

**International
Progress Report**

IPR-03-25

Äspö Hard Rock Laboratory

TRUE Block Scale project

**Summary of chemical data
December 2002**

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SKB

April 2003

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This report concerns a study which was conducted for SKB. The conclusions and viewpoints presented in the report are those of the author(s) and do not necessarily coincide with those of the client.

Abstract

Sampling and analysis is done in True Block Scale according to class 5 in 23 sections. The remaining 19 sections are sampled and analysed according to class 2 with the options O-18, H-2 and H-3. The boreholesections KI0025F03:P7 and KI0025F03:P8 are not sampled and analysed because of high amount of radon.

The boreholesections KA3510A:R1 and KA3510A:R4 are not sampled and analysed because of low flow.

Sammanfattning

Provtagning och analys är gjord i TRUE Block Scale enligt klass 5 i 23 sektioner. Övriga 19 sektioner provtas och analyseras enligt klass 2 med tillägg för O-18, H-2 och H-3.

Borrhålssektion KI0025F03:P7 samt KI0025F03:P8 är inte provtagna och analyserade pga hög halt radon.

Borrhålssektion KA3510A:R1 samt KA3510A:R4 är inte provtagna och analyserade pga lågt flöde.

Contents

1	Introduction	4
2	Methods	5
2.1	Fundamentals	5
2.2	Sampling equipment	6
2.3	Preparations	6
2.4	Sampling and analysis	6
2.5	Qualitycontrol	7
3	Reporting of results	8

Tables

Table 1	SKB:s chemistry classes
Table 2a and b	Sampled sections
Table 3	Laboratories

Appendices

Appendix 1	Activity history
Appendix 2	Water composition
Appendix 3	Environmental isotopes
Appendix 4	Trace elements
Appendix 5	Heavy isotopes
Appendix 6	Stable isotopes

1 Introduction

In this International Progress Report the results from sampling in december 2002 is submitted. All sampled boreholes and sections are listed in Appendix 1.

2 Methods

2.1 Fundamentals

Watersampling and analysis are classified in five different classes with different extensions. Class 1-3 has a simple procedure and consists of few analyses. Class 4 and 5 includes online filtration, preparations and special bottles. The definition of the different classes are listed in table 1.

Tabell 1 Definitions of SKB:s chemical classes

Class	Description	Analyses	Options
1	Simple sampling, simple control of groundwater type	Elektrical conductivity pH Uranine*	
2	Simple sampling, control of water	Elektrical conductivity pH, Cl, HCO ₃ Uranine*	² H, ³ H, ¹⁸ O Frozen sparesample
3	Simple sampling, analyse of non redoxsensitive maincomponents	Elektrical conductivity pH, Cl, HCO ₃ , SO ₄ , Br Uranine* maincomponents ** (except Fe, Mn), SO ₄ as sulfur on ICP-AES	² H, ³ H, ¹⁸ O, S ³⁴ , Cl ³⁷ , Sr ⁸⁷ , B ¹⁰ , C ¹³ , C ¹⁴ Frozen sparesample
4	Extensive sampling, full chemical characterisation	Elektrical conductivity pH, Cl, HCO ₃ , SO ₄ , Br, Fe (total, II+), HS ⁻ , NH ₄ , Uranine*, DOC, maincomponents** SO ₄ as sulfur on ICP-AES ² H, ³ H, ¹⁸ O frozen sparesample, prepared and unprepared	No ₂ , NO ₃ and/or NO ₂ +NO ₃ , PO ₄ , F ⁻ , I ⁻
5	Extensive sampling, full chemical characterisation. Also specialanalyses	Elektrical conductivity pH, Cl, HCO ₃ , SO ₄ , Br, F, I, Fe (total, II+), HS ⁻ , NH ₄ , Uranine*, DOC, maincomponents** SO ₄ as sulfur on ICP-AES ² H, ³ H, ¹⁸ O, NO ₂ , NO ₃ , PO ₄ frozen sparesample, prepared and unprepared	TOC C ¹⁴ , δ ¹³ C per mille PDB, S ³⁴ , Cl ³⁷ , Sr ⁸⁷ , B ¹⁰ , U, Th (component and/or isotopes) Other trace elements (INAA and/or ICP-MS) ²²⁶ Ra, ²²⁸ Ra, ²²² Rn Or own choice

* Is only measured when uranine have been used to mark borewater and when no traceattempts have benn done with uranine in borehole.

** Main components are Na, K, Ca, Mg, Si, Fe, Mn, Li, Sr

2.2 Sampling equipment

At the sampling the following equipments were used: valves, tecalantube, rustfree Swagelok-connections, pressuregauge, on-line filter (Nucleopore) and high-capacity filter (Colly Company). Poresize on all filters are 0,45 µm.

2.3 Preparations

All boreholes where floaded 5 sectionvolumes before sampling. Before the sampling the flow was measured with measuringglas and clock.

2.4 Sampling and analysis

All sampling have been done according to SKB MD 452.001

Sampling and analysis is done in True Block Scale according to class 5 in 23 sections, see table 2a. The remaining 19 sections are sampled and analysed according to class 2 with the options O-18, H-2 and H-3, see table 2b.

