



Pall Corporation

Sample Analysis Report

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March, 2012

Analyst Initials: SEOP
Date: 04-06-12

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
Residential Wells							
D2							
580 Allison-03-27-12-11:58-1	10	1.0					
Extraction Wells							
C3							
DOLPH-03-05-12-09:56-1	64	1.0					
TW-10-03-05-12-10:12-1	553	1.0					
TW-20-03-05-12-10:05-1	951	1.0					
D2							
LB-1-03-05-12-07:50-1	579	1.0					
LB-3-03-05-12-07:52-1	488	1.0					
TW-21-03-05-12-09:28-1	141	1.0					
TW-5-03-05-12-09:36-1	739	1.0					
TW-9-03-05-12-10:18-1	792	1.0					
E							
TW-11-03-05-12-09:38-1	198	1.0					
TW-18-03-05-12-09:58-1	328	1.0					
TW-19-03-05-12-07:55-1	792	1.0					
Marshy							
PW-1-03-05-12-10:00-1	761	1.0					

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
SW							
TW-22-03-05-12-10:10-1	565	1.0					
TW-8-03-05-12-10:12-1	408	1.0					
Monitoring Wells							
D0							
A2 Cleaning Supply-03-01-12-08:00-1	70	1.0					
A2 Cleaning Supply-03-01-12-12:05-1	98	1.0					
Not Determined							
342 Pinewood-03-05-12-15:12-1	nd	1.0					
Surface Water							
Not Applicable							
HC/HR-03-01-12-07:40-1			nd	2.0			
HC/HR-03-02-12-08:10-1			nd	2.0			
HC/HR-03-05-12-08:15-1			nd	2.0			
HC/HR-03-06-12-08:35-1			nd	2.0			
HC/HR-03-07-12-08:00-1			nd	2.0			
HC/HR-03-08-12-08:25-1			nd	2.0			
HC/HR-03-09-12-08:20-1			nd	2.0			
HC/HR-03-12-12-08:45-1			nd	2.0			
HC/HR-03-13-12-08:55-1			nd	2.0			
HC/HR-03-14-12-07:40-1			nd	2.0			
HC/HR-03-15-12-07:40-1			nd	2.0			
HC/HR-03-16-12-09:00-1			nd	2.0			
HC/HR-03-19-12-07:55-1			nd	2.0			
HC/HR-03-20-12-08:05-1			nd	2.0			

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
HC/HR-03-21-12-07:30-1			nd	2.0			
HC/HR-03-22-12-07:40-1			nd	2.0			
HC/HR-03-23-12-08:05-1			nd	2.0			
HC/HR-03-26-12-08:30-1			nd	2.0			
HC/HR-03-27-12-08:05-1			nd	2.0			
HC/HR-03-28-12-08:35-1			nd	2.0			
HC/HR-03-29-12-07:50-1			nd	2.0			
HC/HR-03-30-12-08:05-1			nd	2.0			

Treatment System

OUTFALL-03-01-12-1	5	1.0					
OUTFALL-03-01-12-2			8	5.0			
OUTFALL-03-04-12-1	4	1.0					
OUTFALL-03-04-12-2			7	5.0			
OUTFALL-03-05-12-1	5	1.0					
OUTFALL-03-05-12-2			9	5.0			
OUTFALL-03-06-12-1	6	1.0					
OUTFALL-03-06-12-2			9	5.0			
OUTFALL-03-07-12-1	5	1.0					
OUTFALL-03-07-12-2			8	5.0			
OUTFALL-03-08-12-1	5	1.0					
OUTFALL-03-08-12-2			nd	5.0			
OUTFALL-03-11-12-1	5	1.0					
OUTFALL-03-11-12-2			nd	5.0			
OUTFALL-03-12-12-1	5	1.0					
OUTFALL-03-12-12-2			nd	5.0			
OUTFALL-03-13-12-1	4	1.0					
OUTFALL-03-13-12-2			6	5.0			

