	141	130	42	121	14	8	3471
Rastrites F1	2981	16	0.42	158	104	0.09	19	88	67	80	22	139	135	40	115	14	8	3445
Lindegård	2984	18	0.44	135	106	0.07	19	79	62	99	23	157	98	35	136	16	9	3673
Lindegård	3002	18	0.46	134	117	0.09	23	87	45	78	23	159	99	32	130	16	9	3887
Lindegård	3017	19	0.47	149	123	0.10	21	86	61	77	25	163	117	45	133	17	9	3376
Lindegård	3023	19	0.51	279	122	0.07	19	88	69	91	25	168	91	35	134	17	9	3075
Dicellograptus	3026	19	0.48	251	116	0.09	20	92	68	90	24	162	107	38	130	17	9	3287
Dicellograptus	3029	19	0.48	457	115	0.07	19	91	80	133	24	165	106	45	129	17	9	3486
Dicellograptus	3032	19	0.48	378	114	0.09	22	93	100	217	24	164	91	38	127	17	9	3132
Dicellograptus	3047	18	0.41	167	110	0.41	30	123	102	149	22	149	142	39	111	14	8	5908

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth. base(m)	Sc	Ti	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Cs	Ba
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Dicellograptus	3053	20	0.48	206	116	0.15	26	98	63	120	24	173	114	43	124	17	9	3879
Dicellograptus	3056	20	0.47	197	116	0.15	25	91	69	399	24	170	116	45	122	17	9	3484
Dicellograptus	3062	19	0.48	195	103	0.14	35	99	79	776	24	165	125	47	121	17	9	3522
Dicellograptus	3065	17	0.48	184	109	0.15	27	88	115	226	24	152	111	39	121	16	9	3447
Dicellograptus	3083	18	0.43	171	99	0.10	18	71	63	68	21	151	136	37	122	15	8	2727
Almelund	3092	16	0.43	179	94	0.08	18	71	69	95	22	152	114	40	122	16	8	2795
Almelund	3098	15	0.41	158	95	0.08	17	69	61	67	21	141	129	37	113	15	7	3282
Almelund	3101	13	0.36	130	79	0.07	17	58	63	40	19	126	96	32	93	13	6	3453
Almelund	3113	17	0.47	170	91	0.08	20	67	79	138	24	155	128	43	120	17	8	2926
Almelund	3116	17	0.46	165	88	0.07	18	66	61	72	22	151	132	45	121	16	8	3437
Almelund	3119	15	0.43	135	82	0.06	16	57	62	72	21	143	153	40	113	16	7	3593
Almelund	3122	17	0.46	181	89	0.06	17	62	68	63	22	157	101	37	123	17	8	3357
Tøyen	3128	16	0.47	172	86	0.05	17	57	63	87	22	154	115	36	121	17	8	4387
Tøyen	3131	17	0.46	188	87	0.07	19	66	61	86	22	154	104	37	122	16	8	3967
Tøyen	3140	14	0.44	225	84	0.05	16	67	80	87	21	138	103	34	104	15	8	3321
Tøyen	3143	15	0.41	177	113	0.15	23	90	95	147	21	138	207	39	109	15	8	2370
Tøyen	3155	16	0.44	220	104	0.13	20	80	161	153	22	153	143	35	114	16	8	2981
Tøyen	3164	16	0.44	221	195	0.11	22	83	123	109	22	153	202	34	118	16	8	4980
Tøyen	3167	15	0.41	212	111	0.08	18	65	94	110	20	136	307	35	107	15	7	8197
Alum. L. Ordovician	3170	14	0.42	277	73	0.07	16	56	81	94	19	129	115	32	103	15	7	3144
Alum. L. Ordovician	3173	15	0.45	517	106	0.08	19	79	151	273	20	140	154	41	106	15	8	4157
Alum. L. Ordovician	3176	16	0.51	1747	133	0.06	14	98	134	828	22	157	121	43	120	17	10	3262
Alum. L. Ordovician	3179	18	0.51	1933	130	0.04	15	102	174	1093	23	158	119	46	117	17	10	3283
Alum. L. Ordovician	3182	16	0.48	1239	117	0.05	16	86	102	629	23	155	118	40	120	17	9	2949

Unit	Depth. base(m)	Sc	Ti	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Cs	Ba
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. L. Ordovician	3188	18	0.51	2409	116	0.03	15	133	153	824	24	165	113	43	118	17	10	3329
Alum. L. Ordovician	3191	17	0.50	2478	144	0.04	15	137	172	1018	23	166	134	35	117	17	10	5427
Alum. L. Ordovician	3194	17	0.50	2349	137	0.04	15	128	158	937	23	163	129	46	116	17	10	4445
Alum. L. Ordovician	3197	15	0.47	2570	159	0.04	13	126	162	1088	22	161	177	43	116	17	9	6886
Alum. L. Ordovician	3200	16	0.48	2574	138	0.03	15	144	211	1280	23	158	162	60	117	16	10	3523
Alum. L. Ordovician	3203	17	0.48	1930	100	0.04	16	141	206	612	23	158	151	50	118	16	10	7235
Alum. Furongian	3206	15	0.45	1449	89	0.05	15	117	173	493	22	149	182	45	110	16	9	6185
Alum. Furongian	3209	16	0.48	1695	95	0.03	17	140	188	453	23	157	146	48	116	16	10	6874
Alum. Furongian	3212	15	0.43	1359	82	0.06	14	108	164	275	22	149	187	44	106	15	8	9131
Alum. Furongian	3215	15	0.44	983	79	0.04	13	82	143	144	22	146	157	43	113	15	9	10966
Alum. Furongian	3218	12	0.36	826	58	0.19	14	82	103	69	19	122	310	45	88	13	7	4836
Alum. Furongian	3221	13	0.40	949	66	0.06	15	93	119	60	23	137	163	47	106	14	8	4587
Alum. Furongian	3224	14	0.42	1057	69	0.04	14	90	113	438	24	141	158	49	109	15	8	4382
Alum. Furongian	3227	14	0.41	1148	69	0.07	18	134	119	99	22	133	323	44	105	14	7	8433
Alum. Furongian	3230	12	0.36	912	59	0.07	16	103	100	83	19	120	367	43	97	13	7	8471
Alum. Furongian	3233	12	0.35	828	54	0.08	13	87	90	55	19	116	368	46	91	13	6	9112
Alum. Furongian	3236	12	0.37	841	55	0.06	10	67	80	347	21	120	321	46	95	13	7	8564
Alum. Furongian	3239	13	0.40	761	63	0.05	20	110	121	92	22	129	291	45	100	14	7	7087
Alum. Furongian	3242	10	0.31	519	46	0.09	11	49	67	37	16	98	472	42	79	11	5	8231
Alum. Furongian	3245	12	0.38	797	61	0.05	15	86	92	53	20	126	296	40	102	14	6	9821
Alum. Furongian	3248	14	0.42	968	68	0.04	18	120	116	73	21	137	231	40	107	15	7	7464
Alum. Furongian	3251	13	0.39	839	63	0.08	19	126	115	90	20	124	266	39	98	14	6	11016
Alum. Furongian	3254	13	0.39	519	60	0.30	15	62	105	58	19	124	281	39	101	14	7	12013

