



Pall Corporation

# Sample Analysis Report

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April, 2013

Analyst Initials: SEOP  
Date: 05-08-13

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	Qualifier(s)
<b>Residential Wells</b>								
<b>Not Determined</b>								
697 South Wagner Rd-04-17-13-11:10-1	nd	1.0						
<b>Extraction Wells</b>								
<b>C3</b>								
DOLPH-04-01-13-13:34-1	75	5.0						D
TW-20-04-01-13-13:45-1	860	100.0						D
<b>D2</b>								
LB-1-04-01-13-07:30-1	634	100.0						D
LB-3-04-01-13-07:31-1	416	100.0						D
TW-21-04-01-13-07:40-1	162	25.0						D
TW-5-04-01-13-13:13-1	978	100.0						D
TW-9-04-01-13-13:51-1	751	100.0						D
<b>E</b>								
TW-11-04-01-13-13:16-1	226	25.0						D
TW-18-04-01-13-11:57-1	244	50.0						D
TW-19-04-01-13-07:32-1	906	100.0						D
<b>Marshy</b>								
PW-1-04-18-13-07:45-1	380	10.0						D
<b>Not Applicable</b>								

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	Qualifier(s)
SW-COMB-04-01-13-13:37-1	556	50.0						D
<b>SW</b>								
TW-22-04-01-13-13:27-1	603	100.0						D
TW-8-04-01-13-14:16-1	484	50.0						D
<b>Monitoring Wells</b>								
<b>C3</b>								
MW-128s-04-01-13-11:40-1	nd	1.0						
MW-28-04-01-13-13:00-1	nd	1.0						
<b>D0</b>								
A2 Cleaning Supply-04-10-13-14:30-1	69	6.25						D
<b>D2</b>								
MW-120s-04-03-13-11:10-1	nd	1.0						
MW-123s-04-12-13-14:10-1	nd	1.0						
MW-124s-04-03-13-12:10-1	nd	1.0						
MW-133i-04-04-13-13:30-1	2	1.0						
MW-133s-04-04-13-13:50-1	2	1.0						
MW-134i-04-05-13-14:20-1	8	1.0						
MW-134s-04-05-13-14:40-1	8	1.0						
MW-47d-04-03-13-13:55-1	nd	1.0						
MW-47s-04-03-13-13:30-1	nd	1.0						
MW-56s-04-01-13-10:45-1	71	10.0						D
MW-62i-04-01-13-09:30-1	nd	1.0						
MW-62s-04-01-13-09:07-1	nd	1.0						
MW-63i-04-01-13-08:50-1	nd	1.0						
MW-63s-04-01-13-08:20-1	nd	1.0						
<b>E</b>								

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	Qualifier(s)
IW-2-04-08-13-12:30-1	942	10.0						D
MW-103d-04-29-13-14:05-1	12	1.0						
MW-103s-04-29-13-13:05-1	82	1.0						
MW-112i-04-12-13-11:05-1	8	1.0						
MW-115-04-15-13-12:05-1	603	100.0						D
MW-116-04-15-13-11:25-1	479	100.0						D
MW-121d-04-03-13-10:20-1	nd	1.0						
MW-124d-04-03-13-12:10-1	nd	1.0						
MW-128d-04-01-13-12:40-1	nd	1.0						
MW-131d-04-03-13-09:20-1	nd	1.0						
MW-133d-04-04-13-14:40-1	2	1.0						
MW-134d-04-05-13-13:45-1	6	1.0						
MW-62d-04-01-13-10:15-1	nd	1.0						
MW-68-04-10-13-11:15-1	nd	1.0						
MW-72s-04-09-13-09:35-1	6	1.0						
MW-76s-04-12-13-11:30-1	242	5.0						D
MW-79d-04-12-13-10:10-1	36	1.0						
MW-79s-04-15-13-09:25-1	624	100.0						D
MW-83s-04-15-13-10:30-1	258	25.0						D
MW-84s-04-15-13-10:00-1	468	100.0						D
<b>Marshy</b>								
NMW-1s-04-05-13-09:45-1	1216	100.0						D
NMW-2s-04-05-13-10:00-1	1974	200.0						D
<b>Surface Water</b>								
<b>Not Applicable</b>								
HC/HR-04-01-13-07:10-1				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	Qualifier(s)
HC/HR-04-02-13-07:40-1			nd	2.0				
HC/HR-04-03-13-07:30-1			nd	2.0				
HC/HR-04-04-13-08:20-1			nd	2.0				
HC/HR-04-05-13-08:35-1			nd	2.0				
HC/HR-04-08-13-07:45-1			nd	2.0				
HC/HR-04-09-13-08:25-1			nd	2.0				
HC/HR-04-10-13-08:10-1			nd	2.0				
HC/HR-04-11-13-08:25-1			nd	2.0				
HC/HR-04-12-13-08:25-1			nd	2.0				
HC/HR-04-15-13-07:55-1			nd	2.0				
HC/HR-04-16-13-07:45-1			nd	2.0				
HC/HR-04-17-13-08:15-1			nd	2.0				
HC/HR-04-18-13-08:10-1			nd	2.0				
HC/HR-04-19-13-08:15-1			nd	2.0				
HC/HR-04-22-13-08:05-1			nd	2.0				
HC/HR-04-23-13-08:20-1			nd	2.0				
HC/HR-04-24-13-08:50-1			nd	2.0				
HC/HR-04-25-13-08:30-1			nd	2.0				
HC/HR-04-26-13-07:55-1			nd	2.0				
HC/HR-04-29-13-08:10-1			nd	2.0				
HC/HR-04-30-13-08:05-1			nd	2.0				
<b>Treatment System</b>								
OUTFALL-04-01-13-1	4	1.0						
OUTFALL-04-01-13-2			nd	5.0				
OUTFALL-04-02-13-1	4	1.0						
OUTFALL-04-02-13-2			nd	5.0				
OUTFALL-04-03-13-1	5	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	Qualifier(s)
OUTFALL-04-03-13-2			nd	5.0				
OUTFALL-04-04-13-1	5	1.0						
OUTFALL-04-04-13-2			nd	5.0				
OUTFALL-04-07-13-1	4	1.0						
OUTFALL-04-07-13-2			nd	5.0				
OUTFALL-04-08-13-1	3	1.0						
OUTFALL-04-08-13-2			nd	5.0				
OUTFALL-04-09-13-1	3	1.0						
OUTFALL-04-09-13-2			6	5.0				
OUTFALL-04-10-13-1	3	1.0						
OUTFALL-04-10-13-2			6	5.0				
OUTFALL-04-11-13-1	4	1.0						
OUTFALL-04-11-13-2			nd	5.0				
OUTFALL-04-14-13-1	3	1.0						
OUTFALL-04-14-13-2			nd	5.0				
OUTFALL-04-15-13-1	3	1.0						
OUTFALL-04-15-13-2			nd	5.0				
OUTFALL-04-16-13-1	5	1.0						
OUTFALL-04-16-13-2			nd	5.0				
OUTFALL-04-17-13-1	5	1.0						
OUTFALL-04-17-13-2			nd	5.0				
OUTFALL-04-18-13-1	4	1.0						
OUTFALL-04-18-13-2			7	5.0				
OUTFALL-04-21-13-1	3	1.0						
OUTFALL-04-21-13-2			nd	5.0				
OUTFALL-04-22-13-1	4	1.0						
OUTFALL-04-22-13-2			nd	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	Qualifier(s)
OUTFALL-04-23-13-1	4	1.0						
OUTFALL-04-23-13-2			7	5.0				
OUTFALL-04-24-13-1	3	1.0						
OUTFALL-04-24-13-2			6	5.0				
OUTFALL-04-25-13-1	4	1.0						
OUTFALL-04-25-13-2			nd	5.0				
OUTFALL-04-28-13-1	5	1.0						
OUTFALL-04-28-13-2			6	5.0				
OUTFALL-04-29-13-1	4	1.0						
OUTFALL-04-29-13-2			6	5.0				
OUTFALL-04-30-13-1	3	1.0						
OUTFALL-04-30-13-2			5	5.0				
Red Pond-04-01-13-07:20-1	482	25.0						D
Red Pond-04-08-13-07:20-1	452	20.0						D
Red Pond-04-15-13-07:15-1	453	25.0						D
Red Pond-04-22-13-07:30-1	500	25.0						D
Red Pond-04-29-13-08:40-1	530	10.0						D