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
OUTFALL-03-14-12-1	5	1.0					
OUTFALL-03-14-12-2			nd	5.0			
OUTFALL-03-15-12-1	4	1.0					
OUTFALL-03-15-12-2			5	5.0			
OUTFALL-03-18-12-1	5	1.0					
OUTFALL-03-18-12-2			7	5.0			
OUTFALL-03-19-12-1	5	1.0					
OUTFALL-03-19-12-2			9	5.0			
OUTFALL-03-20-12-1	6	1.0					
OUTFALL-03-20-12-2			9	5.0			
OUTFALL-03-21-12-1	6	1.0					
OUTFALL-03-21-12-2			8	5.0			
OUTFALL-03-22-12-1	6	1.0					
OUTFALL-03-22-12-2			nd	5.0			
OUTFALL-03-25-12-1	6	1.0					
OUTFALL-03-25-12-2			nd	5.0			
OUTFALL-03-26-12-1	6	1.0					
OUTFALL-03-26-12-2			5	5.0			
OUTFALL-03-27-12-1	6	1.0					
OUTFALL-03-27-12-2			nd	5.0			
OUTFALL-03-28-12-1	6	1.0					
OUTFALL-03-28-12-2			nd	5.0			
OUTFALL-03-29-12-1	5	1.0					
OUTFALL-03-29-12-2			nd	5.0			
Red Pond-03-05-12-10:10-1	527	1.0					
Red Pond-03-12-12-08:00-1	526	1.0					
Red Pond-03-19-12-08:30-1	511	1.0					

Sample Name - Date/Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
Red Pond-03-26-12-14:48-1	501	1.0					

Control Chart for 03/2012 MS/MSD %Recoveries

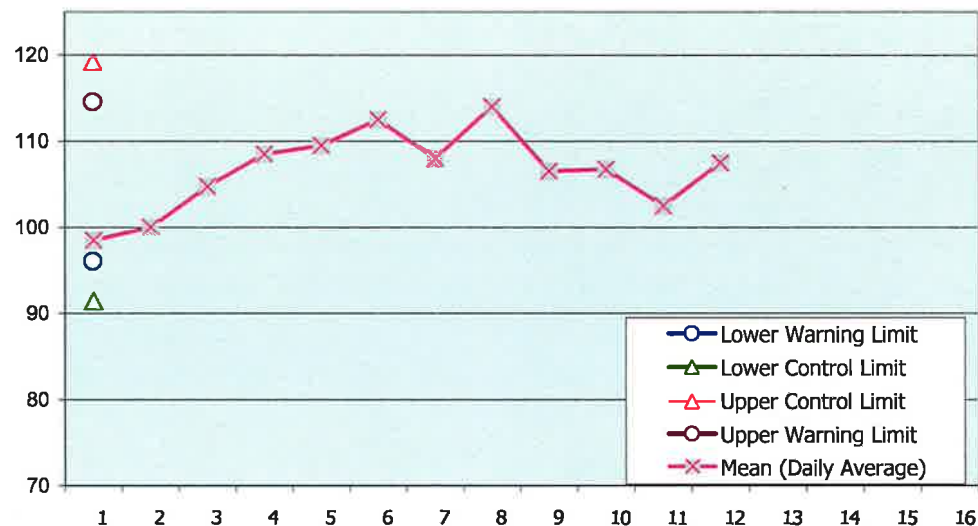
Analyst: SEOP 04-06-12

GC/MS Data: #2
 Report Date: 4/6/2012
 Chemist: Susan E.O. Peters
 Dept: Environmental
 Analyte: 1,4-dioxane
 Start date: 3/1/2012
 End date: 3/31/2012
 Desired level: 100%

EPA LIMITS +/-20%

Date	Matrix Spike % Recovery Values						Mean (Daily Average)	Sample Mean (All Individual Data)	Daily Standard Deviation	Daily Average Sample Standard Deviation	Lower Control Limit	Upper Control Limit	Lower Warning Limit	Upper Warning Limit
	MS 1	MSD 1	MS 2	MSD 2	MS 3	MSD 3								
3/1/2012	100	97					98.50	105.33	5.52	4.61	91.50	119.16	96.11	114.55
3/5/2012	97	99	101	103	99	97	100.00							
3/14/2012	106	114	100	99	100	100	104.75							
3/9/2012	107	110					108.50							
3/15/2012	111	108					109.50							
3/16/2012	115	110					112.50							
3/19/2012	109	107					108.00							
3/20/2012	118	110					114.00							
3/21/2012	105	108					106.50							
3/22/2012	105	112	100	110			106.75							
3/23/2012	103	102					102.50							
3/29/2012	108	108	105	109			107.50							