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth. base(m)	Sc	Ti	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Cs	Ba
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. Furongian	3257	13	0.43	727	62	0.14	12	53	106	48	22	138	179	42	103	15	7	6156
Alum. Furongian	3260	15	0.46	650	67	0.11	13	50	123	50	23	143	152	46	119	16	8	5066
Alum. Furongian	3263	15	0.45	467	64	0.12	15	51	129	97	22	143	148	43	108	15	8	6792
Alum. Furongian	3266	14	0.42	393	62	0.19	17	53	116	73	20	135	187	41	111	15	8	4526
Alum. Furongian	3269	15	0.44	352	67	0.13	17	47	117	398	22	142	167	36	113	16	8	6063
Alum. Furongian	3272	14	0.44	331	62	0.13	14	39	103	50	21	141	146	35	105	15	7	4004
Alum. Middle Cambrian	3275	15	0.44	376	66	0.12	17	49	122	82	21	139	152	38	110	15	8	3905
Alum. Middle Cambrian	3278	17	0.49	474	73	0.06	22	79	133	74	24	157	127	38	129	17	8	4356
Alum. Middle Cambrian	3281	21	0.52	519	75	0.07	21	79	117	93	25	171	123	49	167	20	8	2829
Alum. Middle Cambrian	3284	16	0.45	558	66	0.09	20	83	122	104	21	143	174	38	108	15	7	6099
Alum. Middle Cambrian	3287	17	0.50	594	75	0.10	22	82	139	864	23	138	155	41	115	16	6	5456
Alum. Middle Cambrian	3290	17	0.50	528	72	0.06	21	81	126	80	23	158	119	37	124	17	8	3575
Alum. Middle Cambrian	3293	17	0.50	673	78	0.08	19	84	114	174	23	141	139	39	122	16	6	6510
Alum. Middle Cambrian	3296	17	0.50	681	79	0.09	17	76	93	196	22	146	144	36	120	16	6	7169
Alum. Middle Cambrian	3299	33	1.00	1290	165	0.19	35	149	207	447	46	325	413	90	254	36	14	12401
Alum. Middle Cambrian	3302	17	0.51	1118	91	0.05	18	90	143	351	24	154	140	48	129	17	7	4885
Alum. Middle Cambrian	3305	18	0.52	1002	91	0.07	19	98	152	446	23	162	130	36	122	17	8	4327
Alum. Middle Cambrian	3308	19	0.53	808	90	0.05	21	89	165	418	24	152	142	40	133	17	7	3370

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth. base(m)	Sc	Ti	V	Cr	Mn	Co	Ni	Cu	Zn	Ga	Rb	Sr	Y	Zr	Nb	Cs	Ba
		ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. Middle Cambrian	3311	19	0.55	702	86	0.05	22	87	159	190	23	160	143	37	136	17	7	3124
Alum. Middle Cambrian	3314	19	0.54	775	101	0.04	21	88	161	200	24	163	151	37	134	17	7	4367
Alum. Middle Cambrian	3317	18	0.52	676	82	0.04	21	79	134	153	23	172	125	34	129	17	9	2746
Alum. Middle Cambrian	3320	17	0.49	933	85	0.05	24	102	149	175	22	164	175	39	131	17	8	3630
Alum. Middle Cambrian	3323	19	0.54	657	85	0.04	25	96	181	532	24	168	132	38	142	17	8	2020
Alum. Middle Cambrian	3329	17	0.52	388	75	0.05	19	70	94	151	23	165	129	57	133	17	8	3703
Alum. Middle Cambrian	3332	17	0.52	289	73	0.06	17	53	54	92	22	157	142	40	134	18	7	5302
Alum. Middle Cambrian	3335	18	0.55	491	85	0.03	16	67	83	204	25	171	113	44	141	19	8	8353
Alum. Middle Cambrian	3338	15	0.49	386	74	0.05	17	59	77	144	22	143	159	38	145	18	7	3837
Alum. Middle Cambrian	3341	14	0.45	1118	128	0.05	17	148	101	389	21	121	313	45	160	28	5	9315
Alum. Middle Cambrian	3344	14	0.42	867	108	0.05	14	106	119	375	21	136	180	44	123	17	6	8345
Alum. Middle Cambrian	3347	13	0.39	441	69	0.05	15	60	82	227	19	131	171	42	117	14	6	9577
Alum. Middle Cambrian	3350	14	0.45	539	73	0.03	13	54	69	138	20	150	131	34	141	16	7	6435
Hardeberga	3353	11	0.35	683	60	0.03	17	56	84	156	16	107	97	30	109	13	5	3658

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	depth. base(m)	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Rastrites F4	2813	34	71	8	31	5.7	0.8	5.1	0.8	4.6	0.9	2.5	0.4	2.4	0.4	2.8	0.8	54	9	5
Rastrites F4	2819	35	71	8	30	5.8	1.0	5.1	0.8	4.5	0.9	2.6	0.4	2.5	0.4	3.1	0.8	41	9	6
Rastrites F4	2825	39	81	10	37	6.8	1.3	6.0	0.9	5.2	1.0	2.9	0.4	2.8	0.4	3.4	0.9	41	7	6
Rastrites F4	2828	41	84	10	37	6.8	1.3	6.2	0.9	5.3	1.0	3.0	0.4	2.8	0.4	3.5	0.9	42	8	6
Rastrites F4	2843	37	76	9	32	5.8	1.1	5.3	0.8	4.6	0.9	2.5	0.4	2.4	0.4	3.1	0.9	32	10	4
Rastrites F3	2867	41	89	10	36	6.5	1.1	5.7	0.8	4.8	0.9	2.6	0.4	2.6	0.4	3.7	0.9	28	8	2
Rastrites F3	2876	40	86	9	35	6.5	1.2	5.8	0.9	4.9	0.9	2.7	0.4	2.6	0.4	3.7	1.0	108	11	3
Rastrites F3	2894	40	84	9	35	6.6	1.3	5.8	0.9	5.0	1.0	2.8	0.4	2.7	0.4	3.8	0.9	32	7	3
Rastrites F3	2903	40	85	10	37	7.1	1.3	6.3	1.0	5.6	1.1	3.1	0.5	2.8	0.4	3.6	0.9	25	10	3
Rastrites F3	2912	37	79	9	33	6.5	1.1	6.0	0.9	5.2	1.0	2.8	0.4	2.6	0.4	3.3	0.9	34	10	4
Rastrites F3	2918	32	67	8	29	5.7	0.9	5.3	0.8	4.7	0.9	2.6	0.4	2.5	0.4	3.0	0.8	38	9	3
Rastrites F3	2924	33	70	8	30	6.2	0.9	6.0	0.9	5.0	1.0	2.8	0.4	2.6	0.4	3.2	0.9	31	9	4
Rastrites F3	2927	33	70	8	31	6.4	0.9	6.0	0.9	5.4	1.0	3.0	0.4	2.7	0.4	3.4	0.8	29	9	3
Rastrites F2	2942	42	88	10	39	7.9	1.3	7.5	1.1	6.4	1.2	3.5	0.5	3.2	0.5	4.1	1.0	29	9	5
Rastrites F2	2954	44	91	11	41	8.3	1.3	7.8	1.2	6.9	1.3	3.8	0.6	3.5	0.5	3.9	1.1	38	12	6
Rastrites F1	2957	42	86	10	39	7.9	1.4	7.7	1.2	6.7	1.2	3.5	0.6	3.3	0.5	3.7	1.0	35	8	6
Rastrites F1	2960	44	93	12	46	9.7	1.7	9.3	1.4	7.8	1.5	4.1	0.6	3.7	0.5	3.8	1.0	40	12	7
Rastrites F1	2978	41	84	10	39	8.1	1.4	7.8	1.2	6.9	1.3	3.8	0.6	3.4	0.5	3.3	1.0	46	11	10
Rastrites F1	2981	43	89	11	42	8.2	1.3	7.6	1.1	6.6	1.2	3.5	0.5	3.3	0.5	3.3	1.0	37	12	7
Lindegård	2984	43	90	11	40	7.8	1.3	7.2	1.1	6.3	1.2	3.5	0.5	3.2	0.5	4.0	1.1	34	13	5
Lindegård	3002	42	90	10	39	7.6	1.2	6.9	1.1	6.0	1.1	3.2	0.5	3.1	0.4	3.7	1.1	32	13	4
Lindegård	3017	47	96	12	46	10.2	2.0	10.2	1.5	8.3	1.6	4.3	0.6	3.8	0.5	3.7	1.1	44	13	6
Lindegård	3023	45	90	11	41	7.8	1.3	6.9	1.1	6.3	1.2	3.6	0.5	3.4	0.5	3.9	1.2	39	13	8
Dicellograptus	3026	43	88	11	40	8.2	1.4	7.6	1.2	6.6	1.3	3.7	0.6	3.5	0.5	3.8	1.2	42	13	8
Dicellograptus	3029	45	93	12	46	9.7	1.8	9.4	1.4	7.8	1.6	4.4	0.6	3.8	0.6	3.7	1.2	50	13	13
Dicellograptus	3032	46	94	11	41	8.0	1.4	7.3	1.2	6.7	1.3	3.8	0.6	3.6	0.5	3.7	1.2	50	13	8
Dicellograptus	3047	43	91	11	42	9.0	1.5	8.7	1.3	7.4	1.4	3.8	0.6	3.4	0.5	3.2	1.0	297	11	6
Dicellograptus	3053	49	100	12	46	9.4	1.7	9.1	1.4	7.6	1.5	4.1	0.6	3.7	0.5	3.5	1.1	41	13	7
Dicellograptus	3056	48	101	12	48	10.1	1.9	9.4	1.4	8.1	1.6	4.2	0.6	3.7	0.5	3.5	1.1	49	13	7

