



Pall Corporation

Sample Analysis Report

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May, 2014

Analyst Initials: SEOP
Date: 06-06-14

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)
Residential Wells								
D0								
4601 Park 4 inch-05-12-14-10:02-1	2	1.0						
4601 Park 6 inch-05-12-14-10:42-1	2	1.0						
5005 Jackson Rd-05-22-14-15:01-1	17	1.0					Brighton Analytical	O
Not Determined								
697 South Wagner Rd-05-22-14-14:30-1	nd	1.0					Brighton Analytical	O
Miscellaneous Wells								
Bethlehem Cemetery-05-22-14-14:45-1	nd	1.0						
Extraction Wells								
C3								
DOLPH-05-05-14-07:32-1	90	1.0						
TW-1-05-21-14-11:39-1	140	1.0						
TW-10-05-21-14-13:56-1	240	10.0						D
TW-14-05-21-14-11:18-1	22	1.0						
TW-20-05-05-14-09:27-1	940	10.0						D
TW-3-05-21-14-11:49-1	nd	1.0						
D2								
LB-4-05-05-14-09:15-1	530	10.0						D
TW-21-05-05-14-08:45-1	130	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)
TW-5-05-05-14-08:51-1	780	25.0						D
TW-9-05-05-14-09:31-1	750	10.0						D
E								
TW-11-05-05-14-08:52-1	220	5.0						D
TW-12-05-21-14-14:56-1	23	1.0						
TW-17-05-21-14-11:21-1	300	10.0						D
TW-18-05-05-14-07:34-1	280	10.0						D
TW-19-05-05-14-09:16-1	720	10.0						D
Marshy								
PW-1-05-05-14-07:36-1	600	25.0						D
SW								
TW-22-05-05-14-09:50-1	600	10.0						D
TW-8-05-05-14-09:51-1	690	10.0						D
Monitoring Wells								
C2								
MW-25s-05-05-14-11:34-1	760	10.0						D
C3								
MW-105s-05-07-14-11:59-1	560	10.0						D
MW-125-05-08-14-14:55-1	230	5.0						D
MW-127s-05-08-14-10:31-1	nd	1.0						
MW-128s-05-08-14-09:02-1	nd	1.0						
MW-22-05-05-14-11:21-1	780	25.0						D
MW-75-05-05-14-11:06-1	890	25.0						D
D0								
A2 Cleaning Supply-05-02-14-10:12-1	57	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)
MW-41d-05-23-14-13:15-1	31	1.0						
MW-41s-05-23-14-13:00-1	21	1.0						
D2								
2819 Dexter Rd-05-07-14-13:28-1	420	10.0						D
456 Clarendon-05-07-14-14:13-1	810	25.0						D
HZ-S-05-21-14-11:14-1	1000	10.0						D
MW-107-05-09-14-14:23-1	660	10.0						D
MW-113-05-12-14-13:31-1	52	1.0						
MW-117-05-09-14-11:56-1	nd	1.0						
MW-124s-05-09-14-11:13-1	nd	1.0						
MW-47d-05-06-14-13:48-1	nd	1.0						
MW-47s-05-06-14-13:26-1	nd	1.0						
MW-4d-05-07-14-14:44-1	1900	50.0						D
MW-BE-1d-05-09-14-13:31-1	490	10.0						
MW-BE-1s-05-09-14-13:47-1	870	10.0						D
MW-KD-1d-05-12-14-14:19-1	170	1.0						
MW-KD-1s-05-12-14-13:54-1	42	1.0						
E								
MW-103s-05-05-14-14:35-1	74	1.0						
MW-105d-05-07-14-11:43-1	290	5.0						D
MW-106s-05-07-14-10:32-1	250	5.0						D
MW-112i-05-05-14-14:14-1	8	1.0						
MW-112s-05-05-14-13:31-1	nd	1.0						
MW-124d-05-09-14-10:44-1	nd	1.0						
MW-127d-05-08-14-11:23-1	nd	1.0						
MW-128d-05-08-14-09:55-1	nd	1.0						
MW-135-05-06-14-11:16-1	nd	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)
MW-76i-05-02-14-13:56-1	88	1.0						
MW-76s-05-02-14-14:17-1	290	5.0						D
MW-84s-05-02-14-11:10-1	480	10.0						D
MW-90-05-06-14-11:50-1	18	1.0						
MW-91-05-12-14-11:29-1	180	1.0						
MW-98d-05-06-14-11:14-1	15	1.0						
Saginaw Forest Cabin #1-05-08-14-14:01-1	18	1.0						
Saginaw Forest Cabin #2-05-08-14-12:31-1	2	1.0						
SH								
MW-5d-05-05-14-12:26-1	23000	400.0						D
SW								
MW-57-05-05-14-10:46-1	2	1.0						
MW-78-05-08-14-14:29-1	27	1.0						
Surface Water								
Not Applicable								
HC/HR-05-01-14-08:25-1			nd	2.0				
HC/HR-05-02-14-08:25-1			nd	2.0				
HC/HR-05-05-14-08:15-1			nd	2.0				
HC/HR-05-06-14-08:25-1			nd	2.0				
HC/HR-05-07-14-08:00-1			nd	2.0				
HC/HR-05-08-14-07:52-1			nd	2.0				
HC/HR-05-09-14-06:50-1			nd	2.0				
HC/HR-05-12-14-07:30-1			nd	2.0				
HC/HR-05-13-14-08:05-1			nd	2.0				
HC/HR-05-14-14-07:35-1			nd	2.0				
HC/HR-05-15-14-07:45-1			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-05-16-14-08:00-1			nd	2.0				
HC/HR-05-19-14-08:30-1			nd	2.0				
HC/HR-05-20-14-08:35-1			nd	2.0				
HC/HR-05-21-14-08:00-1			nd	2.0				
HC/HR-05-22-14-08:25-1			nd	2.0				
HC/HR-05-23-14-08:00-1			nd	2.0				
HC/HR-05-27-14-08:45-1			nd	2.0				
HC/HR-05-28-14-10:00-1			nd	2.0				
HC/HR-05-29-14-07:45-1			nd	2.0				
HC/HR-05-30-14-08:15-1			nd	2.0				