Table 2a Sampled sections

Borehole/section/structure			Sectionvolume (l) Incl. 2 tubes	Sektionvolume (l) Incl. 1 tube	Flow 2 (l/min) measured 2002	Flow 1 (l/min) estimated
KA2563A	S1	(#19)	8,8	5,7	1,1	0,8
KA2563A	S2	(#19)		12,6	0,24	0,3
KA2563A	S3	(#13)	6,9	4,2	0,8	0,8
KA2563A	S4	(#20)	6,9	4,4	1,0	0,9
KI0025F	R2	(#19)	7,3	5,0	1,8	1,2
KI0025F	R4	(#20)	4,6	3,3	0,48	0,6
KI0023B	P1	(#10)	398,0	396,3	1,76	2,3
KI0023B	P2	(#19)	3,9	2,3	0,2	0,8
KI0023B	P4	(#13a)	3,2	2,0	0,7	0,5
KI0023B	P6	(#21)	2,7	1,6	1,98	1,5
KI0023B	P7	(#20/#6)	13,8	13,0	3,0	2,0
KI0023B	P9	(#5)		16,9	4,98	2,0
KI0025F02	P2	(#19)	33,8	32,2	2,1	1,0
KI0025F02	P3	(#21)	8,3	6,7	0,5	0,5
KI0025F02	P5	(#20)	6,0	4,7	2,8	1,3
KI0025F02	P6	(#22)	9,7	8,5	2,6	1,2
KI0025F02	P7	(#23)	8,2	7,2	0,16	0,1
KI0025F02	P8	(#6)	5,0	4,0	0,6	0,3
KI0025F03	P3	(#13b)	5,2	3,9	0,28	0,3
KI0025F03	P4	(#21)	4,9	3,6	0,35	1,0
KI0025F03	P5	(#20)	5,9	5,0	0,46	2,0
KI0025F03	P6	(#22)	5,2	4,3	0,36	0,6
KI0025F03	P7	(#23)	4,2	3,4	0,32	0,6

Table 2b Sampled sections

Borehole/section/structure			Sectionvolume (l) Incl. 2 tubes	Sectionvolume (l) Incl. 1 tube	Flow 2 (l/min) measured 2002	Flow 1 (l/min) estimated
KA2563A	S5	(#6/#7)		98,5	0,26	0,3
KI0025F	R1	(#Z)		106,0	0,29	0,3
KI0025F	R3	(#?)		304,0	0,14	0,3
KI0025F	R5	(#7)		176,9	0,6	0,5
KI0025F	R6	(#5)		146,0	0,25	0,4
KI0023B	P5	(#18)	7,3	6,2	0,3	0,3
KI0023B	P8	(#7)	1,9	1,2	3,84	2
KI0025F02	P1	(#?)	317,0	315,0	2,1	1
KI0025F02	P9	(#7)	12,6	11,8	3,6	2
KI0025F02	P10	(#5)		31,1	1,8	1,2
KI0025F03	P1	(#19)		185,0	0,42	0,3
KI0025F03	P2	(#?)		26,9	0,26	0,3
KI0025F03	P8	(#6)		9,2		0,3
KI0025F03	P9	(#5,7)		178,6	1,3	0,3
KA3510A	R1			115,0	Lågt	?
KA3510A	R2			59,2	2,1	?
KA3510A	R3			141,0	0,25	?
KA3510A	R4			94,6	Lågt	?
KA3510A	R5			185,2	1,1	?

The laboratories that have been used are the ones in table 3.

Table 3 Laboratories

Laboratory	Parameter (method)
Äspö HRL, Sweden	pH, electrical conductivity, Cl ⁻ , HCO ₃ ⁻ , SO ₄ ²⁻ , Br ⁻ , F ⁻ , Fe (II+ and tot), NH ₄ -N, HS ⁻
Analytica AB, Sweden	Main components (cations), environmental metals, lanthanoids, trace elements, iodid, B10 (ICP-AES and ICP-MS)
University of Waterloo, Canada	Tritium, Cl37, C13, C14
Institute for Systemecology SU, Sweden	NH ₄ -N, N-tot, P-tot, NO ₂ , NO ₃ , P-PO ₄ , O iodometric, silika, chlorophyll a, c, pheophytin
Paavo Ristola Oy, Finland	TOC, DOC, DIC
Institutt for Energiteknikk (IFE), Norway	O18, Deuterium, Ra-, Rn-, U-, Th-, S-, Sr-isotopes

2.5 Qualitycontrol

Qualitycontrol of all results have been done according to SKB MD 451.013.

3 Reporting of results

All results are taken from SICADA-tables and are submitted in the following appendices:

Activity history in Appendix 1, water components in Appendix 2, O-18, deuterium och tritium in Appendix 3. Trace elements in Appendix 4, Heavy isotopes in Appendix 5 and Stable isotopes in Appendix 6.

The results can be found in SICADA under Site "Äspö" with the following searchways:

Start Date: 02-12-01

Stop Date: 02-12-31

Project: True Block Scale

Sample numbers: 3835-3840, 3842-3843, 3845-3873 and 3880

Idcode	Secup* m	Seclow * m	Section No**	Sample No**	Sampling date	Class No**	Northing Äspö96 (m)	Easting Äspö96 (m)	Elevation Äspö96 (m)
KI0025F02	100.25	134.15	2	3835	2002-12-03 10:25	5	7138.104	1916.949	-497.269
KI0025F02	93.35	99.25	3	3836	2002-12-03 11:40	5	7156.120	1923.296	-488.785
KI0025F02	73.30	77.25	5	3837	2002-12-03 10:29	5	7174.170	1929.721	-480.127
KI0025F02	64.00	72.90	6	3838	2002-12-03 10:29	5	7180.022	1931.810	-477.302
KI0025F02	56.10	63.00	7	3839	2002-12-03 10:24	5	7187.645	1934.535	-473.605
KI0025F02	51.70	55.10	8	3840	2002-12-03 11:40	5	7192.915	1936.410	-471.049
KI0025F	87.50	89.50	4	3842	2002-12-04 12:00	5	7155.290	1944.422	-477.549
KI0025F	165.50	169.50	2	3843	2002-12-04 11:30	5	7080.626	1935.272	-501.681
KI0025F03	59.58	65.58	6	3845	2002-12-04 10:45	5	7190.305	1927.449	-478.958
KI0025F03	66.58	74.08	5	3846	2002-12-04 12:00	5	7184.268	1924.403	-482.746
KI0025F03	85.08	88.08	4	3847	2002-12-04 10:00	5	7171.590	1918.012	-490.650
KI0025F03	89.08	92.58	3	3848	2002-12-04 10:00	5	7168.270	1916.339	-492.710
KI0023B	113.70	200.71	1	3849	2002-12-05 10:45	5	7119.011	1870.410	-503.589
KI0023B	111.25	112.70	2	3850	2002-12-05 10:00	5	7154.448	1893.588	-487.690
KI0023B	84.75	86.20	4	3851	2002-12-05 11:00	5	7175.118	1907.204	-478.224
KI0023B	70.95	71.95	6	3852	2002-12-05 11:45	5	7186.022	1914.446	-473.190
KI0023B	43.45	69.95	7	3853	2002-12-05 11:15	5	7197.456	1922.109	-467.889
KI0023B	4.60	40.45	9	3854	2002-12-05 10:35	5	7223.898	1939.991	-455.685
KA2563A	242.00	246.00	1	3855	2002-12-06 09:15	5	7176.715	1869.599	-502.651
KA2563A	206.00	208.00	3	3856	2002-12-06 09:30	5	7190.805	1893.983	-478.654
KA2563A	187.00	190.00	4	3857	2002-12-06 09:15	5	7197.890	1906.062	-466.565
KA2563A	236.00	241.00	2	3858	2002-12-09 10:00	5	7178.805	1873.242	-499.100
KI0023B			8	3859	2002-12-10 09:15	2			
KI0023B	72.95	83.75	5	3860	2002-12-10 13:30	2	7180.662	1910.876	-475.667
KA2563A	146.00	186.00	5	3861	2002-12-09 14:00	2	7206.554	1920.672	-451.808
KI0025F02	135.15	204.18	1	3862	2002-12-11 10:15	2	7092.542	1901.223	-517.989
KI0025F02	38.50	50.70	9	3863	2002-12-11 10:30	2	7200.458	1939.087	-467.390
KI0025F03	93.58	100.08	2	3864	2002-12-11 10:00	2	7163.581	1913.977	-495.613
KI0025F	170.50	193.80	1	3865	2002-12-11 10:00	2	7066.744	1933.561	-506.039
KI0025F02	3.40	37.50	10	3866	2002-12-11 12:30	2	7221.106	1946.456	-457.263
KA3510A	110.00	124.00	2	3867	2002-12-12 08:30	2	7236.529	1855.481	-507.255
KI0025F	5.00	41.50	6	3868	2002-12-12 08:30	2	7216.485	1952.031	-456.228
KI0025F	42.50	86.50	5	3869	2002-12-12 08:30	2	7177.868	1947.220	-469.906
KA3510A	4.50	50.00	5	3870	2002-12-12 08:30	2	7255.003	1930.978	-462.378
KA3510A	75.00	109.00	3	3871	2002-12-12 10:30	2	7241.573	1876.557	-494.791
KI0025F03	3.58	50.58	9	3872	2002-12-12 08:00	2	7217.879	1941.406	-461.491
KI0025F03	101.08	141.72	1	3873	2002-12-12 08:00	2	7144.337	1904.288	-507.423
KI0025F	90.50	164.50	3	3880	2002-12-13 12:30	2	7118.481	1939.899	-489.616

True Block Scale 2002

Water Composition

Appendix 2

Idcode	Secup m	Seclow m	Sample	Sampling date	Na mg/L	K mg/L	Ca mg/L	Mg mg/L	HCO3 mg/L	Cl mg/L	SO4 mg/L	SO4-S mg/L	Br mg/l	F mg/L	Si mg/L	Fe-ICP mg/L	Fetot mg/L
KI0025F02	100,25	134,15	3835	2002-12-03 13:13	1830	8,56	1210	35,9	16	4888,1	391.30	126.00	23.72	1.19	5.5	0.137	0.173
KI0025F02	93,35	99,25	3836	2002-12-03 13:30	2010	9,44	1540	34,6	10	5921,5	407.88	129.00	33.61	1.56	5.0	0.056	0.053
KI0025F02	73,3	77,25	3837	2002-12-03 11:34	2010	10,6	1470	40,7	16	5684	389.03	125.00	33.01	0.96	5.9	0.101	0.092
KI0025F02	64	72,9	3838	2002-12-03 11:35	1980	10,8	1430	39,6	15	5547,5	393.46	124.00	31.13	1.65	5.9	0.096	0.086
KI0025F02	56,1	63	3839	2002-12-03 14:23	1970	10,5	1470	36,9	11	5751,4	387.87	130.00	31.47	0.73	5.8	0.084	0.082
KI0025F02	51,7	55,1	3840	2002-12-03 14:04	1650	8,88	849	38,5	97	4072,7	331.96	105.00	20.29	1.31	7.4	0.094	0.087
KI0025F	87,5	89,5	3842	2002-12-04 12:21	2050	11,2	1610	34,7	8	5985,4	425.58	132.00	35.64	1.16	4.7	0.038	0.041
KI0025F	165,5	169,5	3843	2002-12-04 11:47	1760	11,5	1130	35,2	17	4767,5	386.24	121.00	23.87	1.07	5.7	0.107	0.111
KI0025F03	59,58	65,58	3845	2002-12-04 11:00	1970	12,3	1460	37,6	16	5687,5	370.80	130.00	28.84	1.18	5.8	0.065	0.068
KI0025F03	66,58	74,08	3846	2002-12-04 12:32	1990	12,9	1490	39,7	16	5750,5	386.19	125.00	31.58	1.08	5.9	0.092	0.093
KI0025F03	85,08	88,08	3847	2002-12-04 11:20	1970	11,3	1420	33,8	12	5598	383.89	127.00	31.90	1.13	5.5	0.058	0.063
KI0025F03	89,08	92,58	3848	2002-12-04 11:10	2010	12,6	1560	35,5	11	5854,2	407.19	131.00	32.92	1.04	5.2	0.047	0.050
KI0023B	113,7	200,71	3849	2002-12-05 10:58	1480	18,1	335	96,4	268	2915,3	247.50	84.20	10.85	1.37	7.1	0.565	0.522
KI0023B	111,25	112,7	3850	2002-12-05 11:33	1720	11,4	1010	39,7	59	4424,5	354,5	114	23,19	1,02	6,6	0,189	0,19
KI0023B	84,75	86,2	3851	2002-12-05 11:43	2070	11,6	1420	34,8	7	5653	384,8	122	35,9	1,22	5	0,07	0,069
KI0023B	70,95	71,95	3852	2002-12-05 11:50	1920	11,3	1300	44,1	32	5336,6	369,4	119	32,27	1,17	6,5	0,086	0,082
KI0023B	43,45	69,95	3853	2002-12-05 11:47	1830	11,8	1140	46,7	73	4706,4	351,4	115	25,82	1,17	6,7	0,04	0,121
KI0023B	4,6	40,45	3854	2002-12-05 11:13	1740	11,8	977	51,5	70	4744,5	394,9	119	25,21	1,32	6,8	0,151	0,132
KA2563A	242	246	3855	2002-12-06 09:45	1640	11,2	847	44,2	70	4050,5	407,8	108	23,04	1,04	7,4	0,115	0,117
KA2563A	206	208	3856	2002-12-06 10:00	2000	11,7	1360	33,3	9	5489	496,2	128	37,56	1,33	5,3	0,038	0,037
KA2563A	187	190	3857	2002-12-06 09:45	1550	11,9	632	63,5	160	3528,3	302,1	96,9	16,23	1,33	7,1	0,19	0,193
KA2563A	236	241	3858	2002-12-09 10:55	1800	12,1	1120	41,6	32	4779,1	376	120	24,44	1,14	6,8	0,099	0,096
KI0023B			3859	2002-12-10 09:25					233	3028							
KI0023B	72,95	83,75	3860	2002-12-10 14:21					18	5446,5							
KA2563A	146	186	3861	2002-12-09 14:43					184	3380,4							
KI0025F02	135,15	204,18	3862	2002-12-11 10:35					237	3038,7							
KI0025F02	38,5	50,7	3863	2002-12-11 10:54					224	3043,3							
KI0025F03	93,58	100,08	3864	2002-12-11 11:00					18	5808,1							
KI0025F	170,5	193,8	3865	2002-12-11 10:53					188	3173,4							
KI0025F02	3,4	37,5	3866	2002-12-11 12:38					76	4673,6							