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	depth. base(m)	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Dicellograptus	3062	48	98	12	47	9.9	1.8	9.4	1.4	8.1	1.6	4.3	0.6	3.8	0.6	3.5	1.2	44	13	6
Dicellograptus	3065	47	93	11	42	8.1	1.3	7.6	1.2	6.6	1.3	3.7	0.5	3.4	0.5	3.5	1.2	44	14	5
Dicellograptus	3083	44	88	10	39	7.4	1.3	6.9	1.1	6.1	1.2	3.4	0.5	3.2	0.5	3.2	1.0	29	12	6
Almelund	3092	44	89	11	40	7.4	1.3	7.3	1.1	6.5	1.3	3.7	0.6	3.5	0.5	3.4	1.1	35	13	7
Almelund	3098	42	84	10	38	7.0	1.1	7.0	1.0	5.9	1.2	3.4	0.5	3.2	0.5	3.2	1.0	32	12	6
Almelund	3101	37	75	9	34	6.2	0.9	6.0	0.9	5.2	1.0	3.0	0.5	2.8	0.4	2.6	0.9	35	11	5
Almelund	3113	47	94	11	43	8.1	1.4	8.2	1.2	7.1	1.4	4.0	0.6	3.7	0.5	3.4	1.1	38	14	6
Almelund	3116	46	93	12	45	8.7	1.4	8.7	1.3	7.4	1.4	4.1	0.6	3.7	0.6	3.2	1.1	42	14	6
Almelund	3119	43	86	11	40	7.8	1.3	7.6	1.2	6.8	1.3	3.7	0.6	3.5	0.5	3.2	1.0	39	13	5
Almelund	3122	44	89	10	39	7.4	1.2	7.0	1.2	6.1	1.2	3.5	0.5	3.3	0.5	3.3	1.1	36	14	6
Tøyen	3128	44	87	10	39	7.2	1.1	7.0	1.0	6.1	1.2	3.5	0.5	3.3	0.5	3.3	1.1	46	14	6
Tøyen	3131	43	88	11	39	7.4	1.2	7.2	1.1	6.4	1.2	3.6	0.5	3.3	0.5	3.4	1.1	47	14	6
Tøyen	3140	41	81	10	37	7.2	1.2	6.7	1.0	5.9	1.2	3.3	0.5	3.1	0.5	3.0	1.1	45	13	8
Tøyen	3143	41	84	10	38	7.9	1.5	7.7	1.2	6.6	1.2	3.5	0.5	3.2	0.5	3.1	1.0	120	12	5
Tøyen	3155	43	88	11	40	7.5	1.3	7.4	1.1	6.3	1.2	3.4	0.5	3.3	0.5	3.3	1.1	120	13	7
Tøyen	3164	42	84	10	37	7.0	1.0	6.9	1.0	5.9	1.1	3.3	0.5	3.1	0.5	3.2	1.1	193	13	6
Tøyen	3167	40	82	10	38	7.6	0.8	7.2	1.0	5.9	1.1	3.3	0.5	3.0	0.5	3.0	1.0	179	12	7
Alum. L. Ordovician	3170	40	78	9	35	6.7	1.1	6.2	0.9	5.6	1.1	3.1	0.5	3.1	0.5	2.9	1.1	66	13	9
Alum. L. Ordovician	3173	42	86	11	44	9.7	1.6	9.2	1.4	7.7	1.5	4.2	0.6	3.5	0.5	3.3	1.1	238	13	12
Alum. L. Ordovician	3176	49	92	12	44	8.9	1.5	8.3	1.3	7.6	1.5	4.3	0.6	4.0	0.6	3.8	1.3	67	14	22
Alum. L. Ordovician	3179	49	96	13	48	9.8	1.6	9.0	1.4	8.2	1.7	4.7	0.7	4.3	0.6	3.5	1.3	178	14	20
Alum. L. Ordovician	3182	47	90	11	42	8.1	1.4	7.5	1.2	6.9	1.3	3.9	0.6	3.6	0.6	3.4	1.2	62	14	15
Alum. L. Ordovician	3188	48	90	12	45	9.1	1.5	8.4	1.3	7.8	1.5	4.4	0.6	4.1	0.6	3.4	1.2	86	15	27
Alum. L. Ordovician	3191	46	85	11	40	7.5	1.0	6.7	1.0	6.2	1.3	3.7	0.6	3.6	0.6	3.3	1.2	97	14	22
Alum. L. Ordovician	3194	47	89	12	44	8.9	1.4	8.5	1.3	8.0	1.6	4.5	0.7	4.1	0.6	3.3	1.2	86	14	25
Alum. L. Ordovician	3197	45	83	11	42	8.2	1.2	7.7	1.2	7.2	1.4	4.1	0.6	3.9	0.6	3.2	1.2	69	15	31
Alum. L. Ordovician	3200	48	91	13	51	11.7	2.1	11.4	1.7	10.2	2.0	5.6	0.8	4.8	0.7	3.3	1.2	68	14	51
Alum. L. Ordovician	3203	45	84	11	45	9.4	1.2	8.9	1.4	8.5	1.8	5.0	0.7	4.6	0.7	3.3	1.2	60	14	46
Alum. Furongian	3206	42	80	11	42	8.8	1.2	8.2	1.3	7.6	1.5	4.4	0.6	4.1	0.6	3.1	1.1	55	13	40

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. Furongian	3209	44	84	11	44	9.3	1.2	8.7	1.4	8.2	1.7	4.9	0.7	4.5	0.7	3.3	1.2	58	14	39
Alum. Furongian	3212	43	81	10	40	8.3	1.0	8.0	1.2	7.4	1.5	4.4	0.7	4.1	0.6	3.0	1.1	50	14	38
Alum. Furongian	3215	42	81	11	41	8.3	0.6	7.6	1.2	7.3	1.5	4.4	0.7	4.1	0.6	3.1	1.1	48	12	51
Alum. Furongian	3218	38	73	9	36	7.3	1.2	7.5	1.2	7.0	1.4	4.1	0.6	3.8	0.6	2.4	0.9	35	11	56
Alum. Furongian	3221	42	82	10	39	7.6	1.2	7.5	1.2	7.5	1.6	4.5	0.7	4.2	0.6	2.9	1.0	35	12	70
Alum. Furongian	3224	43	85	11	41	8.4	1.3	8.2	1.3	7.9	1.6	4.7	0.7	4.5	0.7	3.1	1.1	38	12	71
Alum. Furongian	3227	41	80	10	38	7.3	0.9	7.2	1.1	6.8	1.4	4.2	0.7	4.0	0.6	2.7	1.0	48	12	61
Alum. Furongian	3230	37	72	9	34	6.9	0.8	6.7	1.1	6.4	1.3	3.9	0.6	3.8	0.6	2.6	0.9	31	11	62
Alum. Furongian	3233	38	75	9	37	7.3	1.0	7.3	1.2	7.0	1.5	4.3	0.7	3.9	0.6	2.6	0.9	32	11	61
Alum. Furongian	3236	37	74	9	37	7.4	0.9	7.1	1.1	7.0	1.5	4.2	0.6	3.9	0.6	2.6	0.9	32	10	81
Alum. Furongian	3239	39	79	10	39	7.7	1.0	7.3	1.2	6.9	1.4	4.2	0.6	3.8	0.6	2.7	1.0	39	11	73
Alum. Furongian	3242	31	61	8	33	6.7	0.9	6.5	1.0	6.4	1.3	3.9	0.6	3.8	0.6	2.2	0.8	29	9	41
Alum. Furongian	3245	36	71	9	37	7.3	0.7	6.9	1.1	6.5	1.3	3.8	0.6	3.6	0.6	2.7	0.9	34	12	48
Alum. Furongian	3248	40	78	10	38	7.4	0.9	7.0	1.1	6.5	1.3	3.9	0.6	3.7	0.6	3.0	1.0	28	11	55
Alum. Furongian	3251	36	71	9	36	7.0	0.5	6.6	1.1	6.2	1.3	3.8	0.6	3.6	0.6	2.6	1.0	35	11	54
Alum. Furongian	3254	38	75	9	36	7.1	0.5	6.9	1.1	6.5	1.3	3.8	0.6	3.6	0.6	2.8	0.9	24	11	42
Alum. Furongian	3257	39	78	11	41	7.8	1.0	7.4	1.2	7.0	1.4	4.2	0.6	3.9	0.6	2.9	1.1	32	12	57
Alum. Furongian	3260	42	86	11	42	8.6	1.3	8.1	1.3	7.7	1.6	4.6	0.7	4.2	0.6	3.2	1.1	35	12	57
Alum. Furongian	3263	41	82	11	43	8.4	1.0	7.8	1.3	7.6	1.5	4.4	0.7	4.2	0.6	3.0	1.1	34	13	42
Alum. Furongian	3266	39	79	10	38	7.6	1.1	7.3	1.1	6.9	1.4	4.0	0.6	3.7	0.6	2.9	1.0	30	12	30
Alum. Furongian	3269	40	79	10	37	7.1	0.9	6.6	1.0	6.2	1.2	3.6	0.6	3.5	0.5	3.1	1.1	35	12	27
Alum. Furongian	3272	39	78	10	38	7.3	1.1	6.6	1.0	6.1	1.2	3.6	0.6	3.4	0.5	3.0	1.1	32	12	25
Alum. Middle Cambrian	3275	40	79	10	38	7.6	1.2	7.1	1.1	6.5	1.3	3.7	0.6	3.5	0.5	3.1	1.0	32	12	28
Alum. Middle Cambrian	3278	41	82	10	40	7.9	1.1	6.9	1.1	6.5	1.3	3.8	0.6	3.7	0.6	3.4	1.2	36	13	31
Alum. Middle Cambrian	3281	65	114	13	47	9.0	1.4	8.2	1.3	7.7	1.5	4.6	0.7	4.3	0.7	3.9	1.3	48	14	28