**Qualifier Code:** \_\_\_\_\_ **Qualifier Description** \_\_\_\_\_

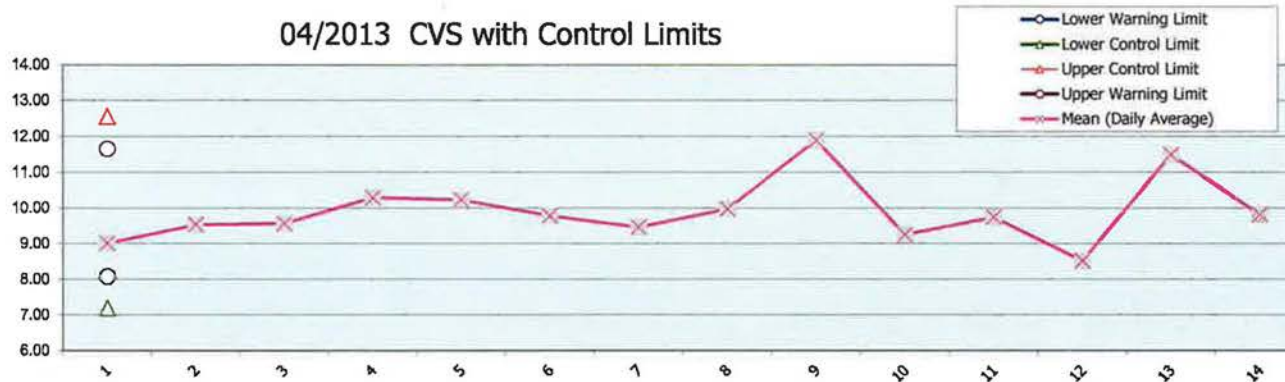
**D** Analyte value quantified from a dilution, reporting limit is raised to reflect dilution

# Control Chart for 04/2013 CVS

Analyst: Susan E.O. Peters 05-08-13

**GC/MS Data:** #2  
**Report Date:** 5/8/2013  
**Chemist:** Susan E.O. Peters  
**Dept:** Environmental  
**Analyte:** 1,4-dioxane  
**Start date:** 4/1/2013  
**End date:** 4/30/2013  
**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								
4/2/2013	8.33	9.97	8.77		9.02	9.88	0.85	0.89	7.20	12.56	8.09	11.67
4/5/2013	9.34	9.74			9.54	9.88	0.28					
4/8/2013	9.93	8.84	9.96		9.58	9.88	0.64					
4/9/2013	10.14	10.46			10.30	9.88	0.23					
4/12/2013	9.98	10.5			10.24	9.88	0.37					
4/16/2013	9.48	10.1			9.79	9.88	0.44					
4/17/2013	9.47				9.47	9.88	na					
4/18/2013	9.98				9.98	9.88	na					
4/19/2013	11.9				11.90	9.88	na					
4/22/2013	9.26				9.26	9.88	na					
4/24/2013	9.75				9.75	9.88	na					
4/26/2013	8.52				8.52	9.88	na					
4/30/2013	11.9	11.1			11.50	9.88	0.57					
5/3/2013	9.75	9.90			9.83	9.88	0.11					