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

<"value" = result less than detection limit

SICADA: water_composition, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Fe2+ mg/L	Mn mg/L	Li mg/L	Sr mg/L	pH pH unit	El, Cond, mS/m	DOC mg/L	S2 mg/L	NO3N mg/l	NH4-N mg/L	PO4P mg/l
KI0025F02	100,25	134,15	3835	0.162	0.29	0.888	20.20	7.68	1396.0	1.3	0.01	0.001	0.022	0.001
KI0025F02	93,35	99,25	3836	0.047	0.24	1.150	25.50	7.91	1636.0	1.1	0.01	0.001	0.015	0.001
KI0025F02	73,3	77,25	3837	0.085	0.36	1.110	24.60	7.60	1579.0	1.7	0.00	0.001	0.016	0.001
KI0025F02	64	72,9	3838	0.086	0.33	1.070	23.80	7.60	1560.0	1.7	0.01	0.001	0.020	0.001
KI0025F02	56,1	63	3839	0.076	0.28	1.090	24.30	7.78	1574.0	1.3	0.42	0.001	0.022	0.001
KI0025F02	51,7	55,1	3840	0.081	0.34	0.573	14.50	7.42	1186.0	3.9	0.16	0.001	0.045	0.001
KI0025F	87,5	89,5	3842	0.033	0.24	1.210	26.60	8.06	1649.0	1.7	0.18	0.001	0.012	0.001
KI0025F	165,5	169,5	3843	0.111	0.27	0.839	19.10	7.75	1325.0	2.2	0.11	0.001	0.024	0.001
KI0025F03	59,58	65,58	3845	0.062	0.30	1.080	24.20	7.68	1563.0	2.0	1.36	0.001	0.016	0.001
KI0025F03	66,58	74,08	3846	0.083	0.31	1.120	24.70	7.65	1602.0	1.0	0.32		0.016	0.001
KI0025F03	85,08	88,08	3847	0.051	0.23	1.060	23.60	7.91	1558.0	1.7	0.32	0.001	0.019	0.001
KI0025F03	89,08	92,58	3848	0.042	0.24	1.170	25.80	7.75	1630.0	1.4	0.86	0.001	0.018	0.001
KI0023B	113,7	200,71	3849	0.546	0.69	0.149	5.53	7.40	923.0	5.4	0.10		0.914	0.001
KI0023B	111,25	112,7	3850	0,18	0,32	0,728	17,1	7,46	1290	2,3	0,06	0,001	0,034	0,001
KI0023B	84,75	86,2	3851	0,064	0,28	1,03	23,3	7,49	1580	1,2	0,06	0,001	0,024	0,001
KI0023B	70,95	71,95	3852	0,077	0,35	0,976	21,6	7,48	1495	2	0,04	0,001	0,042	0,001
KI0023B	43,45	69,95	3853	0,115	0,37	0,829	19,1	7,43	1355	2,6	0,05		0,069	0,001
KI0023B	4,6	40,45	3854	0,124	0,41	0,662	16,4	7,5	1359	2,4	0,21	0,001	0,109	0,001
KA2563A	242	246	3855	0,111	0,37	0,619	14,4	7,43	1201	3,3	0,11		0,054	0,001
KA2563A	206	208	3856	0,031	0,27	0,995	22,6	7,92	1557		0,15	0,001	0,018	0,001
KA2563A	187	190	3857	0,186	0,46	0,407	10,8	7,44	1078	4,7	0,09		0,304	0,001
KA2563A	236	241	3858	0,09	0,33	0,824	18,8	7,54	1363	1,6	0,06	0,001	0,022	0,001
KI0023B			3859					7,51	953					
KI0023B	72,95	83,75	3860					7,53	1523					
KA2563A	146	186	3861					7,46	1016					
KI0025F02	135,15	204,18	3862					7,44	977					
KI0025F02	38,5	50,7	3863					7,45	945					
KI0025F03	93,58	100,08	3864					7,19	1628					
KI0025F	170,5	193,8	3865					7,48	974					
KI0025F02	3,4	37,5	3866					7,39	1336					