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. Middle Cambrian	3284	40	79	10	39	7.7	1.0	7.0	1.1	6.6	1.3	3.8	0.6	3.6	0.6	3.0	1.1	40	13	34
Alum. Middle Cambrian	3287	42	83	11	42	8.6	1.3	8.1	1.2	7.2	1.4	4.0	0.6	3.8	0.6	3.3	1.1	37	9	25
Alum. Middle Cambrian	3290	42	84	11	43	8.1	1.3	7.1	1.1	6.6	1.3	3.8	0.6	3.7	0.6	3.5	1.2	48	14	27
Alum. Middle Cambrian	3293	42	83	11	42	8.1	1.2	7.5	1.2	6.7	1.4	3.9	0.6	3.6	0.6	3.4	1.4	35	9	23
Alum. Middle Cambrian	3296	42	82	11	39	7.7	1.1	7.1	1.1	6.4	1.3	3.7	0.5	3.6	0.5	3.3	1.0	31	9	22
Alum. Middle Cambrian	3299	97	191	23	88	17.5	3.0	16.8	2.5	14.7	2.8	8.0	1.2	7.6	1.1	6.6	2.2	66	19	46
Alum. Middle Cambrian	3302	45	88	12	46	9.6	1.7	9.4	1.4	8.2	1.6	4.7	0.7	4.2	0.6	3.5	1.7	44	9	31
Alum. Middle Cambrian	3305	42	81	11	41	8.0	1.2	7.1	1.1	6.7	1.3	3.9	0.6	3.8	0.6	3.5	1.2	54	14	26
Alum. Middle Cambrian	3308	43	83	11	42	8.6	1.6	8.1	1.3	7.4	1.5	4.2	0.6	4.1	0.6	3.7	1.1	58	10	20
Alum. Middle Cambrian	3311	44	84	11	41	8.0	1.4	7.5	1.2	6.8	1.3	3.9	0.6	3.9	0.6	3.7	1.1	60	9	18
Alum. Middle Cambrian	3314	44	84	11	43	8.3	1.4	7.7	1.2	6.8	1.4	3.9	0.6	3.9	0.6	3.6	1.2	63	9	19
Alum. Middle Cambrian	3317	41	79	11	41	8.1	1.4	7.0	1.1	6.7	1.3	3.8	0.6	3.7	0.6	3.5	1.2	43	14	20
Alum. Middle Cambrian	3320	42	80	10	38	7.7	1.5	7.3	1.2	6.8	1.3	3.9	0.6	4.0	0.6	3.4	1.5	71	8	22
Alum. Middle Cambrian	3323	44	84	11	44	8.9	1.6	8.2	1.2	7.3	1.4	4.2	0.6	4.2	0.6	3.8	1.1	45	9	20
Alum. Middle Cambrian	3329	50	106	15	62	13.9	2.5	12.8	1.9	10.7	2.0	5.4	0.8	4.5	0.7	3.7	1.2	27	14	14
Alum. Middle Cambrian	3332	45	91	11	43	8.6	1.5	8.1	1.2	7.0	1.3	3.8	0.5	3.5	0.5	3.7	1.1	17	9	9

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Pb	Th	U
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Alum. Middle Cambrian	3335	47	91	12	48	9.9	1.4	9.1	1.4	8.0	1.5	4.3	0.6	4.0	0.6	4.1	1.2	24	10	17
Alum. Middle Cambrian	3338	43	89	10	40	7.9	1.4	7.6	1.2	6.6	1.3	3.7	0.5	3.6	0.5	3.9	1.1	27	9	15
Alum. Middle Cambrian	3341	56	103	13	47	8.8	1.5	8.5	1.3	7.3	1.4	4.2	0.6	3.9	0.6	3.7	1.3	27	9	50
Alum. Middle Cambrian	3344	44	83	11	42	8.4	1.3	8.0	1.2	7.1	1.4	4.1	0.6	3.9	0.6	3.4	1.0	32	8	32
Alum. Middle Cambrian	3347	39	81	10	39	7.9	1.1	7.6	1.2	6.7	1.4	3.9	0.6	3.5	0.6	3.3	0.9	36	8	21
Alum. Middle Cambrian	3350	39	80	10	38	7.3	1.1	6.6	1.0	6.0	1.2	3.5	0.5	3.3	0.5	4.1	1.0	22	8	18
Hardeberga	3353	31	62	8	32	6.3	1.0	5.8	0.9	5.3	1.0	3.0	0.4	2.9	0.4	3.1	0.8	25	10	21

Elements measured on PerkinElmer Elan 6100DRC ICP-MS with the PerkinElmer's TotalQuant method.