Treatment System

OUTFALL-05-01-14-1	5	1.0						
OUTFALL-05-01-14-2			nd	5.0				
OUTFALL-05-04-14-1	5	1.0						
OUTFALL-05-04-14-2			nd	5.0				
OUTFALL-05-05-14-1	5	1.0						
OUTFALL-05-05-14-2			nd	5.0				
OUTFALL-05-06-14-1	6	1.0						
OUTFALL-05-06-14-2			nd	5.0				
OUTFALL-05-07-14-1	6	1.0						
OUTFALL-05-07-14-2			6	5.0				
OUTFALL-05-08-14-1	7	1.0						
OUTFALL-05-08-14-2			5	5.0				
OUTFALL-05-11-14-1	5	1.0						
OUTFALL-05-11-14-2			6	5.0				
OUTFALL-05-12-14-1	5	1.0						
OUTFALL-05-12-14-2			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	Qualifier(s)
OUTFALL-05-13-14-1	5	1.0						
OUTFALL-05-13-14-2			5	5.0				
OUTFALL-05-14-14-1	5	1.0						
OUTFALL-05-14-14-2			5	5.0				
OUTFALL-05-15-14-1	5	1.0						
OUTFALL-05-15-14-2			5	5.0				
OUTFALL-05-18-14-1	5	1.0						
OUTFALL-05-18-14-2			6	5.0				
OUTFALL-05-19-14-1	5	1.0						
OUTFALL-05-19-14-2			6	5.0				
OUTFALL-05-20-14-1	5	1.0						
OUTFALL-05-20-14-2			6	5.0				
OUTFALL-05-21-14-1	5	1.0						
OUTFALL-05-21-14-2			6	5.0				
OUTFALL-05-22-14-1	5	1.0						
OUTFALL-05-22-14-2			6	5.0				
OUTFALL-05-25-14-1	5	1.0						
OUTFALL-05-25-14-2			nd	5.0				
OUTFALL-05-26-14-1	6	1.0						
OUTFALL-05-26-14-2			6	5.0				
OUTFALL-05-27-14-1	6	1.0						
OUTFALL-05-27-14-2			6	5.0				
OUTFALL-05-28-14-1	4	1.0						
OUTFALL-05-28-14-2			5	5.0				
OUTFALL-05-29-14-1	5	1.0						
OUTFALL-05-29-14-2			7	5.0				
Red Pond-05-05-14-07:30-1	480	10.0						D

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)
Red Pond-05-12-14-07:15-1	460	10.0						D
Red Pond-05-19-14-08:30-1	470	10.0						D
Red Pond-05-27-14-07:15-1	480	10.0						D