03/2012 MS/MSD with Control Limits

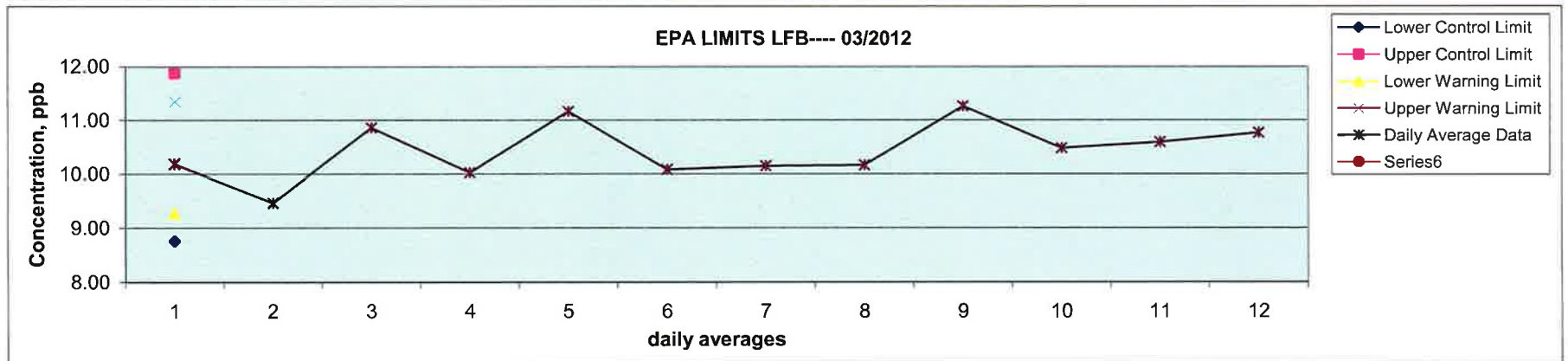


Control Chart for 03/2012 LFB

Analyst: SEOP 04-06-12

GC/MS Data: #2
Report Date: 4/6/2012
Chemist: Susan E.O. Peters
Dept: Environmental
Analyte: 1,4-dioxane
Start date: 3/1/2012
End date: 3/31/2012
Desired level: 100%

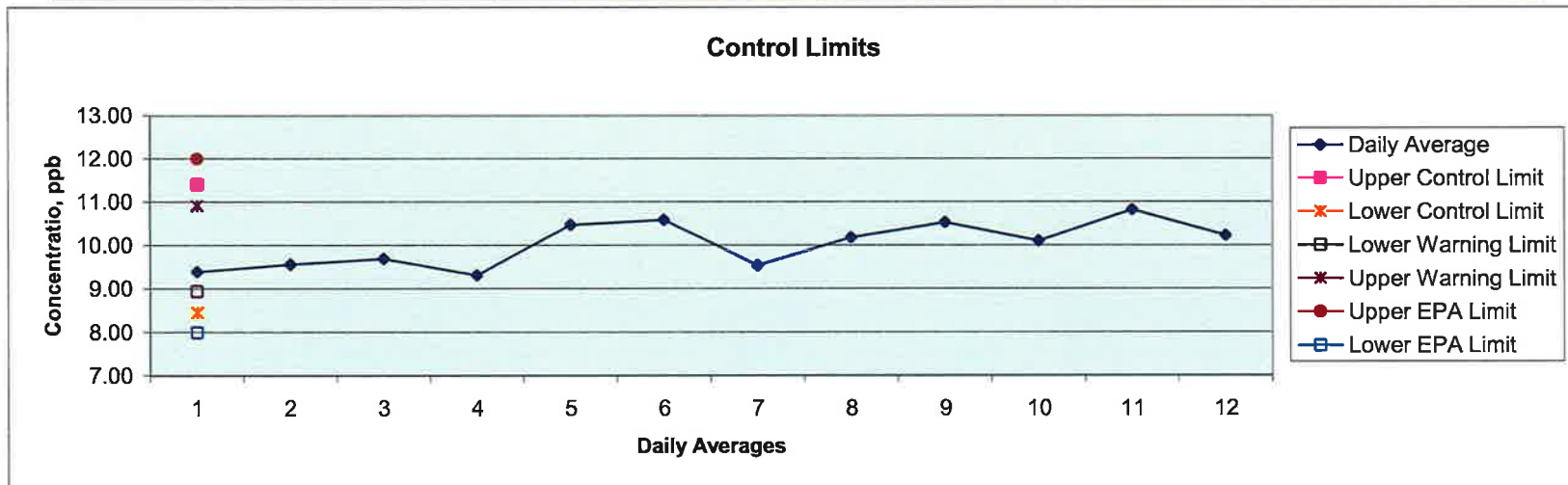
Date	LFB Values							Mean (Daily Average)	Sample Mean (All Individual Data)	Daily Standard Deviation	Daily Average Sample Standard Deviation	Lower Control Limit	Upper Control Limit	Lower Warning Limit	Upper Warning Limit
	LFB 1	LFB 2	LFB 3	LFB 4	LFB 5	LFB 6	LFB 7								
3/1/2012	10.09	10.53	9.93					10.18	10.32	0.31	0.52	8.76	11.88	9.28	11.36
3/5/2012	10.11	10.15	8.99	9.19	9.14	9.40	9.34	9.47	10.32	0.47					
3/14/2012	10.00	11.11	11.43	10.90				10.86	10.32	0.61					
3/9/2012	9.49	10.56						10.03	10.32	0.76					
3/15/2012	11.18	11.15						11.17	10.32	0.02					
3/16/2012	8.82	10.42	11.00					10.08	10.32	1.13					
3/19/2012	9.94	10.36						10.15	10.32	0.30					
3/20/2012	10.67	10.21	9.61					10.16	10.32	0.53					
3/21/2012	11.34	11.44	11.01					11.26	10.32	0.23					
3/22/2012	10.21	10.75						10.48	10.32	0.38					
3/23/2012	10.87	10.32						10.60	10.32	0.39					
3/29/2012	10.55	10.99						10.77	10.32	0.31					