Unit	Depth base(m)	Ag	Al	As	B	Be	Bi	Ca	Cd	Cl	Fe	K	Li	Mg	Mo	Na
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Rastrites F4	2813	0.0	71597	21	29	0.4	0.0	6296	0	*284347*	43276	27393	42	10414	17	8507
Rastrites F4	2819	0.0	71901	21	27	0.5	0.0	6459	0	*220475*	45618	26662	46	11980	17	8429
Rastrites F4	2825	0.2	84741	25	24	0.0	0.0	7259	0	*142339*	52456	31197	44	13999	12	8427
Rastrites F4	2828	0.2	80755	23	27	0.0	0.0	8048	0	*118210*	46571	31593	47	14466	11	8207
Rastrites F4	2843	0.0	79893	23	27	0.5	0.0	10219	0	*220618*	48152	28349	53	15392	11	8726
Rastrites F3	2867	0.0	80331	3	12	0.0	0.0	10320	0	*122603*	50177	29598	48	16291	1	8297
Rastrites F3	2876	0.0	87831	9	33	0.9	0.0	16283	0	*159397*	48326	29579	58	18750	4	9333
Rastrites F3	2894	0.0	82295	12	4	0.0	0.0	15544	0	*128157*	50247	28819	50	19434	3	9086
Rastrites F3	2903	0.4	82378	12	68	2.8	0.1	18882	0	*259344*	53909	29815	62	18671	4	9543
Rastrites F3	2912	0.2	75845	21	36	1.6	0.0	14990	0	*183011*	46928	27212	57	16639	7	9181
Rastrites F3	2918	0.0	69026	18	25	0.5	0.0	14344	0	*181883*	41487	22266	60	16975	5	8462
Rastrites F3	2924	0.0	67503	15	19	0.0	0.0	10619	0	*291358*	41678	22473	56	15422	5	11435
Rastrites F3	2927	0.0	66832	13	18	0.1	0.0	12172	0	*243638*	36200	20338	57	15487	4	11552
Rastrites F2	2942	0.0	81815	14	12	0.0	0.0	13400	0	*98590*	44076	29729	43	14809	7	10558
Rastrites F2	2954	0.0	87190	14	29	0.3	0.0	11439	0	*227790*	42906	32434	53	15411	5	9596
Rastrites F1	2957	0.5	74172	17	59	1.5	0.0	16121	0	*244245*	45877	32920	42	13992	8	9179
Rastrites F1	2960	0.0	82999	15	18	0.6	0.0	17910	0	*253449*	37908	31196	43	14050	7	9978
Rastrites F1	2978	0.0	77754	14	7	0.9	0.0	15639	0	*242612*	42533	31372	44	14274	15	9561
Rastrites F1	2981	0.0	76347	6	0	0.0	0.0	17101	0	*190684*	43711	32106	40	13979	9	8709
Lindegård	2984	0.6	82955	13	69	3.5	0.2	9947	0	*296049*	43864	34574	52	14329	6	8701
Lindegård	3002	0.2	85692	13	51	1.9	0.0	9967	0	*151496*	49698	31618	54	15032	6	8737
Lindegård	3017	0.0	86912	13	28	2.1	0.0	12134	0	*192813*	44764	33573	57	16046	5	8993
Lindegård	3023	0.1	92544	13	41	1.6	0.0	7328	0	*198472*	41626	34914	52	15203	9	9412
Dicellograptus	3026	0.0	87802	14	25	0.9	0.0	11148	0	*206564*	43591	33122	51	15245	9	9057
Dicellograptus	3029	0.2	86146	14	14	0.9	0.0	7901	1	*224437*	39361	34764	48	13999	18	8615
Dicellograptus	3032	0.2	87596	19	9	0.8	0.0	7642	2	*285870*	45441	33980	51	15154	12	9184
Dicellograptus	3047	0.3	77456	17	6	0.5	0.0	14275	1	*273840*	75556	29893	45	15609	25	7408
Dicellograptus	3053	0.0	88282	18	23	0.8	0.0	10835	0	*260972*	50034	34828	52	15785	7	8477

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	Ag	Al	As	B	Be	Bi	Ca	Cd	*Cl*	Fe	K	Li	Mg	Mo	Na
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	*ppm*	ppm	ppm	ppm	ppm	ppm	ppm
Dicellograptus	3056	0.6	82582	23	68	3.0	0.2	10268	6	*284666*	48633	35603	55	14687	6	8383
Dicellograptus	3062	0.5	84784	38	31	2.0	0.0	12001	11	*195860*	60609	35369	58	15432	9	9210
Dicellograptus	3065	0.0	83390	13	0	0.0	0.0	9412	0	*129135*	52176	34231	58	15443	4	8147
Dicellograptus	3083	0.0	75384	7	38	1.0	0.0	11343	0	*223258*	40155	30543	50	14839	5	7829
Almelund	3092	0.2	81029	13	13	0.6	0.0	10509	0	*100325*	43002	33070	48	13993	4	7957
Almelund	3098	0.0	73118	9	4	0.0	0.0	12956	0	*120782*	40659	29497	50	14815	4	7655
Almelund	3101	0.0	65780	12	0	0.0	0.0	6722	0	*166737*	33523	26643	45	11687	4	6708
Almelund	3113	0.7	79344	14	61	2.3	0.2	10715	0	*232698*	47657	34967	59	15873	4	8216
Almelund	3116	0.3	76866	9	36	1.0	0.0	8876	0	*81523*	42107	31200	57	14822	3	7892
Almelund	3119	0.2	73730	8	38	0.5	0.0	9266	0	*90421*	39191	29760	56	15138	5	7755
Almelund	3122	0.0	80483	9	24	0.5	0.0	7186	0	*107510*	43811	32779	58	15408	4	8749
Tøyen	3128	0.0	80197	11	18	0.3	0.0	5188	0	*162072*	42186	31495	60	15775	3	9048
Tøyen	3131	0.0	81845	13	11	0.1	0.0	6189	0	*137571*	46142	31732	56	15290	5	8290
Tøyen	3140	0.0	67502	17	0	0.0	0.0	6274	0	*99885*	47502	28091	46	13406	16	7883
Tøyen	3143	0.0	69913	10	0	0.0	0.0	56199	0	*101131*	47696	27495	43	12916	7	6122
Tøyen	3155	0.0	82346	9	270	0.0	0.0	25707	0	*183893*	47612	31804	49	14391	5	7608
Tøyen	3164	0.7	80823	12	29	0.1	0.0	27491	0	*134692*	58083	31297	46	14125	20	7715
Tøyen	3167	1.5	75939	20	120	10.3	2.7	34928	2	*341242*	43301	31038	48	15391	12	7866
Alum. L. Ordovician	3170	0.0	64679	5	0	0.0	0.0	9927	1	*55375*	32114	25746	37	10613	12	6832
Alum. L. Ordovician	3173	1.3	70302	16	47	1.1	0.0	13686	5	*226111*	49041	30421	36	12942	15	7681
Alum. L. Ordovician	3176	4.5	74510	15	29	0.0	0.0	9341	24	*103456*	37577	32073	36	13339	31	8367
Alum. L. Ordovician	3179	5.1	74345	18	13	0.0	0.0	10113	34	*76690*	35620	31092	37	12747	31	7971
Alum. L. Ordovician	3182	3.8	81091	19	48	2.1	3.2	10564	21	*189144*	40222	33697	47	14004	21	8210
Alum. L. Ordovician	3188	4.1	81285	20	7	0.0	0.0	10099	24	*27709*	32558	32293	32	13452	43	7464
Alum. L. Ordovician	3191	4.2	76810	32	3	0.0	0.0	5855	30	*21580*	39398	30777	32	11827	49	7198
Alum. L. Ordovician	3194	5.4	79532	34	62	1.6	0.3	9494	31	*225928*	39321	33857	32	12573	45	7445
Alum. L. Ordovician	3197	7.0	77897	29	29	0.8	0.0	17195	36	*79904*	34011	34795	36	14874	44	7219
Alum. L. Ordovician	3200	6.1	73971	40	27	0.0	0.0	16202	36	*132308*	34523	32634	33	12926	39	6960
Alum. L. Ordovician	3203	3.4	79431	33	10	0.0	0.0	11453	18	*116157*	36627	32422	27	13267	47	6900