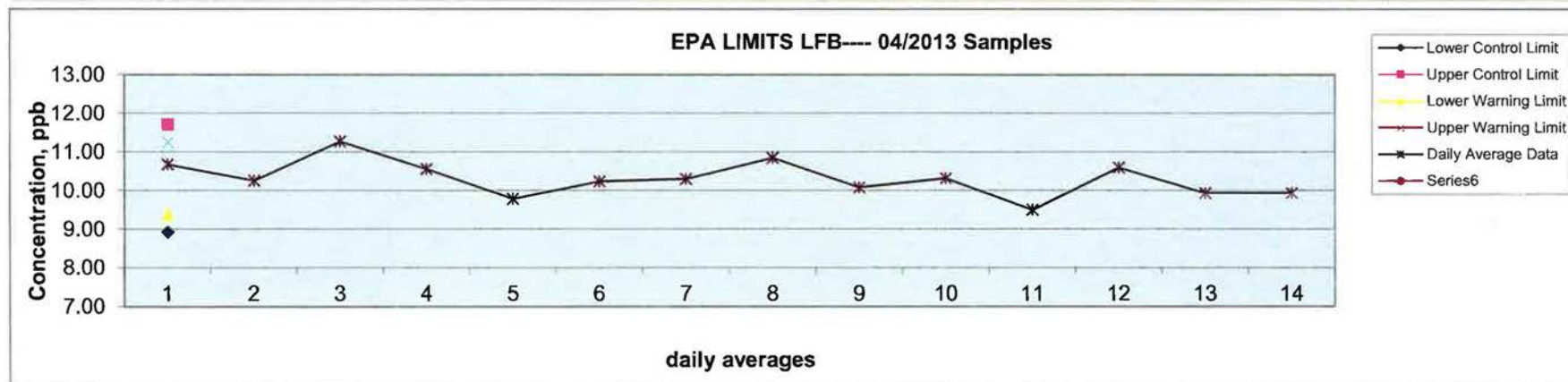


# Control Chart for 4/2013 LFB

Analyst: Susan E.O. Peters 05-08-13

**GC/MS Data:** #2  
**Report Date:** 5/8/2013  
**Chemist:** Susan E.O. Peters  
**Dept:** Environmental  
**Analyte:** 1,4-dioxane  
**Start date:** 4/1/2013  
**End date:** 4/30/2013  
**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								
4/2/2013	9.73	11.8	10.3	10.9			10.68	10.32	0.89	0.46	8.93	11.70	9.39	11.24
4/5/2013	9.38	10.9	10.5				10.26	10.32	0.79					
4/8/2013	10.8	11.6	11.6	11.1			11.28	10.32	0.39					
4/9/2013	9.95	11.4	9.5	11.4			10.56	10.32	0.98					
4/12/2013	8.51	10.8	11.0	8.84			9.79	10.32	1.29					
4/16/2013	9.98	10.5					10.24	10.32	0.37					
4/17/2013	10.1	10.4	10.4				10.30	10.32	0.17					
4/18/2013	11.4	10.3					10.85	10.32	0.78					
4/19/2013	9.5	10.3	10.4				10.08	10.32	0.47					
4/22/2013	10.2	9.96	10.8				10.32	10.32	0.43					
4/24/2013	8.90	10.1					9.50	10.32	0.85					
4/26/2013	11.3	9.90					10.60	10.32	0.99					
4/30/2013	9.9	12.0	9.3	9.2	9.3		9.93	10.32	1.18					
5/3/2013	10.1	9.52	10.2				9.94	10.32	0.37					





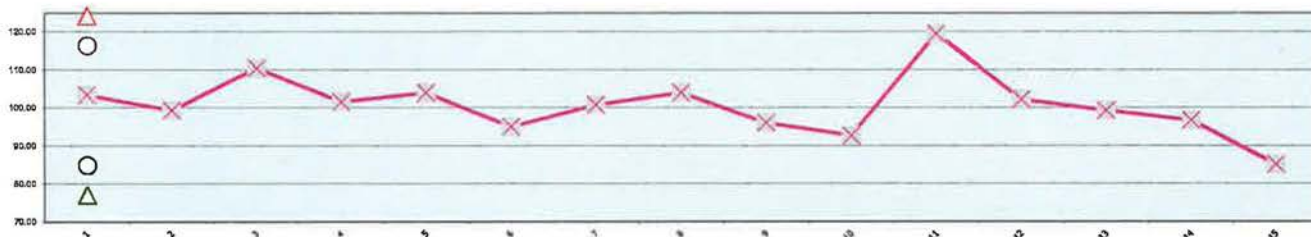
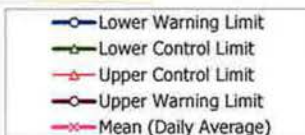
# Control Chart for 04/2013 MS/MSD %Recoveries

Analyst: Susan E.O. Peters 05-08-13

GC/MS Data: #2  
 Report Date: 5/8/2013  
 Chemist: Susan E.O. Peters  
 Dept: Environmental  
 Analyte: 1,4-dioxane  
 Start date: 4/1/2013  
 End date: 4/30/2013  
 Desired level: 100%

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	Mean RPD (Individual Data)
	MS 1	MSD 1	MS 2	MSD 2	MS 3	MSD 3									
4/2/2013	91	115	100	108			103.43	100.69	11.83	7.85	77.14	124.23	84.99	116.38	100.69
4/5/2013	105	112	101	79			99.33								
4/8/2013	102	119					110.50								
4/9/2013	94	110					101.60								
4/12/2013	92	116					104.00								
4/16/2013	93	97					95.00								
4/17/2013	103	99					100.80								
4/18/2013	104	104					104.00								
4/19/2013	111	81					96.00								
4/22/2013	88	98					92.65								
4/24/2013	117	122					119.50								
4/26/2013	109	96					102.25								
4/30/2013	117	108	77	95			99.34								
5/3/2013	90	103					96.75								
5/6/2013	90	80					85.15								