Qualifier Code: _____ **Qualifier Description** _____

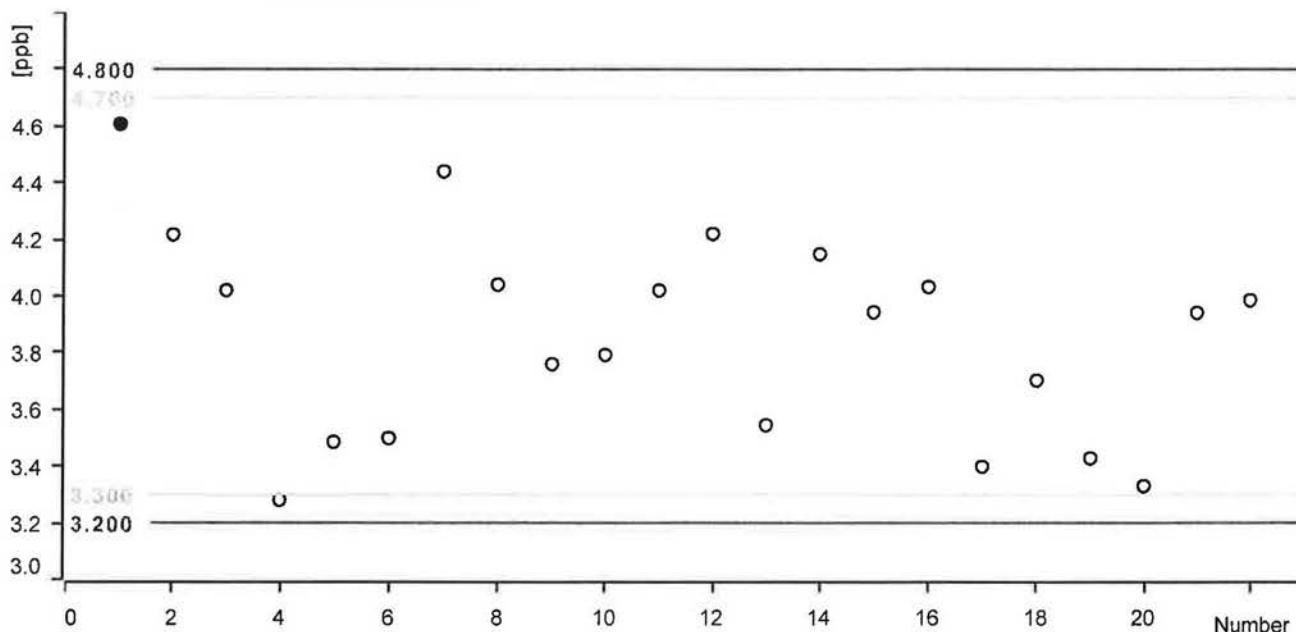
- D Analyte value quantified from a dilution, reporting limit is raised to reflect dilution
- O Samples analyzed in outside laboratory

Control chart

SEOP

Comment

Bromate 4 PPB concentration



Statistics

Mean value:	3.856 ppb	Absolute standard deviation:	0.365 ppb
Minimum:	3.281 ppb	Relative standard deviation:	9.473 %
Maximum:	4.607 ppb	Number of determinations:	22