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	Ag	Al	As	B	Be	Bi	Ca	Cd	*Cl*	Fe	K	Li	Mg	Mo	Na
Alum. Furongian	3206	2.5	70456	27	15	0.0	0.0	19584	14	*118475*	38204	31272	24	16328	45	6874
Alum. Furongian	3209	2.5	80446	38	13	0.0	0.0	9408	12	*137107*	43682	33245	26	11747	59	7029
Alum. Furongian	3212	2.1	68681	74	11	0.9	0.0	19606	8	*54011*	51959	31932	23	14316	78	6051
Alum. Furongian	3215	0.9	71825	40	0	0.0	0.0	11978	4	*138379*	45200	30549	20	10595	61	6317
Alum. Furongian	3218	0.2	56551	26	0	0.6	0.0	50098	2	*105703*	32581	26959	22	27091	116	5407
Alum. Furongian	3221	1.1	67807	34	16	0.4	0.0	16471	2	*228347*	32904	32523	20	12189	128	5495
Alum. Furongian	3224	0.9	73216	37	0	0.0	0.0	14427	13	*265362*	36452	32679	18	10328	111	5637
Alum. Furongian	3227	0.3	70155	45	0	0.1	0.0	49787	3	*127066*	44010	30491	21	14424	120	5553
Alum. Furongian	3230	0.5	64326	41	0	0.0	0.0	71410	3	*318199*	41206	28243	16	16344	98	4709
Alum. Furongian	3233	0.3	57977	42	0	0.0	0.0	71268	2	*159912*	42550	27112	16	16995	110	4036
Alum. Furongian	3236	1.4	62791	45	42	1.3	0.0	57310	10	*394769*	37826	29550	17	14131	114	4540
Alum. Furongian	3239	1.0	67314	73	29	1.1	0.0	40917	3	*383281*	57306	31903	17	12481	116	5341
Alum. Furongian	3242	0.0	51730	31	0	0.0	0.0	121648	1	*234310*	42622	23401	13	20550	78	3498
Alum. Furongian	3245	0.0	62878	44	0	0.0	0.0	57932	1	*186621*	48276	28723	18	14025	88	4126
Alum. Furongian	3248	0.8	75088	54	14	0.2	0.0	34628	2	*178105*	50305	32617	20	11705	88	4764
Alum. Furongian	3251	0.0	64745	44	0	0.0	0.0	41945	2	*152824*	52490	30023	18	17499	88	4377
Alum. Furongian	3254	0.4	70753	35	2	0.0	0.0	48538	1	*274529*	46059	29968	18	23830	61	4771
Alum. Furongian	3257	0.6	70801	39	34	1.8	0.0	26041	1	*281736*	42354	33878	18	13545	104	4862
Alum. Furongian	3260	0.6	76457	40	15	0.0	0.0	17169	2	*227381*	42771	34614	17	11324	85	5355
Alum. Furongian	3263	0.4	70678	42	13	0.0	0.0	18757	2	*130768*	51616	32374	21	11345	67	4782
Alum. Furongian	3266	0.3	75237	31	2	0.0	0.0	34353	1	*255322*	47067	31285	20	21169	44	5307
Alum. Furongian	3269	0.2	78468	34	0	0.0	0.0	27973	6	*239434*	53274	33303	21	17486	48	5314
Alum. Furongian	3272	0.0	69638	32	2	0.0	0.0	30912	1	*119537*	50718	31999	21	16789	52	4863
Alum. Middle Cambrian	3275	0.3	77387	36	0	0.0	0.0	31528	1	*242563*	54120	32120	21	19312	56	5114
Alum. Middle Cambrian	3278	1.3	80823	48	50	2.4	0.0	15983	2	*360890*	57576	37036	26	13151	74	5350
Alum. Middle Cambrian	3281	0.9	86751	42	19478	1.6	0.0	18682	1	*217670*	59125	36785	33	13710	60	29580

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	Ag	Al	As	B	Be	Bi	Ca	Cd	*Cl*	Fe	K	Li	Mg	Mo	Na
Alum. Middle Cambrian	3284	0.0	67912	38	0	0.3	0.0	28593	2	*89658*	54503	32129	26	14889	67	4932
Alum. Middle Cambrian	3287	1.7	68339	32	58	1.4	0.0	24453	12	*172079*	55662	32251	27	15022	43	5288
Alum. Middle Cambrian	3290	0.0	80194	41	0	0.0	0.0	18768	1	*80226*	55667	34545	29	12974	66	5167
Alum. Middle Cambrian	3293	1.4	73102	21	28	0.0	0.0	24888	4	*187165*	57973	31464	28	16210	35	5155
Alum. Middle Cambrian	3296	0.9	66858	36	28	0.4	0.0	27174	4	*22522*	56228	30620	27	15445	37	5208
Alum. Middle Cambrian	3299	2.0	143502	86	76	3.0	0.0	110777	12	*26915*	124148	65550	53	29701	70	10640
Alum. Middle Cambrian	3302	1.5	78347	25	16	0.1	0.0	17180	10	*141361*	41786	34087	31	12502	47	5869
Alum. Middle Cambrian	3305	0.9	76096	26	0	0.1	0.0	17146	11	*90759*	52489	33116	35	13601	45	6039
Alum. Middle Cambrian	3308	1.9	80002	22	35	0.4	0.0	20828	11	*276058*	54320	35831	35	13494	36	5894
Alum. Middle Cambrian	3311	1.6	79033	24	24	0.2	0.0	21399	4	*104948*	51131	34300	37	12022	35	5840
Alum. Middle Cambrian	3314	1.4	81440	18	25	0.1	0.0	17695	4	*141485*	45107	35882	40	12677	28	5795
Alum. Middle Cambrian	3317	0.3	74502	17	0	0.0	0.0	18080	3	*133988*	45170	33515	38	11673	39	5357
Alum. Middle Cambrian	3320	1.3	76586	25	25	0.1	0.0	69147	3	*138438*	45936	33630	35	11635	45	4715
Alum. Middle Cambrian	3323	0.9	80362	22	7	0.4	0.0	28056	7	*155093*	47354	35385	37	12254	38	5563
Alum. Middle Cambrian	3329	0.0	74446	14	0	0.0	0.0	46989	3	*71442*	43098	31331	43	11525	21	5239
Alum. Middle Cambrian	3332	0.3	72619	10	0	0.0	0.0	59102	1	*198938*	36605	30838	47	12720	9	6202

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	Ag	Al	As	B	Be	Bi	Ca	Cd	*Cl*	Fe	K	Li	Mg	Mo	Na
Alum. Middle Cambrian	3335	0.6	84367	13	8	0.0	0.0	15665	4	*199536*	41007	36365	45	11671	19	6569
Alum. Middle Cambrian	3338	1.2	70628	18	0	0.0	0.0	31204	3	*177205*	38952	30042	42	11236	19	8759
Alum. Middle Cambrian	3341	1.6	59382	21	0	0.2	0.0	37385	7	*182426*	33961	26954	33	18062	57	12830
Alum. Middle Cambrian	3344	1.9	60797	26	0	0.3	0.0	30336	7	*147434*	36606	28875	36	11913	56	7079
Alum. Middle Cambrian	3347	1.6	57038	28	11	1.1	0.0	34848	6	*315457*	46638	29608	33	9162	44	5166
Alum. Middle Cambrian	3350	1.3	69023	14	3	0.0	0.0	14615	4	*255670*	29366	32298	25	8555	24	4134
Hardeberga	3353	1.5	50280	18	0	0.0	0.0	11622	4	*161359*	27022	24236	21	7617	33	3949

Unit	Depth base(m)	P	S	Sb	Se	Sn	Te	Tl
		ppm	ppm	ppm	ppm	ppm	ppm	ppm
Rastrites F4	2813	311	*41096*	2.0	0.0	2.2	0.0	1.4
Rastrites F4	2819	283	*49011*	2.2	0.0	2.1	0.0	1.6
Rastrites F4	2825	231	*63847*	2.2	1.1	2.4	0.0	1.8
Rastrites F4	2828	318	*45903*	2.0	0.0	2.3	0.0	1.6
Rastrites F4	2843	350	*40982*	1.4	0.0	2.4	0.0	1.3
Rastrites F3	2867	417	*0*	0.6	0.0	2.3	0.0	0.5
Rastrites F3	2876	436	*9427*	1.1	0.0	2.7	0.0	0.8
Rastrites F3	2894	418	*13108*	1.0	0.0	2.4	0.0	0.8
Rastrites F3	2903	450	*9363*	1.0	0.2	2.7	0.0	1.0
Rastrites F3	2912	451	*22950*	1.6	0.0	2.4	0.0	0.9
Rastrites F3	2918	343	*14982*	1.1	0.0	2.2	0.0	0.7
Rastrites F3	2924	432	*16182*	1.1	0.0	2.5	0.0	0.5
Rastrites F3	2927	518	*10250*	1.0	0.0	2.7	0.0	0.4
Rastrites F2	2942	803	*38678*	1.0	0.0	2.9	0.0	1.3
Rastrites F2	2954	1681	*20211*	1.4	0.0	3.1	0.0	0.9
Rastrites F1	2957	2120	*36438*	1.5	2.8	2.9	0.0	1.3
Rastrites F1	2960	3961	*17535*	1.7	0.0	3.0	0.0	1.0
Rastrites F1	2978	2014	*32078*	2.0	0.0	2.8	0.0	1.2
Rastrites F1	2981	2633	*27973*	1.8	0.0	3.1	0.0	1.1
Lindegård	2984	1253	*21037*	1.3	0.7	3.3	0.0	1.3
Lindegård	3002	740	*20801*	1.3	0.0	3.1	0.0	1.0
Lindegård	3017	1751	*12144*	1.3	0.0	3.0	0.0	0.9
Lindegård	3023	923	*9394*	1.7	0.0	3.2	0.0	1.1
Dicellograptus	3026	1378	*21666*	1.8	0.0	3.1	0.0	1.1
Dicellograptus	3029	1221	*9169*	2.6	0.0	3.2	0.0	1.3
Dicellograptus	3032	882	*23250*	3.3	0.0	3.0	0.0	1.0
Dicellograptus	3047	1899	*83101*	3.0	0.5	2.7	0.0	1.0
Dicellograptus	3053	1819	*29190*	2.0	0.0	2.9	0.0	0.8
Dicellograptus	3056	1666	*21831*	1.7	2.3	3.0	0.1	1.3