04/2013 MS/MSD with Control Limits

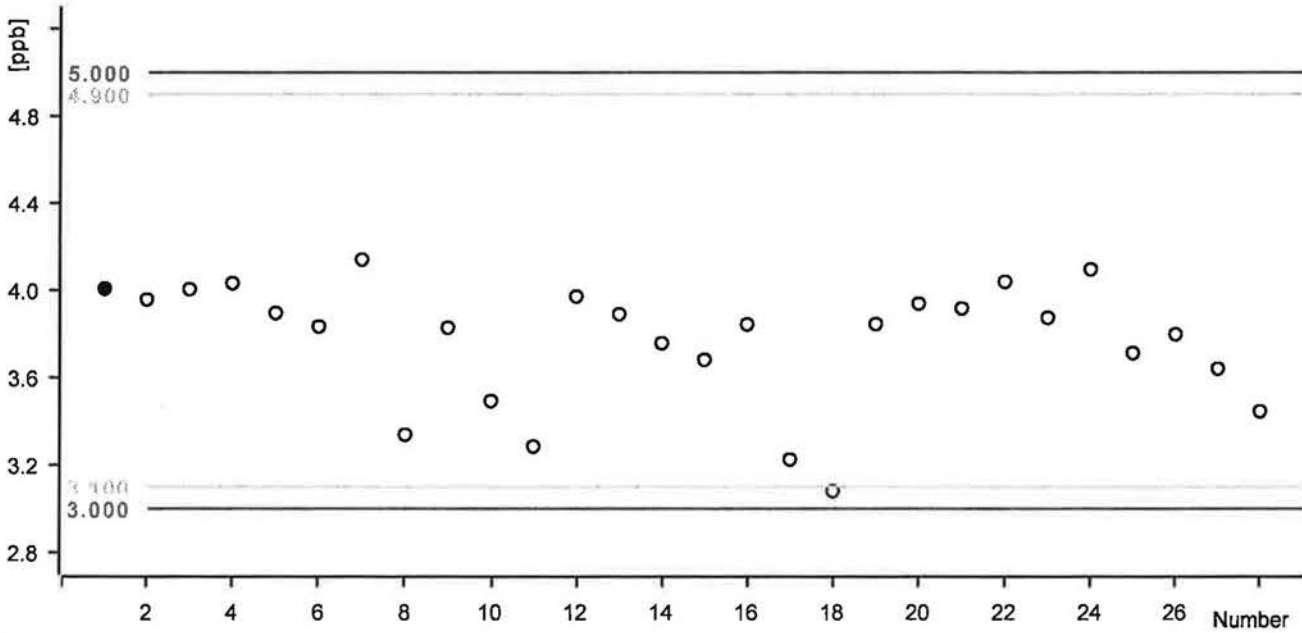


# Control chart

SEOP - 4ppb ECCS

## Comment

### ECCS. CCCS Bromate std 4ppb



## Statistics

Mean value:	3.769 ppb	Absolute standard deviation:	0.278 ppb
Minimum:	3.080 ppb	Relative standard deviation:	7.370 %
Maximum:	4.139 ppb	Number of determinations:	28