Control Chart for 03/2012 CVS

GC/MS Data: #2
Report Date: 4/6/2012
Chemist: Susan E.O. Peters
Dept: Environmental
Analyte: 1,4-dioxane
Start date: 3/1/2012
End date: 3/31/2012
Desired level: 100%

Date	CVS Values				Mean (Daily Average)	Sample Mean (All Individual Data)	Daily Standard Deviation	Daily Average Sample Standard Deviation	Lower Control Limit	Upper Control Limit	Lower Warning Limit	Upper Warning Limit
	CVS 1	CVS 2	CVS 3	CVS 4								
3/1/2012	9.40	9.38			9.39	9.93	0.01	0.49	8.45	11.41	8.94	10.92
3/5/2012	9.46	9.49	9.74		9.56	9.93	0.15					
3/14/2012	9.34	10.04			9.69	9.93	0.49					
3/9/2012	9.31				9.31	9.93	na					
3/15/2012	10.47				10.47	9.93	na					
3/16/2012	10.59				10.59	9.93	na					
3/19/2012	9.55				9.55	9.93	na					
3/20/2012	10.22	10.14			10.18	9.93	0.06					
3/21/2012	10.53				10.53	9.93	na					
3/22/2012	10.10				10.10	9.93	na					
3/23/2012	10.82				10.82	9.93	na					
3/29/2012	10.23				10.23	9.93	na					