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	P	*S*	Sb	Se	Sn	Te	Tl
		ppm	*ppm*	ppm	ppm	ppm	ppm	Ppm
Dicellograptus	3062	1823	*41412*	3.2	1.5	3.4	0.1	1.2
Dicellograptus	3065	1105	*12240*	1.6	0.0	3.4	0.0	0.9
Dicellograptus	3083	1158	*7028*	1.3	0.0	2.8	0.0	0.8
Almelund	3092	1385	*23542*	1.1	0.1	2.8	0.0	0.6
Almelund	3098	1179	*18653*	1.0	0.0	2.5	0.0	0.6
Almelund	3101	1004	*15337*	1.0	0.0	2.3	0.0	0.4
Almelund	3113	1355	*14945*	1.2	1.9	3.2	0.0	1.1
Almelund	3116	1617	*10695*	1.2	0.0	2.8	0.0	0.8
Almelund	3119	1210	*9668*	1.1	0.0	2.6	0.0	0.6
Almelund	3122	1130	*12697*	1.2	0.3	2.8	0.0	0.6
Tøyen	3128	872	*17770*	1.3	0.0	2.8	0.0	0.6
Tøyen	3131	1032	*24862*	1.7	0.3	2.7	0.0	0.8
Tøyen	3140	1077	*33069*	2.7	0.0	3.1	0.0	1.0
Tøyen	3143	1338	*21595*	2.0	0.0	2.8	0.0	0.8
Tøyen	3155	1168	*20175*	1.5	0.0	3.0	0.0	0.6
Tøyen	3164	1130	*8840*	1.6	0.2	3.5	0.0	0.7
Tøyen	3167	1261	*22161*	1.9	12.5	2.7	0.9	2.4
Alum. L. Ordovician	3170	831	*22618*	3.9	0.0	3.0	0.0	1.2
Alum. L. Ordovician	3173	1129	*51161*	8.6	4.4	3.4	0.0	1.2
Alum. L. Ordovician	3176	2090	*15624*	14.8	11.4	3.3	0.0	1.5
Alum. L. Ordovician	3179	1900	*23606*	15.7	16.6	3.2	0.0	1.6
Alum. L. Ordovician	3182	1597	*29502*	11.3	13.6	3.2	0.0	2.6
Alum. L. Ordovician	3188	1284	*19276*	20.0	11.4	3.3	0.0	1.5
Alum. L. Ordovician	3191	657	*31510*	22.0	13.6	3.4	0.0	1.8
Alum. L. Ordovician	3194	1605	*34495*	23.6	16.5	3.8	0.3	2.4
Alum. L. Ordovician	3197	2179	*29909*	26.1	28.8	3.1	0.0	2.9
Alum. L. Ordovician	3200	3282	*34476*	26.3	20.4	4.7	0.0	2.1
Alum. L. Ordovician	3203	1323	*52731*	19.6	7.9	2.9	0.0	1.7
Alum. Furongian	3206	1359	*65163*	13.5	5.0	2.8	0.0	1.7

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	P	*S*	Sb	Se	Sn	Te	Tl
		ppm	*ppm*	ppm	ppm	ppm	ppm	ppm
Alum. Furongian	3209	1338	*81328*	12.9	6.3	2.8	0.0	2.5
Alum. Furongian	3212	766	*98295*	13.5	5.9	3.0	0.0	3.5
Alum. Furongian	3215	752	*103599*	6.8	1.5	2.6	0.0	2.7
Alum. Furongian	3218	706	*51318*	2.8	0.1	2.4	0.0	3.5
Alum. Furongian	3221	548	*70976*	2.9	0.0	2.7	0.0	4.1
Alum. Furongian	3224	656	*84403*	4.2	1.2	2.9	0.0	4.7
Alum. Furongian	3227	568	*80653*	4.3	1.9	2.8	0.0	5.8
Alum. Furongian	3230	577	*92288*	4.0	2.0	2.4	0.0	4.9
Alum. Furongian	3233	676	*74870*	3.6	1.3	2.3	0.0	5.4
Alum. Furongian	3236	725	*85248*	4.1	4.1	2.5	0.0	6.1
Alum. Furongian	3239	843	*149263*	3.7	3.7	2.8	0.0	6.1
Alum. Furongian	3242	569	*74628*	2.8	0.0	2.1	0.0	3.5
Alum. Furongian	3245	555	*97768*	3.4	1.1	2.5	0.0	4.2
Alum. Furongian	3248	660	*115682*	3.7	2.9	2.7	0.0	4.6
Alum. Furongian	3251	598	*98615*	3.2	2.5	2.5	0.0	4.7
Alum. Furongian	3254	593	*102798*	2.1	0.5	2.5	0.0	3.0
Alum. Furongian	3257	570	*72344*	2.6	1.2	2.6	0.0	4.4
Alum. Furongian	3260	600	*86780*	2.8	1.4	2.9	0.0	3.9
Alum. Furongian	3263	615	*85788*	2.1	0.8	2.8	0.0	3.5
Alum. Furongian	3266	626	*103311*	2.4	0.0	2.6	0.0	2.6
Alum. Furongian	3269	541	*105919*	2.0	0.3	3.0	0.0	2.8
Alum. Furongian	3272	489	*90894*	1.9	0.0	2.6	0.0	3.0
Alum. Middle Cambrian	3275	564	*97872*	2.4	0.3	2.8	0.0	3.0
Alum. Middle Cambrian	3278	456	*118717*	3.2	3.2	3.1	0.0	3.8
Alum. Middle Cambrian	3281	756	*107782*	3.5	2.6	9.3	0.0	3.7
Alum. Middle Cambrian	3284	485	*90468*	3.0	0.8	2.7	0.0	3.2

Analytical results from the Terne-1 and Slagelse-1 wells

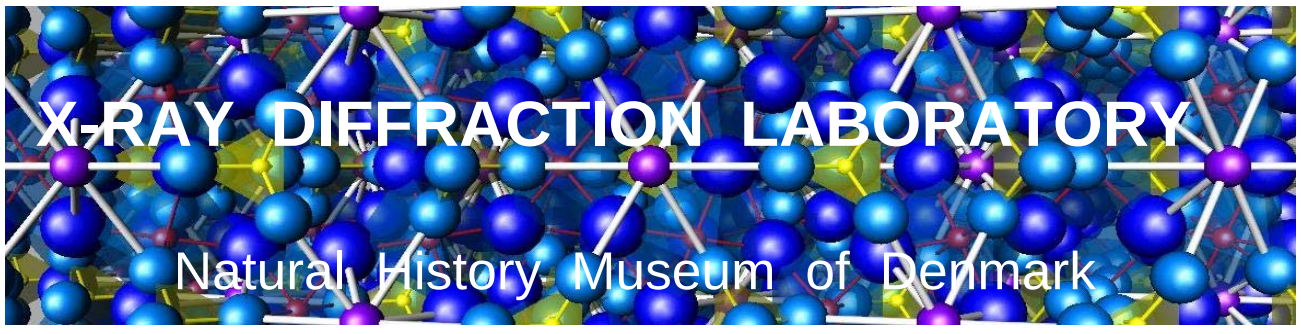
Unit	Depth base(m)	P	*S*	Sb	Se	Sn	Te	Tl
		ppm	*ppm*	ppm	ppm	ppm	ppm	ppm
Alum. Middle Cambrian	3287	618	*95489*	3.2	4.5	3.0	0.0	3.0
Alum. Middle Cambrian	3290	452	*89462*	3.5	1.0	2.9	0.0	4.0
Alum. Middle Cambrian	3293	505	*87515*	3.7	2.8	3.3	0.0	2.3
Alum. Middle Cambrian	3296	606	*88185*	3.4	4.2	2.9	0.0	2.1
Alum. Middle Cambrian	3299	2813	*209315*	9.7	9.9	5.9	0.0	4.3
Alum. Middle Cambrian	3302	1113	*55002*	5.8	4.8	3.1	0.0	2.9
Alum. Middle Cambrian	3305	489	*77884*	5.8	2.5	3.1	0.0	2.2
Alum. Middle Cambrian	3308	704	*86716*	6.4	5.4	3.3	0.0	2.3
Alum. Middle Cambrian	3311	596	*75449*	5.1	3.6	3.2	0.0	2.0
Alum. Middle Cambrian	3314	525	*54849*	5.2	2.9	3.5	0.0	1.8
Alum. Middle Cambrian	3317	363	*50535*	5.6	0.0	3.0	0.0	1.8
Alum. Middle Cambrian	3320	432	*70653*	5.3	2.9	2.9	0.0	2.4
Alum. Middle Cambrian	3323	459	*61892*	3.8	1.6	3.1	0.0	2.1
Alum. Middle Cambrian	3329	4105	*34327*	2.5	0.0	2.9	0.0	1.2
Alum. Middle Cambrian	3332	1148	*20282*	1.8	0.5	3.0	0.0	1.2
Alum. Middle Cambrian	3335	1643	*41883*	2.9	1.3	3.4	0.0	1.7