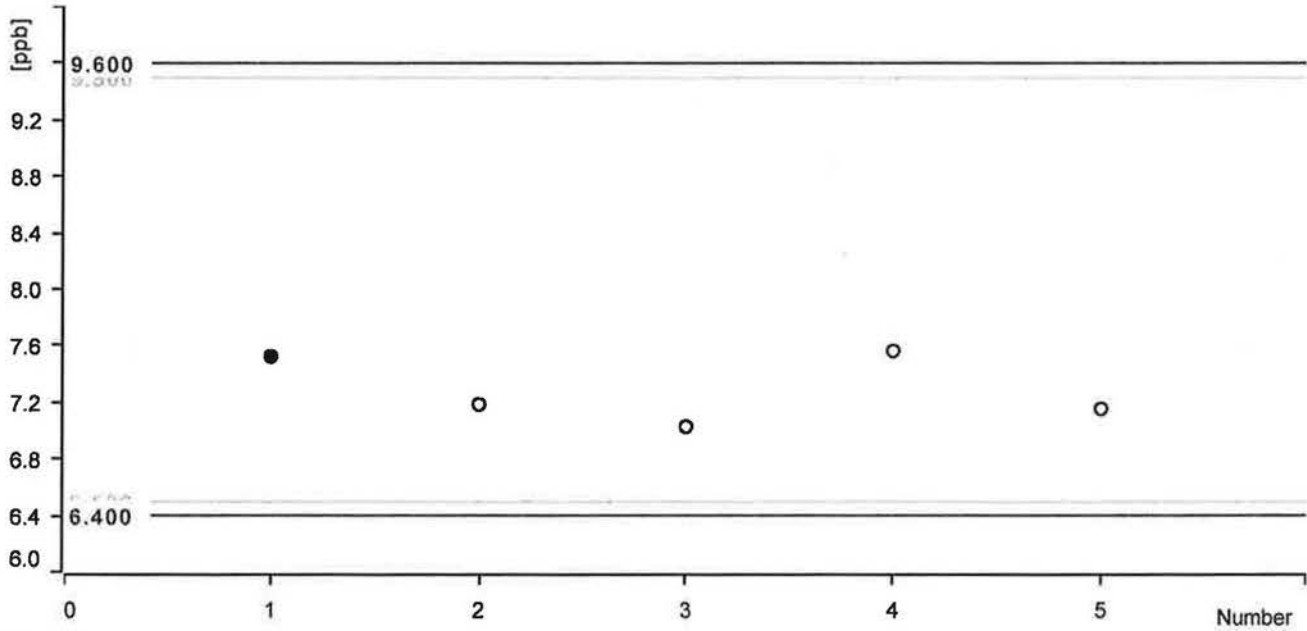
Date	Number	Ident	Sample type	Method	ECCS. CCCS Bromate std 4ppb	Statistics
2013-04-02 18:08:29 UTC-4	1	ECCS/CCCS	Sample	02122013 300.1A	4.007 ppb	on
2013-04-02 18:46:13 UTC-4	2	ECCS/CCCS	Sample	02122013 300.1A	3.958 ppb	on
2013-04-03 15:27:24 UTC-4	3	ECCS/CCCS	Sample	02122013 300.1A	4.004 ppb	on
2013-04-03 16:05:07 UTC-4	4	ECCS/CCCS	Sample	02122013 300.1A	4.032 ppb	on
2013-04-04 13:55:16 UTC-4	5	ECCS/CCCS	Sample	02122013 300.1A	3.895 ppb	on
2013-04-04 14:32:59 UTC-4	6	ECCS/CCCS	Sample	02122013 300.1A	3.833 ppb	on
2013-04-05 14:22:11 UTC-4	7	ECCS/CCCS	Sample	02122013 300.1A	4.139 ppb	on
2013-04-08 21:50:09 UTC-4	8	ECCS/CCCS	Sample	02122013 300.1A	3.338 ppb	on
2013-04-08 22:27:52 UTC-4	9	ECCS/CCCS	Sample	02122013 300.1A	3.827 ppb	on
2013-04-09 14:42:27 UTC-4	10	ECCS/CCCS	Sample	02122013 300.1A	3.491 ppb	on
2013-04-09 15:20:10 UTC-4	11	ECCS/CCCS	Sample	02122013 300.1A	3.285 ppb	on
2013-04-09 18:00:37 UTC-4	12	ECCS/CCCS	Sample	02122013 300.1A	3.971 ppb	on
2013-04-11 00:53:59 UTC-4	13	ECCS/CCCS	Sample	02122013 300.1A	3.889 ppb	on
2013-04-11 18:56:03 UTC-4	14	ECCS/CCCS	Sample	02122013 300.1A	3.755 ppb	on
2013-04-11 19:33:46 UTC-4	15	ECCS/CCCS	Sample	02122013 300.1A	3.680 ppb	on
2013-04-12 18:59:20 UTC-4	16	ECCS/CCCS	Sample	02122013 300.1A	3.842 ppb	on
2013-04-18 20:35:41 UTC-4	17	ECCS/CCCS	Sample	02122013 300.1A	3.224 ppb	on
2013-04-18 21:13:28 UTC-4	18	ECCS/CCCS	Sample	02122013 300.1A	3.080 ppb	on
2013-04-20 00:30:19 UTC-4	19	ECCS/CCCS	Sample	04172013 300.1	3.843 ppb	on
2013-04-20 01:08:04 UTC-4	20	ECCS/CCCS	Sample	04172013 300.1	3.937 ppb	on
2013-04-22 17:28:31 UTC-4	21	ECCS/CCCS	Sample	04172013 300.1	3.915 ppb	on
2013-04-22 18:06:17 UTC-4	22	ECCS/CCCS	Sample	04172013 300.1	4.038 ppb	on
2013-04-23 14:18:41 UTC-4	23	ECCS/CCCS	Sample	04172013 300.1	3.873 ppb	on
2013-04-23 17:50:45 UTC-4	24	ECCS/CCCS	Sample	04172013 300.1	4.095 ppb	on
2013-04-24 20:26:24 UTC-4	25	ECCS/CCCS	Sample	04172013 300.1	3.711 ppb	on
2013-04-24 21:04:08 UTC-4	26	ECCS/CCCS	Sample	04172013 300.1	3.797 ppb	on
2013-04-25 14:47:54 UTC-4	27	ECCS/CCCS	Sample	04172013 300.1	3.639 ppb	on
2013-04-26 14:58:40 UTC-4	28	ECCS/CCCS	Sample	04172013 300.1	3.445 ppb	on

# Control chart

SEOP @ppb ECCS

## Comment

### Bromate 8 PPB concentration



## Statistics

Mean value:	7.290 ppb	Absolute standard deviation:	0.239 ppb
Minimum:	7.026 ppb	Relative standard deviation:	3.273 %
Maximum:	7.562 ppb	Number of determinations:	5