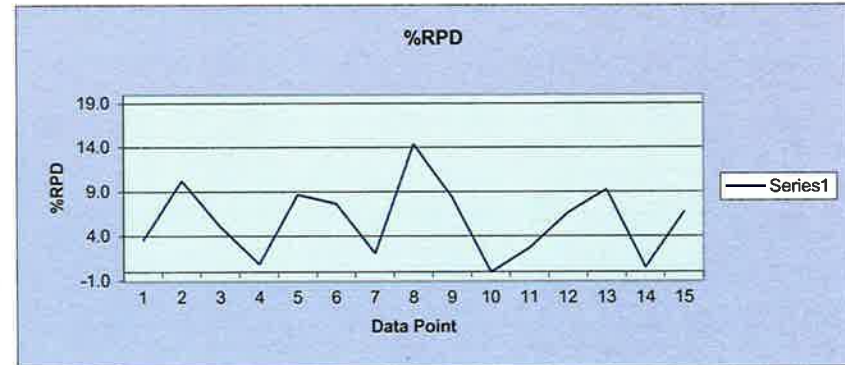
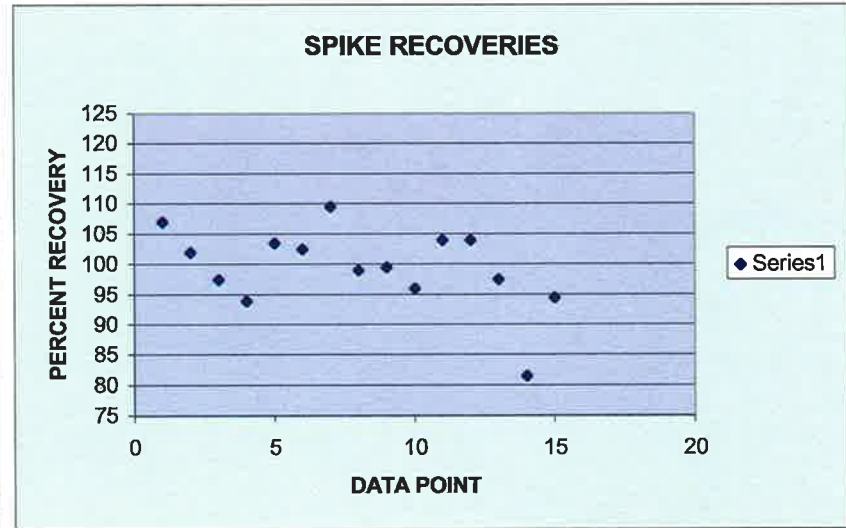


Control Chart for 03/2012 MS/MSD & Repeat %Recoveries

Analyst: SEOP 0406-12

IC: Metrohm
Report Date: 4/6/2012
Chemist: Susan E.O. Peters
Dept: Environmental
Analyte: Bromate
Start date: 3/1/2012
End date: 3/31/2012
Desired level: 100%

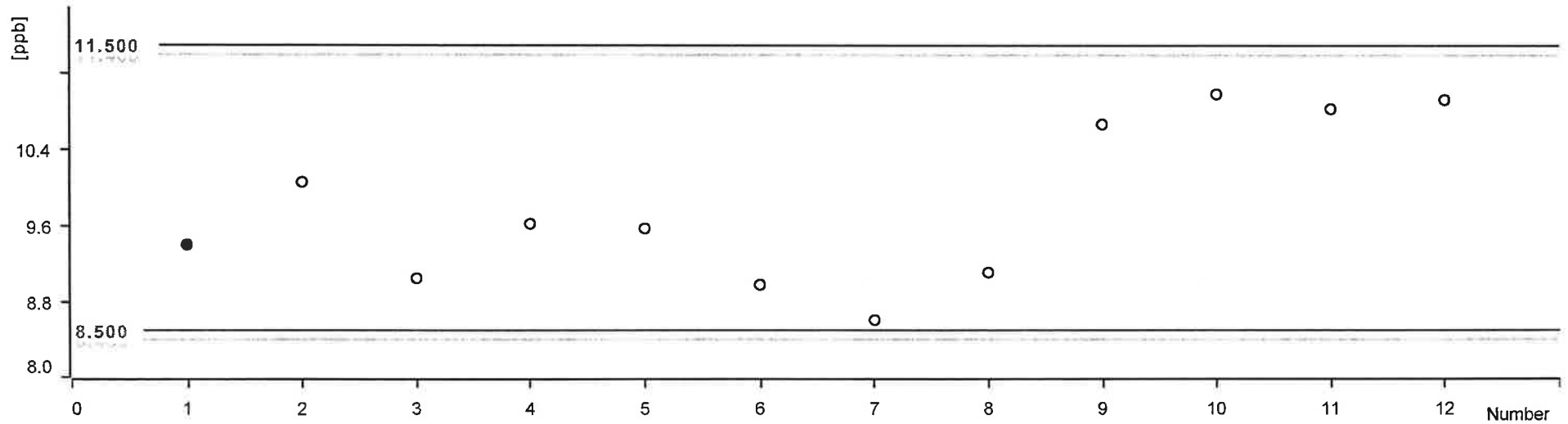
Sample Date	MS Recoveries and Replicate Recoveries							
	Spike 1 ---- % Rec	Spike 2 ----- % Rec	Ave. Spike Recovery (75-125%)	%RPD Spike Recovery (0-20%)	Std. Dev. Spikes	Ave. Sample Replicates	Std. Dev. Sample Replicates	n =
	103	111	107	3.6	5.6	na	na	na
3/6/2012	96	107	102	10	7.8	na	na	na
3/7/2012	92	103	98	5.1	7.8	na	na	na
3/7/2012	93	95	94	0.92	1.4	na	na	na
3/7/2012	99	108	104	8.7	6.4	na	na	na
3/7/2012	106	99	103	7.7	4.9	na	na	na
3/9/2012	108	111	110	2.1	2.1	na	na	na
3/9/2012	92	106	99	14.4	9.9	na	na	na
3/9/2012	107	92	100	8.4	10.6	na	na	na
3/14/2012	96	na	96	na	na	1.65	0.22	3
3/15/2012	102	106	104	2.7	2.8	na	na	na
3/16/2012	111	97	104	6.7	10	na	na	na
3/20/2012	106	89	98	9.3	11.9	na	na	na
3/22/2012	82	81	82	0.51	0.71	8.92	0.92	6
3/29/2012	99	90	95	6.80	6.40	3.39	1.96	2