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

<"value" = result less than detection limit

SICADA: water_composition, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	Na mg/L	K mg/L	Ca mg/L	Mg mg/L	HCO3 mg/L	Cl mg/L	SO4 mg/L	SO4-S mg/L	Br mg/l	F mg/L	Si mg/L	Fe-ICP mg/L	Fetot mg/L
KA3510A	110	124	3867	2002-12-12 08:52					86	4610,7							
KI0025F	5	41,5	3868	2002-12-12 09:18					98	4132							
KI0025F	42,5	86,5	3869	2002-12-12 09:14					202	3157,1							
KA3510A	4,5	50	3870	2002-12-12 08:50					222	3145,4							
KA3510A	75	109	3871	2002-12-12 11:04					99	4086							
KI0025F03	3,58	50,58	3872	2002-12-12 09:00					128	4146,2							
KI0025F03	101,08	141,72	3873	2002-12-12 08:59					15	4948,4							
KI0025F	90,5	164,5	3880	2002-12-13 13:35					18	4893,4							

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

<"value" = result less than detection limit

SICADA: water_composition, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Fe2+ mg/L	Mn mg/L	Li mg/L	Sr mg/L	pH pH unit	El, Cond, mS/m	DOC mg/L	S2 mg/L	NO3N mg/l	NH4-N mg/L	PO4P mg/l
KA3510A	110	124	3867					7,4	1365					
KI0025F	5	41,5	3868					7,43	1232					
KI0025F	42,5	86,5	3869					7,51	993					
KA3510A	4,5	50	3870					7,42	982					
KA3510A	75	109	3871					7,43	1220					
KI0025F03	3,58	50,58	3872					7,43	1227					
KI0025F03	101,08	141,72	3873					7,51	1381					
KI0025F	90,5	164,5	3880					7,28	1415					

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

<"value" = result less than detection limit

SICADA: water_composition, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	D dev SMOW	Tr TU	O18 dev SMOW
KI0025F02	100,25	134,15	3835	2002-12-03 13:13	-70,8	3,7	-9,5
KI0025F02	93,35	99,25	3836	2002-12-03 13:30	-77,6	181,4	-10,7
KI0025F02	73,3	77,25	3837	2002-12-03 11:34	-73,7	2	-10,2
KI0025F02	64	72,9	3838	2002-12-03 11:35	-73,4	2,3	-10
KI0025F02	56,1	63	3839	2002-12-03 14:23	-74,9	1,8	-10,2
KI0025F02	51,7	55,1	3840	2002-12-03 14:04	-69,6	6,9	-9,3
KI0025F	87,5	89,5	3842	2002-12-04 12:21	-78,5	1,7	-10,8
KI0025F	165,5	169,5	3843	2002-12-04 11:47	-70,5	4,8	-9,5
KI0025F03	59,58	65,58	3845	2002-12-04 11:00	-73,9	3,2	-10,1
KI0025F03	66,58	74,08	3846	2002-12-04 12:32	-75,8	2,2	-10,4
KI0025F03	89,08	92,58	3848	2002-12-04 11:10	-78,5	2,4	-10,6
KI0023B	113,7	200,71	3849	2002-12-05 10:58	-59,8	9,8	-7,8
KI0023B	111,25	112,7	3850	2002-12-05 11:33	-70,4	5,6	-9,3
KI0023B	84,75	86,2	3851	2002-12-05 11:43	-84,9	99,5	-11,5
KI0023B	70,95	71,95	3852	2002-12-05 11:50	-72,6	21,1	-9,9
KI0023B	43,45	69,95	3853	2002-12-05 11:47	-71,6	4,6	-9,6
KI0023B	4,6	40,45	3854	2002-12-05 11:13	-68,4	4,6	-9,4
KA2563A	242	246	3855	2002-12-06 09:45	-67,5	7,2	-9
KA2563A	206	208	3856	2002-12-06 10:00	-85,7	1	-11,6
KA2563A	187	190	3857	2002-12-06 09:45	-63	10,5	-8,2
KA2563A	236	241	3858	2002-12-09 10:55	-68,7	4,7	-9,4
KI0023B			3859	2002-12-10 09:25	-62,5	12,3	-8,2
KA2563A	146	186	3861	2002-12-09 14:43	-64,6	11,6	-8,6
KI0025F02	135,15	204,18	3862	2002-12-11 10:35	-61,4	11,6	-8,1
KI0025F02	38,5	50,7	3863	2002-12-11 10:54	-62,5	11,3	-8,2
KI0025F03	93,58	100,08	3864	2002-12-11 11:00	-85,6	1	-11,8
KI0025F	170,5	193,8	3865	2002-12-11 10:53	-63,1	10,5	-8,4
KI0025F02	3,4	37,5	3866	2002-12-11 12:38	-70,2	4,9	-9,7

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

SICADA: h_o_isotopes, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	D dev SMOW	Tr TU	O18 dev SMOW
KA3510A	110	124	3867	2002-12-12 08:52	-70,3	5,8	-9,7
KI0025F	5	41,5	3868	2002-12-12 09:18	-68,6	6,7	-9,3
KI0025F	42,5	86,5	3869	2002-12-12 09:14	-62,6	7,5	-8,4
KA3510A	4,5	50	3870	2002-12-12 08:50	-64,4	11,6	-8,2
KA3510A	75	109	3871	2002-12-12 11:04	-67,4	7,4	-9,2
KI0025F03	3,58	50,58	3872	2002-12-12 09:00	-67	6,1	-9,1
KI0025F03	101,08	141,72	3873	2002-12-12 08:59	-70,5	2,8	-9,6
KI0025F	90,5	164,5	3880	2002-12-13 13:35	-73,6	3,9	-9,9