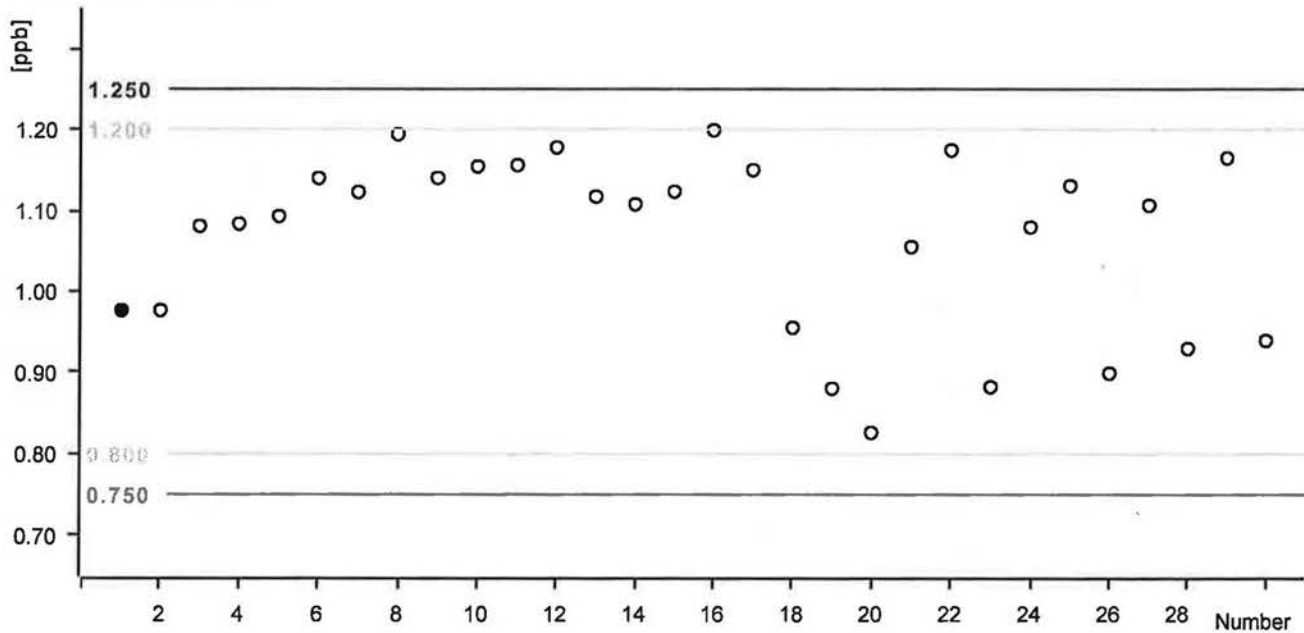
Date	Number	Ident	Sample type	Method	Bromate 8 PPB concentration	Statistics
2013-04-29 13:01:49 UTC-4	1	ECCS/CCCS	Sample	04172013 300.1	7.522 ppb	on
2013-04-29 16:10:28 UTC-4	2	ECCS/CCCS	Sample	04172013 300.1	7.185 ppb	on
2013-04-30 20:12:50 UTC-4	3	ECCS/CCCS	Sample	04172013 300.1	7.026 ppb	on
2013-04-30 20:50:33 UTC-4	4	ECCS/CCCS	Sample	04172013 300.1	7.562 ppb	on
2013-05-02 15:05:26 UTC-4	5	ECCS/CCCS	Sample	04172013 300.1	7.153 ppb	on

# Control chart

SEOP

## Comment

### ppb Bromate Concentration ICCS



## Statistics

Mean value:	1.067 ppb	Absolute standard deviation:	0.108 ppb
Minimum:	0.826 ppb	Relative standard deviation:	10.108 %
Maximum:	1.199 ppb	Number of determinations:	30

Date	Number	Ident	Sample type	Method	ppb Bromate Concentration ICCS	Statistics
2013-04-02 09:20:21 UTC-4	1	ICCS/LFB	Sample	02122013 300.1A	0.976 ppb	on
2013-04-02 10:35:48 UTC-4	2	ICCS/LFB	Sample	02122013 300.1A	0.976 ppb	on
2013-04-03 10:25:37 UTC-4	3	ICCS/LFB	Sample	02122013 300.1A	1.080 ppb	on
2013-04-03 11:03:23 UTC-4	4	ICCS/LFB	Sample	02122013 300.1A	1.083 ppb	on
2013-04-04 08:53:31 UTC-4	5	ICCS/LFB	Sample	02122013 300.1A	1.093 ppb	on
2013-04-04 09:31:15 UTC-4	6	ICCS/LFB	Sample	02122013 300.1A	1.140 ppb	on
2013-04-05 08:42:43 UTC-4	7	ICCS/LFB	Sample	02122013 300.1A	1.123 ppb	on
2013-04-05 09:20:27 UTC-4	8	ICCS/LFB	Sample	02122013 300.1A	1.184 ppb	on
2013-04-08 13:02:09 UTC-4	9	ICCS/LFB	Sample	02122013 300.1A	1.140 ppb	on
2013-04-08 13:39:52 UTC-4	10	ICCS/LFB	Sample	02122013 300.1A	1.155 ppb	on
2013-04-09 07:47:25 UTC-4	11	ICCS/LFB	Sample	02122013 300.1A	1.156 ppb	on
2013-04-09 08:25:08 UTC-4	12	ICCS/LFB	Sample	02122013 300.1A	1.178 ppb	on
2013-04-10 14:50:25 UTC-4	13	ICCS/LFB	Sample	02122013 300.1A	1.117 ppb	on
2013-04-10 15:28:09 UTC-4	14	ICCS/LFB	Sample	02122013 300.1A	1.108 ppb	on
2013-04-11 09:26:30 UTC-4	15	ICCS/LFB	Sample	02122013 300.1A	1.123 ppb	on
2013-04-12 08:35:48 UTC-4	16	ICCS/LFB	Sample	02122013 300.1A	1.199 ppb	on
2013-04-12 09:13:31 UTC-4	17	ICCS/LFB	Sample	02122013 300.1A	1.150 ppb	on
2013-04-16 13:40:34 UTC-4	18	ICCS/LFB	Sample	02122013 300.1A	0.955 ppb	on
2013-04-18 18:35:44 UTC-4	19	ICCS/LFB	Sample	04172013 300.1	0.880 ppb	on
2013-04-18 17:13:28 UTC-4	20	ICCS/LFB	Sample	04172013 300.1	0.826 ppb	on
2013-04-26 10:34:38 UTC-4	21	ICCS/LFB	Sample	04172013 300.1	1.055 ppb	on
2013-04-28 11:12:22 UTC-4	22	ICCS/LFB	Sample	04172013 300.1	1.174 ppb	on
2013-04-29 08:21:30 UTC-4	23	ICCS/LFB	Sample	04172013 300.1	0.882 ppb	on
2013-04-29 08:59:14 UTC-4	24	ICCS/LFB	Sample	04172013 300.1	1.079 ppb	on
2013-04-30 15:48:46 UTC-4	25	ICCS/LFB	Sample	04172013 300.1	1.130 ppb	on
2013-04-30 16:28:29 UTC-4	26	ICCS/LFB	Sample	04172013 300.1	0.899 ppb	on
2013-05-01 09:21:59 UTC-4	27	ICCS/LFB	Sample	04172013 300.1	1.107 ppb	on
2013-05-01 09:59:42 UTC-4	28	ICCS/LFB	Sample	04172013 300.1	0.929 ppb	on
2013-05-02 08:48:11 UTC-4	29	ICCS/LFB	Sample	04172013 300.1	1.165 ppb	on