Control chart

Comment

Bromate QCS concentration, ppb



Statistics

Mean value:	9.821 ppb	Absolute standard deviation:	0.849 ppb
Minimum:	8.610 ppb	Relative standard deviation:	8.643 %
Maximum:	10.988 ppb	Number of determinations:	12

Date	Number	Ident	Sample type	Method	Bromate QCS concentration, ppb	Statistics
2012-03-02 14:56:51 UTC-5	1	QCS	Sample	300.1 03022012	9.408 ppb	on
2012-03-06 18:55:55 UTC-5	2	QCS	Sample	300.1.03052012	10.064 ppb	on
2012-03-08 01:53:26 UTC-5	3	QCS	Sample	300.1 03052012	9.051 ppb	on
2012-03-14 10:32:59 UTC-4	4	QCS	Sample	300.1 03052012	9.627 ppb	on

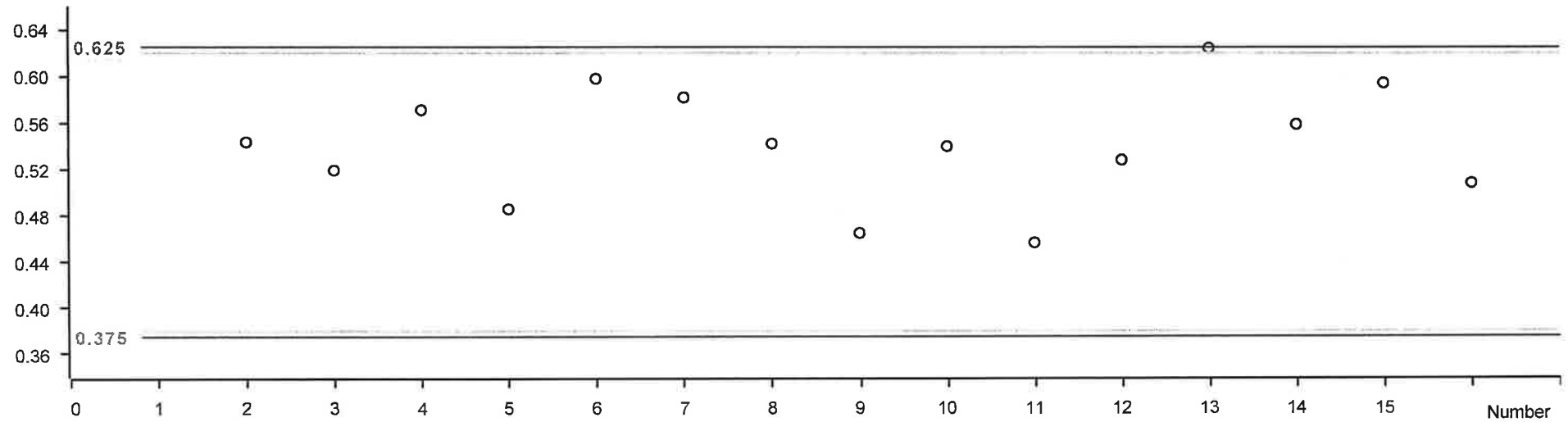
Control chart

Date	Number	Ident	Sample type	Method	Bromate QCS concentration, ppb	Statistics
2012-03-15 01:06:09 UTC-4	5	QCS	Sample	300.1 03052012	9.578 ppb	on
2012-03-15 19:58:44 UTC-4	6	QCS	Sample	300.1 03052012	8.982 ppb	on
2012-03-15 20:36:27 UTC-4	7	QCS	Sample	300.1 03052012	8.610 ppb	on
2012-03-16 20:28:49 UTC-4	8	QCS	Sample	300.1 03052012	9.114 ppb	on