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

SICADA: h_o_isotopes, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	U ug/L	Th ug/L	Al ug/L	Sc ug/L	Cd ug/L	Cr ug/L	Cu ug/L	Co ug/L	Hg ug/L	Ni ug/L	Zn ug/L
KI0025F02	100,25	134,15	3835	2002-12-03 13:13	0,0091	<0,1000	<0,3000	<0,3000	<0,0200	0,378	0,503	<0,0200	<0,0020	0,43	<0,8000
KI0025F02	93,35	99,25	3836	2002-12-03 13:30	0,0067	<0,1000	1,14	<0,3000	<0,0200	0,0656	0,395	<0,0200	<0,0020	<0,2000	<0,8000
KI0025F02	73,3	77,25	3837	2002-12-03 11:34	0,0083	<0,1000	3,04	<0,3000	<0,0200	0,0957	0,377	0,033	<0,0020	<0,2000	1,9
KI0025F02	64	72,9	3838	2002-12-03 11:35	0,0093	<0,1000	8,71	<0,3000	<0,0200	0,74	0,563	<0,0200	<0,0020	0,418	<0,8000
KI0025F02	56,1	63	3839	2002-12-03 14:23	<0,0050	<0,1000	<0,6000	<0,3000	<0,0200	0,057	0,419	<0,0200	<0,0020	<0,2000	<0,8000
KI0025F02	51,7	55,1	3840	2002-12-03 14:04	0,0857	<0,1000	4,15	<0,3000	<0,0200	0,199	0,464	0,0652	<0,0020	<0,2000	<0,8000
KI0025F	87,5	89,5	3842	2002-12-04 12:21	<0,0050	<0,1000	1,16	<0,3000	0,0208	0,109	0,369	0,0335	<0,0020	<0,2000	<0,8000
KI0025F	165,5	169,5	3843	2002-12-04 11:47	0,0155	<0,1000	2,61	<0,3000	<0,0200	0,153	0,326	<0,0200	<0,0020	<0,2000	<0,8000
KI0025F03	59,58	65,58	3845	2002-12-04 11:00	0,0074	<0,1000	4,3	<0,3000	<0,0200	0,179	0,452	0,0213	<0,0020	<0,2000	<0,8000
KI0025F03	66,58	74,08	3846	2002-12-04 12:32	0,0109	<0,1000	1,33	<0,3000	<0,0200	0,237	0,522	<0,0200	<0,0020	0,404	<0,8000
KI0025F03	85,08	88,08	3847	2002-12-04 11:20	0,023	<0,1000	2,71	<0,3000	<0,0200	0,293	0,421	0,0366	<0,0020	0,532	<0,8000
KI0025F03	89,08	92,58	3848	2002-12-04 11:10	0,0088	<0,1000	3,55	<0,3000	<0,0200	0,196	0,532	<0,0200	<0,0020	0,227	0,898
KI0023B	113,7	200,71	3849	2002-12-05 10:58	0,142	<0,1000	2,73	<0,3000	<0,0200	0,257	0,531	0,0737	<0,0020	<0,2000	1,04
KI0023B	111,25	112,7	3850	2002-12-05 11:33	0,0176	<0,1000	0,8	<0,3000	<0,0200	0,407	1,17	0,042	<0,0020	1,3	8,51
KI0023B	84,75	86,2	3851	2002-12-05 11:43	<0,0050	<0,1000	1,31	<0,3000	<0,0200	0,126	0,384	<0,0200	<0,0020	<0,2000	<0,8000
KI0023B	70,95	71,95	3852	2002-12-05 11:50	0,0125	<0,1000	5,32	<0,3000	<0,0200	0,182	0,42	0,023	<0,0020	<0,2000	<0,8000
KI0023B	43,45	69,95	3853	2002-12-05 11:47	0,0507	<0,1000	0,444	<0,3000	<0,0200	0,065	0,393	0,0372	<0,0020	0,308	1,15
KI0023B	4,6	40,45	3854	2002-12-05 11:13	0,103	<0,1000	0,883	<0,3000	<0,0200	0,184	0,323	0,0364	<0,0020	<0,2000	<0,8000
KA2563A	242	246	3855	2002-12-06 09:45	0,0152	<0,1000	2,92	<0,3000	<0,0200	0,184	0,363	0,0297	<0,0020	0,219	<0,8000
KA2563A	206	208	3856	2002-12-06 10:00	0,01	<0,1000	2,67	<0,3000	<0,0200	0,118	0,35	<0,0200	<0,0020	<0,2000	<0,8000
KA2563A	187	190	3857	2002-12-06 09:45	0,0878	<0,1000	5,59	<0,3000	<0,0200	0,208	0,365	0,0522	<0,0020	<0,2000	<0,8000
KA2563A	236	241	3858	2002-12-09 10:55	0,0132	<0,1000	3,26	<0,3000	<0,0200	0,337	0,479	<0,0200	<0,0020	0,259	3,13