Analytical results from the Terne-1 and Slagelse-1 wells

Unit	Depth base(m)	P	*S*	Sb	Se	Sn	Te	Tl
		ppm	*ppm*	ppm	ppm	ppm	ppm	ppm
Alum. Middle Cambrian	3338	1276	*38318*	3.3	1.1	2.8	0.0	1.5
Alum. Middle Cambrian	3341	1725	*37576*	4.9	3.5	2.4	0.0	2.1
Alum. Middle Cambrian	3344	1464	*52318*	7.0	5.5	2.4	0.0	2.2
Alum. Middle Cambrian	3347	2393	*77352*	3.6	3.5	2.2	0.0	2.0
Alum. Middle Cambrian	3350	1071	*29467*	3.3	1.8	2.5	0.0	1.7
Hardeberga	3353	593	*33923*	3.9	2.4	2.1	0.0	1.8

Appendix B: XRD analysis report on 20 samples from the Terne-1 well

File: ‘Appendix B XRD analytical report.pdf ’ in folder Appendix



Analysis report 13 Dec. 2011

Ordered by:
Niels Hemmingsen Schovsbo
GEUS.
Øster Voldgade 10
1350 København K

Samples: 20 samples of sediments

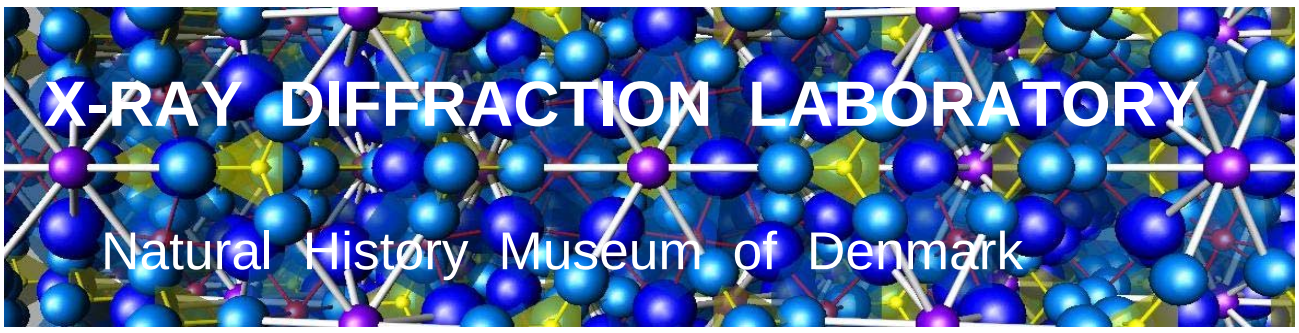
Method:

Powder X-ray Diffraction with quantitative Rietveld phase analysis.

Table 1. Instrumental parameters

instrument	Bruker-AXS powder diffractometer D8 Advance
radiation	Cu X-ray tube
monochromator	Primary beam Ge111
wavelength	1.54059 Å
geometry	Bragg-Brentano
detector	LynxEye, linear PSD, 3.3^{o} opening
Divergence slit	Fixed, 0.18^{o}
Measuring range	5 – 90^{o} 2θ
step	0.025^{o}

Rietveld method (Topas 4 program, Bruker-AXS product) was used for the determination of mineral quantities.



Results:

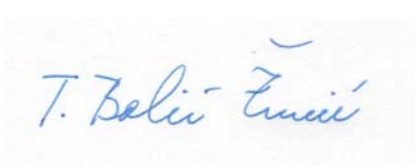
	quartz	albite	microcline	muscovite	chlorite	calcite	dolomite	pyrite	gypsum
2828	32.0(4)	8.7(3)		47.5(6)	6.0(3)	2.0(2)		3.9(1)	
2894	30.9(4)	11.5(4)		44.8(6)	8.8(4)	2.7(2)		1.3(1)	
2942	27.3(4)	11.4(3)		47.1(4)	5.6(4)	1.3(2)	4.4(3)	2.9(1)	
2981	31.3(4)	8.7(3)		46.6(6)	4.7(3)	1.3(1)	4.7(2)	2.6(1)	
3065	29.9(4)	9.1(3)	3.2(4)	45.1(6)	7.9(3)	0.8(2)	2.4(2)	1.6(1)	
3140	38.8(4)	8.9(3)	4.0(4)	37.6(5)	5.5(3)		2.4(2)	2.7(1)	
3170	42.9(4)	8.2(3)	4.3(4)	36.9(5)	3.6(2)		2.3(2)	1.7(1)	
3182	34.6(4)	9.1(3)	3.6(5)	43.3(6)	5.0(3)	0.4(1)	2.0(2)	2.0(1)	
3197	29.4(4)	6.4(3)	4.7(4)	47.7(6)	3.1(2)	0.4(1)	5.6(2)	2.7(1)	
3212	27.8(4)	5.1(3)	4.6(4)	46.4(6)	1.1(2)	0.5(2)	8.0(3)	5.5(1)	0.9(1)
3227	24.0(3)	4.4(3)	4.7(5)	42.0(7)	0.4(2)	8.5(2)	8.9(3)	5.1(1)	1.9(1)
3242	19.8(3)	3.5(3)	3.2(5)	27.6(7)		21.0(4)	17.3(4)	5.3(1)	2.3(1)
3251	25.1(4)	3.2(3)	4.4(4)	42.6(7)		1.7(3)	14.0(4)	7.7(2)	1.3(1)
3257	26.2(4)	3.8(3)	4.2(5)	47.1(7)		1.4(2)	10.6(3)	4.6(1)	2.1(1)
3272	25.8(4)	3.5(3)	2.5(4)	44.4(6)	0.5(2)	0.9(2)	15.5(3)	5.1(1)	1.9(1)
3284	24.8(4)	3.8(3)	3.4(5)	44.6(6)	1.5(2)	2.7(2)	11.6(3)	5.8(1)	1.7(1)
3290	27.4(4)	4.6(4)	2.3(4)	47.3(7)	1.8(2)	1.2(2)	6.6(5)	6.8(2)	1.9(2)
3305	28.0(4)	5.7(3)	3.6(5)	46.0(6)	3.3(2)	2.3(2)	6.0(3)	5.0(1)	
3317	28.9(4)	5.4(3)	3.9(5)	45.8(6)	3.9(2)	4.3(2)	3.4(3)	4.0(1)	0.4(1)
3329	27.0(4)	4.6(3)	3.0(5)	43.6(7)	5.2(3)	12.6(3)	0.8(3)	2.9(1)	

The values represent wt%.

Muscovite includes both illite and sericite/muscovite.

Samples might include further minerals in very little amounts (few wt%) not clearly identifiable from XRD diagrams.

Analyst



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