2012-03-23 15:19:52 UTC-4	9	QCS	Sample	300.1 03232012	10.672 ppb	on
2012-03-27 02:32:19 UTC-4	10	QCS	Sample	300.1 03232012	10.988 ppb	on
2012-03-28 04:38:18 UTC-4	11	QCS	Sample	300.1 03232012	10.833 ppb	on
2012-03-30 20:49:01 UTC-4	12	QCS	Sample	300.1 03232012	10.929 ppb	on

Control chart

Comment

ICCS/LFB concentration, ppb



Statistics

Mean value:	0.541	Absolute standard deviation:	0.049
Minimum:	0.456	Relative standard deviation:	9.040 %
Maximum:	0.624	Number of determinations:	15

Date	Number	Ident	Sample type	Method	ICCS/LFB concentration, ppb	Statistics
2012-03-05 11:07:02 UTC-5	1	ICCS/LFB	Sample	300.1 03022012		on
2012-03-06 08:50:16 UTC-5	2	ICCS/LFB	Sample	300.1 03052012	0.544 ppb	on
2012-03-07 15:09:29 UTC-5	3	ICCS/LFB	Sample	300.1 03052012	0.519 ppb	on
2012-03-09 09:01:42 UTC-5	4	ICCS/LFB	Sample	300.1 03052012	0.571 ppb	on

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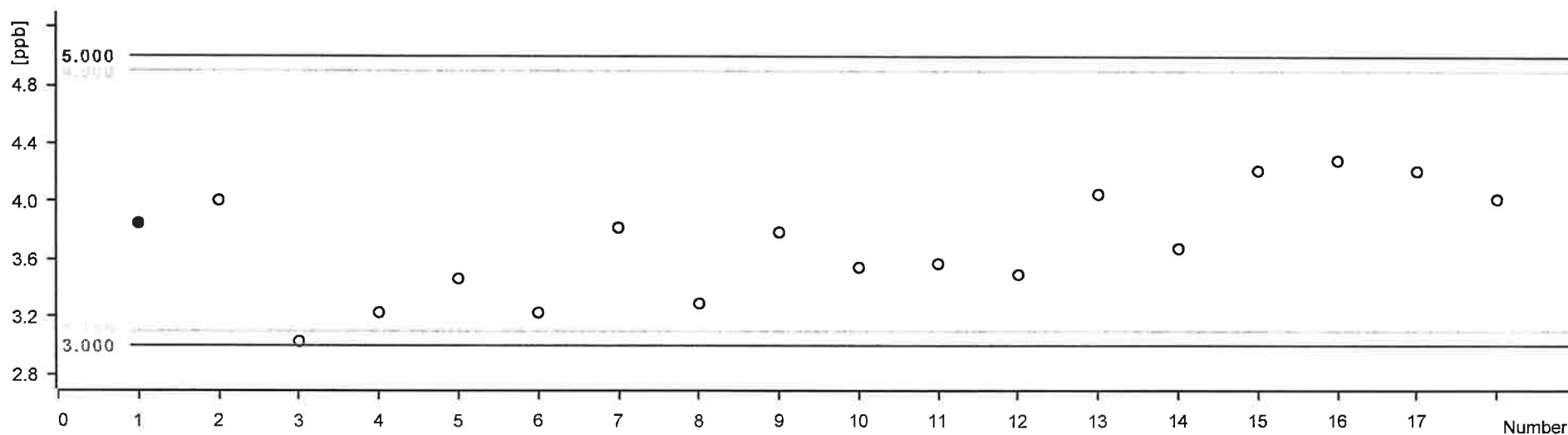
Control chart