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

< "value" = result less than detection limit

SICADA: trace_elements, 021201-021231 True Block Scale

True Block Scale 2002

Trace elements

Appendix 4

Idcode	Secup m	Seclow m	Sample	Pb ug/L	V ug/L	Rb ug/L	Y ug/L	Zr ug/L	Mo ug/L	Sb ug/L	Cs ug/L	Ba ug/L	La ug/L	Hf ug/L	Tl ug/L	Ce ug/L
KI0025F02	100,25	134,15	3835	<0,1000	<0,0300	29,2	0,192	0,13	47,4	0,0763	2,55	53,9	0,0766	<0,0200	<0,1000	0,0608
KI0025F02	93,35	99,25	3836	<0,1000	<0,0300	31,5	0,24	0,134	59,6	0,0905	2,61	69,6	0,169	<0,0200	<0,1000	0,108
KI0025F02	73,3	77,25	3837	<0,1000	<0,0300	35,5	0,246	0,13	54,5	0,0916	3,01	69,5	0,104	<0,0200	<0,1000	0,0691
KI0025F02	64	72,9	3838	<0,1000	<0,0300	33,2	0,235	<0,1000	51,4	0,0821	2,84	66,9	0,128	<0,0200	<0,1000	0,108
KI0025F02	56,1	63	3839	<0,1000	<0,0300	29,7	0,249	<0,1000	55	0,0728	2,51	63,3	0,1	<0,0200	<0,1000	0,0713
KI0025F02	51,7	55,1	3840	<0,1000	0,0843	26	0,867	<0,1000	25,3	<0,0500	2,19	48,9	0,213	<0,0200	<0,1000	0,785
KI0025F	87,5	89,5	3842	<0,1000	<0,0300	29,9	0,237	<0,1000	60,9	0,0795	2,66	67,2	0,109	<0,0200	<0,1000	0,0644
KI0025F	165,5	169,5	3843	<0,1000	<0,0300	29,2	0,192	<0,1000	44,6	<0,0500	2,68	54,2	0,0644	<0,0200	<0,1000	0,0663
KI0025F03	59,58	65,58	3845	<0,1000	<0,0300	30,9	0,243	<0,1000	50,1	0,0698	2,67	66,2	0,148	<0,0200	<0,1000	0,0945
KI0025F03	66,58	74,08	3846	<0,1000	<0,0300	30,5	0,234	<0,1000	54,1	0,0754	2,76	67,2	0,0774	<0,0200	<0,1000	0,0459
KI0025F03	85,08	88,08	3847	<0,1000	<0,0300	26,3	0,273	<0,1000	51,5	0,0679	2,56	63	0,14	<0,0200	<0,1000	0,104
KI0025F03	89,08	92,58	3848	<0,1000	<0,0300	29,9	0,24	<0,1000	57,8	0,0697	2,46	70,1	0,163	<0,0200	<0,1000	0,118
KI0023B	113,7	200,71	3849	<0,1000	0,355	42,2	0,102	0,261	5,27	<0,0500	3,58	51,9	0,0584	<0,0200	<0,1000	0,0716
KI0023B	111,25	112,7	3850	<0,1000	0,0382	27,8	0,169	<0,1000	34,9	0,0664	2,3	51,6	0,0962	<0,0200	<0,1000	0,0985
KI0023B	84,75	86,2	3851	<0,1000	<0,0300	27,1	0,952	<0,1000	49,5	0,0655	2,36	62	0,325	<0,0200	<0,1000	1,39
KI0023B	70,95	71,95	3852	<0,1000	<0,0300	33,4	0,228	<0,1000	46,8	0,0686	2,93	64,9	0,1	<0,0200	<0,1000	0,0869
KI0023B	43,45	69,95	3853	<0,1000	0,0426	30,2	0,198	<0,1000	38,6	<0,0500	2,44	59,5	0,0698	<0,0200	<0,1000	0,0451
KI0023B	4,6	40,45	3854	<0,1000	0,0949	28,2	0,167	<0,1000	31,4	<0,0500	2,51	53,8	0,0346	<0,0200	<0,1000	0,0286
KA2563A	242	246	3855	<0,1000	0,057	27,6	0,172	<0,1000	24,8	<0,0500	2,42	54,2	0,0954	<0,0200	<0,1000	0,11
KA2563A	206	208	3856	<0,1000	<0,0300	27,3	0,317	<0,1000	47,9	<0,0500	2,46	59,4	0,103	<0,0200	<0,1000	0,261
KA2563A	187	190	3857	<0,1000	0,131	29,6	0,161	0,133	18,7	<0,0500	2,68	52,4	0,0645	<0,0200	<0,1000	0,0655
KA2563A	236	241	3858	<0,1000	<0,0300	27,8	0,186	<0,1000	38	0,0513	2,46	54,3	0,118	<0,0200	<0,1000	0,09

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

< "value" = result less than detection limit

SICADA: trace_elements, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Pr ug/L	Nd ug/L	Sm ug/L	Eu ug/L	Gd ug/L	Tb ug/L	Dy ug/L	Ho ug/L	Er ug/L	Tm ug/L
KI0025F02	100,25	134,15	3835	<0,0200	<0,0200	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F02	93,35	99,25	3836	<0,0200	0,0318	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F02	73,3	77,25	3837	<0,0200	<0,0200	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F02	64	72,9	3838	<0,0200	0,0353	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F02	56,1	63	3839	<0,0200	0,0402	<0,0200	<0,0200	0,027	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F02	51,7	55,1	3840	0,224	1,85	0,432	0,0845	3,29	<0,3000	0,197	0,0336	0,0755	<0,0200
KI0025F	87,5	89,5	3842	<0,0200	<0,0200	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F	165,5	169,5	3843	<0,0200	0,028	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F03	59,58	65,58	3845	<0,0200	0,0272	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F03	66,58	74,08	3846	<0,0200	<0,0200	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F03	85,08	88,08	3847	<0,0200	0,0412	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0025F03	89,08	92,58	3848	<0,0200	0,0343	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0023B	113,7	200,71	3849	<0,0200	0,0312	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0023B	111,25	112,7	3850	<0,0200	0,0332	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0023B	84,75	86,2	3851	0,342	2,6	0,511	0,115	0,464	<0,3000	0,218	8,98	0,0935	<0,0200
KI0023B	70,95	71,95	3852	<0,0200	0,0553	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	0,112	<0,0200	<0,0200
KI0023B	43,45	69,95	3853	<0,0200	0,0264	<0,0200	<0,0200	0,0313	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KI0023B	4,6	40,45	3854	<0,0200	<0,0200	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KA2563A	242	246	3855	<0,0200	0,114	0,0269	<0,0200	<0,0200	<0,3000	<0,0200	0,386	<0,0200	<0,0200
KA2563A	206	208	3856	0,059	0,423	0,088	<0,0200	0,0676	<0,3000	0,0332	2,17	<0,0200	<0,0200
KA2563A	187	190	3857	<0,0200	0,0356	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200
KA2563A	236	241	3858	<0,0200	0,039	<0,0200	<0,0200	<0,0200	<0,3000	<0,0200	<0,0200	<0,0200	<0,0200

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

< "value" = result less than detection limit

SICADA: trace_elements, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Yb ug/L	Lu ug/L
KI0025F02	100,25	134,15	3835	<0,0200	<0,0200
KI0025F02	93,35	99,25	3836	<0,0200	<0,0200
KI0025F02	73,3	77,25	3837	<0,0200	<0,0200
KI0025F02	64	72,9	3838	<0,0200	<0,0200
KI0025F02	56,1	63	3839	0,134	<0,0200
KI0025F02	51,7	55,1	3840	0,0305	<0,0200
KI0025F	87,5	89,5	3842	<0,0200	<0,0200
KI0025F	165,5	169,5	3843	<0,0200	<0,0200
KI0025F03	59,58	65,58	3845	0,166	<0,0200
KI0025F03	66,58	74,08	3846	<0,0200	<0,0200
KI0025F03	85,08	88,08	3847	<0,0200	<0,0200
KI0025F03	89,08	92,58	3848	<0,0200	<0,0200
KI0023B	113,7	200,71	3849	<0,0200	<0,0200
KI0023B	111,25	112,7	3850	<0,0200	<0,0200
KI0023B	84,75	86,2	3851	0,0279	<0,0200
KI0023B	70,95	71,95	3852	<0,0200	<0,0200
KI0023B	43,45	69,95	3853	<0,0200	<0,0200
KI0023B	4,6	40,45	3854	<0,0200	<0,0200
KA2563A	242	246	3855	<0,0200	<0,0200
KA2563A	206	208	3856	<0,0200	<0,0200
KA2563A	187	190	3857	<0,0200	<0,0200
KA2563A	236	241	3858	<0,0200	<0,0200