## Control chart

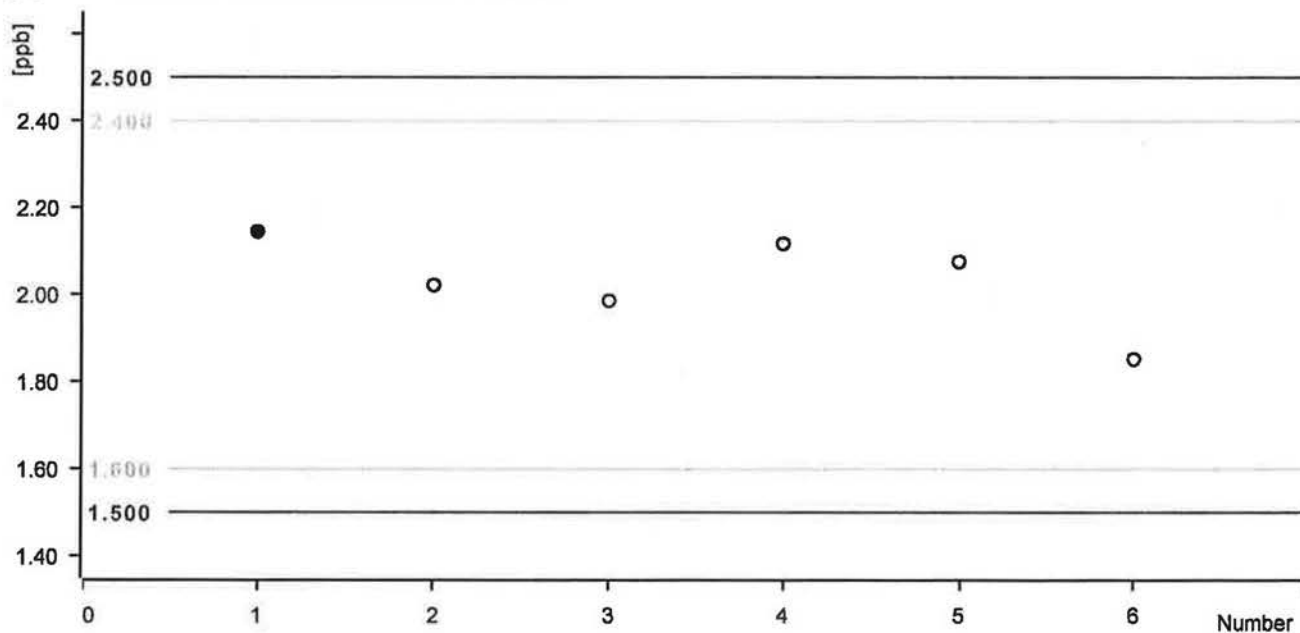
Date	Number	Ident	Sample type	Method	ppb Bromate Concentration-ICCS	Statistics
30 2013-05-02 09:25:54 UTC-4	30	ICCS/LFB	Sample	04172013 300,1	0.939 ppb	on

# Control chart

SEOP

## Comment

### ppb Bromate Concentration ECCS



## Statistics

Mean value:	2.032 ppb	Absolute standard deviation:	0.106 ppb
Minimum:	1.852 ppb	Relative standard deviation:	5.224 %
Maximum:	2.144 ppb	Number of determinations:	6