	Date	Number	Ident	Sample type	Method	ICCS/LFB concentration, ppb	Statistics
5	2012-03-14 14:20:44 UTC-4	5	ICCS/LFB	Sample	300.1 03052012	0.486 ppb	on
6	2012-03-15 14:19:17 UTC-4	6	ICCS/LFB	Sample	300.1 03052012	0.598 ppb	on
7	2012-03-16 14:11:40 UTC-4	7	ICCS	Sample	300.1 03052012	0.581 ppb	on
8	2012-03-20 11:31:36 UTC-4	8	ICCS/LFB	Sample	300.1 03052012	0.542 ppb	on
9	2012-03-20 12:09:18 UTC-4	9	ICCS/LFB	Sample	300.1 03052012	0.465 ppb	on
10	2012-03-21 10:17:22 UTC-4	10	ICCS/LFB	Sample	300.1 03052012	0.540 ppb	on
11	2012-03-21 10:55:05 UTC-4	11	ICCS/LFB	Sample	300.1 03052012	0.456 ppb	on
12	2012-03-22 09:49:51 UTC-4	12	ICCS/LFB	Sample	300.1 03052012	0.528 ppb	on
13	2012-03-26 15:51:25 UTC-4	13	ICCS/LFB	Sample	300.1 03232012	0.624 ppb	on
14	2012-03-27 15:26:20 UTC-4	14	ICCS/LFB	Sample	300.1 03232012	0.559 ppb	on
15	2012-03-29 14:00:59 UTC-4	15	ICCS/LFB	Sample	300.1 03232012	0.594 ppb	on
16	2012-03-30 06:59:13 UTC-4	16	ICCS/LFB	Sample	300.1 03232012	0.508 ppb	on

Control chart

Comment

ECCS. CCCS Bromate std 4ppb



Statistics

Mean value:	3.709 ppb	Absolute standard deviation:	0.379 ppb
Minimum:	3.028 ppb	Relative standard deviation:	10.212 %
Maximum:	4.283 ppb	Number of determinations:	18

Date	Number	Ident	Sample type	Method	ECCS. CCCS Bromate std 4ppb	Statistics
1 2012-03-06 18:18:03 UTC-5	1	ECCS/CCCS	Sample	300.1 03052012	3.851 ppb	on
2 2012-03-08 01:15:31 UTC-5	2	ECCS/CCCS	Sample	300.1 03052012	4.008 ppb	on
3 2012-03-09 20:24:00 UTC-5	3	ECCS/CCCS	Sample	300.1 03052012	3.028 ppb	on
4 2012-03-15 00:28:03 UTC-4	4	ECCS/CCCS	Sample	300.1 03052012	3.227 ppb	on

Control chart

Date	Number	Ident	Sample type	Method	ECCS. CCCS Bromate std 4ppb	Statistics
2012-03-15 18:43:20 UTC-4	5	ECCS/CCCS	Sample	300.1 03052012	3.464 ppb	on
2012-03-16 19:13:24 UTC-4	6	ECCS/CCCS	Sample	300.1 03052012	3.226 ppb	on
2012-03-16 19:51:07 UTC-4	7	ECCS/CCCS	Sample	300.1 03052012	3.819 ppb	on
2012-03-21 01:59:00 UTC-4	8	ECCS/CCCS	Sample	300.1 03052012	3.291 ppb	on
2012-03-21 02:36:43 UTC-4	9	ECCS/CCCS	Sample	300.1 03052012	3.787 ppb	on
2012-03-21 20:08:16 UTC-4	10	ECCS/CCCS	Sample	300.1 03052012	3.543 ppb	on
2012-03-21 20:46:00 UTC-4	11	ECCS/CCCS	Sample	300.1 03052012	3.570 ppb	on
2012-03-22 21:46:35 UTC-4	12	ECCS/CCCS	Sample	300.1 03052012	3.494 ppb	on
2012-03-27 01:54:36 UTC-4	13	ECCS/CCCS	Sample	300.1 03232012	4.051 ppb	on
2012-03-28 03:22:52 UTC-4	14	ECCS/CCCS	Sample	300.1 03232012	3.676 ppb	on
2012-03-28 04:00:35 UTC-4	15	ECCS/CCCS	Sample	300.1 03232012	4.213 ppb	on
2012-03-30 04:28:22 UTC-4	16	ECCS/CCCS	Sample	300.1 03232012	4.283 ppb	on
2012-03-30 19:33:36 UTC-4	17	ECCS/CCCS	Sample	300.1 03232012	4.213 ppb	on
2012-03-30 20:11:20 UTC-4	18	ECCS/CCCS	Sample	300.1 03232012	4.021 ppb	on