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

< "value" = result less than detection limit

SICADA: trace_elements, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	U238 mBq/kg	U235 mBq/kg	U234 mBq/kg	Th232 mBq/kg	Th230 mBq/kg	Ra226 Bq/L
KI0025F02	100,25	134,15	3835	2002-12-03 13:13	<50.00	<50.00	<50.00	<50.00	<50.00	4.00E-01
KI0025F02	93,35	99,25	3836	2002-12-03 13:30	<50.00	<50.00	<50.00	<50.00	<50.00	6.00E-01
KI0025F02	73,3	77,25	3837	2002-12-03 11:34	<50.00	<50.00	<50.00	<50.00	<50.00	5.00E-01
KI0025F02	64	72,9	3838	2002-12-03 11:35	<50.00	<50.00	<50.00	<50.00	<50.00	1.00E+00
KI0025F02	56,1	63	3839	2002-12-03 14:23	<50.00	<50.00	<50.00	<50.00	<50.00	5.00E-01
KI0025F02	51,7	55,1	3840	2002-12-03 14:04	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KI0025F	87,5	89,5	3842	2002-12-04 12:21	<50.00	<50.00	<50.00	<50.00	<50.00	5.00E-01
KI0025F	165,5	169,5	3843	2002-12-04 11:47	<50.00	<50.00	<50.00	<50.00	<50.00	8.00E-01
KI0025F03	59,58	65,58	3845	2002-12-04 11:00	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KI0025F03	66,58	74,08	3846	2002-12-04 12:32	<50.00	<50.00	<50.00	<50.00	<50.00	6.00E-01
KI0025F03	85,08	88,08	3847	2002-12-04 11:20	<50.00	<50.00	<50.00	<50.00	<50.00	1.70E+00
KI0025F03	89,08	92,58	3848	2002-12-04 11:10	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KI0023B	113,7	200,71	3849	2002-12-05 10:58	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KI0023B	111,25	112,7	3850	2002-12-05 11:33	<50.00	<50.00	<50.00	<50.00	<50.00	2.00E-01
KI0023B	84,75	86,2	3851	2002-12-05 11:43	<50.00	<50.00	<50.00	<50.00	<50.00	6.00E-01
KI0023B	70,95	71,95	3852	2002-12-05 11:50	<50.00	<50.00	<50.00	<50.00	<50.00	5.00E-01
KI0023B	43,45	69,95	3853	2002-12-05 11:47	<50.00	<50.00	<50.00	<50.00	<50.00	7.00E-01
KI0023B	4,6	40,45	3854	2002-12-05 11:13	<50.00	<50.00	<50.00	<50.00	<50.00	1.00E+00
KA2563A	242	246	3855	2002-12-06 09:45	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KA2563A	206	208	3856	2002-12-06 10:00	<50.00	<50.00	<50.00	<50.00	<50.00	8.00E-01
KA2563A	187	190	3857	2002-12-06 09:45	<50.00	<50.00	<50.00	<50.00	<50.00	3.00E-01
KA2563A	236	241	3858	2002-12-09 10:55	<50.00	<50.00	<50.00	<50.00	<50.00	8.00E-01

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

< "value" = result less than detection limit

SICADA: u_th_isotope_t, ra_rn_isotope_t, 021201-021231 True Block Scale

Idcode	Secup m	Seclow m	Sample	Sampling date	S34 dev CDT	Sr87 dev EN-1
KI0025F02	100,25	134,15	3835	2002-12-03 13:13	22,6	0,72
KI0025F02	93,35	99,25	3836	2002-12-03 13:30	20,2	0,72
KI0025F02	73,3	77,25	3837	2002-12-03 11:34	20,5	0,72
KI0025F02	64	72,9	3838	2002-12-03 11:35	20,6	0,72
KI0025F02	56,1	63	3839	2002-12-03 14:23	20,9	0,72
KI0025F02	51,7	55,1	3840	2002-12-03 14:04	24,4	0,72
KI0025F	87,5	89,5	3842	2002-12-04 12:21	20,4	0,72
KI0025F	165,5	169,5	3843	2002-12-04 11:47	23	0,72
KI0025F03	59,58	65,58	3845	2002-12-04 11:00	21,3	0,72
KI0025F03	66,58	74,08	3846	2002-12-04 12:32	20,5	0,72
KI0025F03	85,08	88,08	3847	2002-12-04 11:20	20,5	0,72
KI0025F03	89,08	92,58	3848	2002-12-04 11:10	20,2	0,72
KI0023B	113,7	200,71	3849	2002-12-05 10:58	29,5	0,72
KI0023B	111,25	112,7	3850	2002-12-05 11:33	23,4	0,72
KI0023B	84,75	86,2	3851	2002-12-05 11:43	20,2	0,72
KI0023B	70,95	71,95	3852	2002-12-05 11:50	21,9	0,72
KI0023B	43,45	69,95	3853	2002-12-05 11:47	22,6	0,72
KI0023B	4,6	40,45	3854	2002-12-05 11:13	22,8	0,72
KA2563A	242	246	3855	2002-12-06 09:45	24,2	0,72
KA2563A	206	208	3856	2002-12-06 10:00	19,4	0,72
KA2563A	187	190	3857	2002-12-06 09:45	27,4	0,72
KA2563A	236	241	3858	2002-12-09 10:55	22,8	0,72

- = Not analysed

x = No result due to sampling problems

xx = No result due to analytical problems

SICADA: b_s_cl_sr_isotope, 021201-021231 True Block Scale