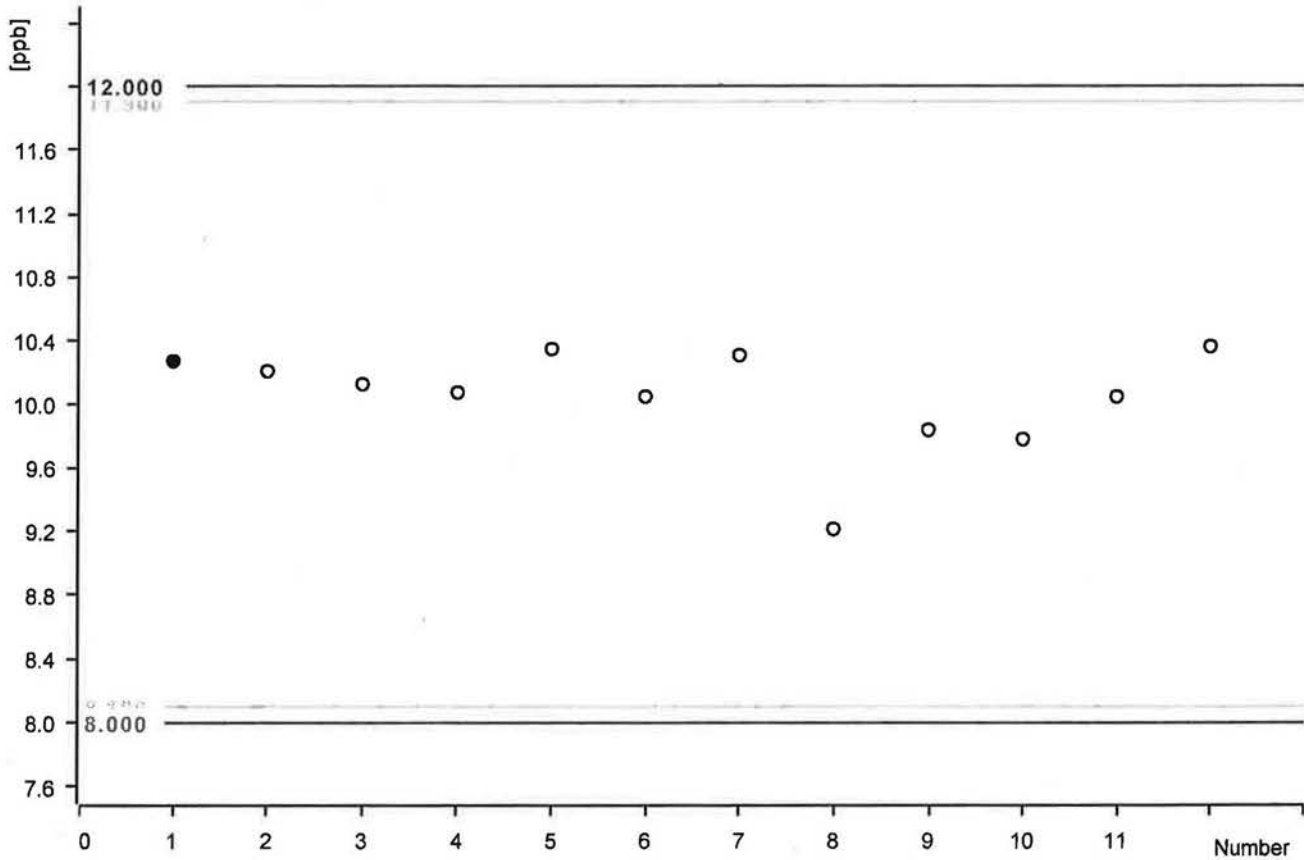
Date	Number	Ident	Sample type	Method	ppb Bromate Concentration EGCS	Statistics
2013-04-22 10:35:17 UTC-4	1	ICCS/LFB	Sample	04172013 300,1	2.144 ppb	on
2013-04-23 09:16:53 UTC-4	2	ICCS/LFB	Sample	04172013 300,1	2.021 ppb	on
2013-04-23 09:54:37 UTC-4	3	ICCS/LFB	Sample	04172013 300,1	1.985 ppb	on
2013-04-24 10:22:41 UTC-4	4	ICCS/LFB	Sample	04172013 300,1	2.117 ppb	on
2013-04-24 11:00:24 UTC-4	5	ICCS/LFB	Sample	04172013 300,1	2.075 ppb	on
2013-04-25 11:01:35 UTC-4	6	ICCS/LFB	Sample	04172013 300,1	1.852 ppb	on

# Control chart

SEOP

## Comment

### 10PPB BROMATE qcs



## Statistics

Mean value:	10.053 ppb	Absolute standard deviation:	0.324 ppb
Minimum:	9.214 ppb	Relative standard deviation:	3.219 %
Maximum:	10.364 ppb	Number of determinations:	12

Date	Number	Ident	Sample type	Method	10PPB BROMATE qcs	Statistics
2013-04-20 01:45:47 UTC-4	1	QCS	Sample	04172013 300.1	10.273 ppb	on
2013-04-20 02:23:34 UTC-4	2	QCS	Sample	04172013 300.1	10.209 ppb	on
2013-04-22 19:21:42 UTC-4	3	QCS	Sample	04172013 300.1	10.128 ppb	on
2013-04-23 19:06:14 UTC-4	4	QCS	Sample	04172013 300.1	10.074 ppb	on
2013-04-23 19:43:57 UTC-4	5	QCS	Sample	04172013 300.1	10.348 ppb	on
2013-04-24 18:33:17 UTC-4	6	QCS	Sample	04172013 300.1	10.048 ppb	on
2013-04-24 19:11:00 UTC-4	7	QCS	Sample	04172013 300.1	10.309 ppb	on
2013-04-25 16:03:20 UTC-4	8	QCS	Sample	04172013 300.1	9.214 ppb	on
2013-04-25 16:41:03 UTC-4	9	QCS	Sample	04172013 300.1	9.838 ppb	on
2013-04-26 16:14:06 UTC-4	10	QCS	Sample	04172013 300.1	9.780 ppb	on
2013-04-26 16:51:50 UTC-4	11	QCS	Sample	04172013 300.1	10.049 ppb	on
2013-04-29 16:48:10 UTC-4	12	QCS	Sample	04172013 300.1	10.364 ppb	on

# Control Chart for 04/2013 MS/MSD & Repeat %Recoveries

Analyst: Susan E.O. Peters

IC: Metrohm  
 Report Date: 5/8/2013  
 Chemist: Susan E.O. Peters  
 Dept: Environmental  
 Analyte: Bromate  
 Start date: 4/1/2013  
 End date: 4/30/2013  
 Desired level: 100%

MS Recoveries and Replicate Recoveries								
Analysis Date	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 =
4/2/2013	114	114	114	0.4	0.5			
4/2/2013	97	100	97	4.8	4.5			
4/3/2013	86	96	91	8.5	7.1			
4/4/2013	101	103	102	1.4	0.8			
4/8/2013	105	102	104	2.2	2.2			
4/8/2013	97	103	100	5.8	4.6			
4/10/2013	109	114	113	2.7	3.5			
4/11/2013	86	95	90	6.0	6.3	5.80	0.40	2
4/16/2013	106	98	102	6.6	5.8	1.50	1.20	2
4/19/2013	93	114	104	12.3	14.8	6.61	0.62	2
4/22/2013	97	91	94	4.8	4.2	0.61	0.0040	2
4/24/2013	109	89	99	11.8	12.6	7.21	1.02	3
4/25/2013	98	101	102	5.2	2.0			
4/26/2013	110	102	106.0	5.5	5.9			
4/29/2013	100	102	101	0.82	1.4			
4/30/2013	99	93	96	3.8	4.2			
5/1/2013	96	110	102	12.9	9.9			
5/2/2013	101	88	95	8.2	9.2	5.23	0.19	3