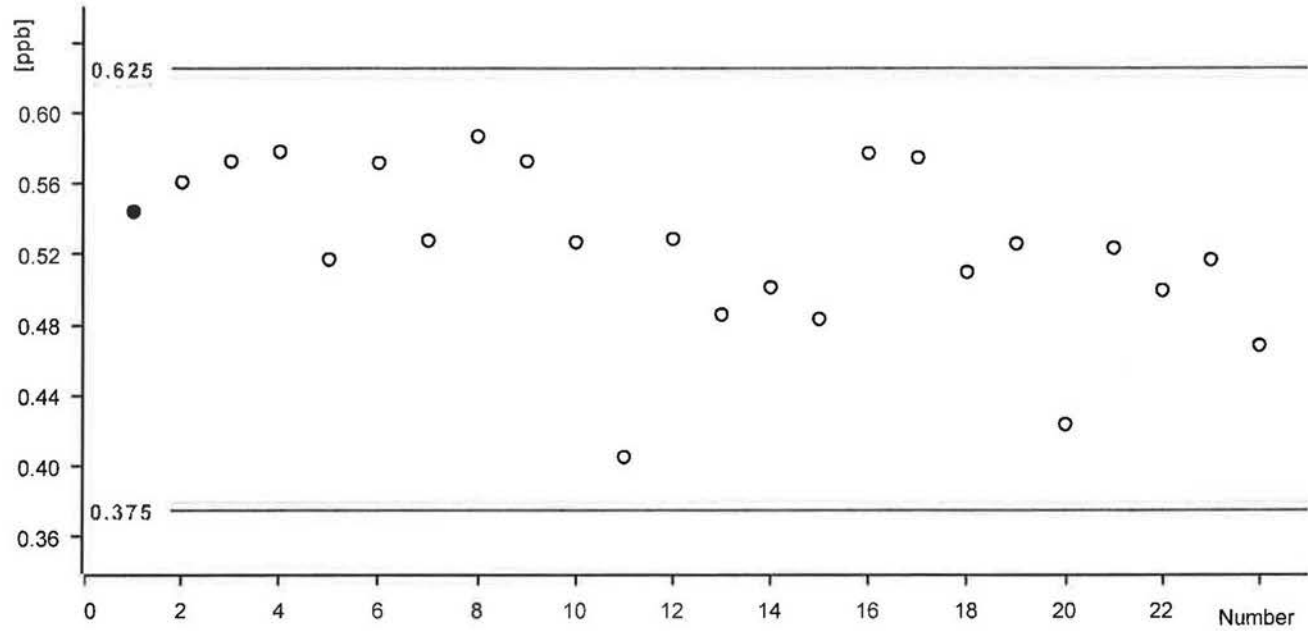
Date	Number	Ident	Sample type	Method	Bromate 4 PPB concentration	Statistics
2014-05-01 09:38:15 UTC-4	1	ECCS/CCCS	Sample	04162014 300.1	4.607 ppb	on
2014-05-01 19:56:11 UTC-4	2	ECCS/CCCS	Sample	04162014 300.1	4.217 ppb	on
2014-05-01 20:35:01 UTC-4	3	ECCS/CCCS	Sample	04162014 300.1	4.020 ppb	on
2014-05-02 17:28:23 UTC-4	4	ECCS/CCCS	Sample	04162014 300.1	3.298 ppb	on
2014-05-02 18:07:07 UTC-4	5	ECCS/CCCS	Sample	04162014 300.1	3.495 ppb	on
2014-05-05 18:14:33 UTC-4	6	ECCS/CCCS	Sample	04162014 300.1	3.489 ppb	on
2014-05-05 18:53:17 UTC-4	7	ECCS/CCCS	Sample	04162014 300.1	4.440 ppb	on
2014-05-14 08:44:28 UTC-4	8	ECCS/CCCS	Sample	05132014 300.1	4.040 ppb	on
2014-05-14 09:23:12 UTC-4	9	ECCS/CCCS	Sample	05132014 300.1	3.759 ppb	on
2014-05-14 19:04:17 UTC-4	10	ECCS/CCCS	Sample	05132014 300.1	3.792 ppb	on
2014-05-14 19:43:07 UTC-4	11	ECCS/CCCS	Sample	05132014 300.1	4.020 ppb	on
2014-05-15 18:14:25 UTC-4	12	ECCS/CCCS	Sample	05132014 300.1	4.220 ppb	on
2014-05-16 17:49:59 UTC-4	13	ECCS/CCCS	Sample	05132014 300.1	3.545 ppb	on
2014-05-19 19:04:18 UTC-4	14	ECCS/CCCS	Sample	05132014 300.1	4.148 ppb	on
2014-05-20 18:31:43 UTC-4	15	ECCS/CCCS	Sample	05132014 300.1	3.944 ppb	on
2014-05-21 18:30:28 UTC-4	16	ECCS/CCCS	Sample	05132014 300.1	4.032 ppb	on
2014-05-23 01:06:11 UTC-4	17	ECCS/CCCS	Sample	05132014 300.1	3.399 ppb	on
2014-05-23 17:31:11 UTC-4	18	ECCS/CCCS	Sample	05132014 300.1	3.702 ppb	on
2014-05-27 20:45:49 UTC-4	19	ECCS/CCCS	Sample	05132014 300.1	3.428 ppb	on
2014-05-28 21:06:35 UTC-4	20	ECCS/CCCS	Sample	05132014 300.1	3.330 ppb	on
2014-05-29 18:52:20 UTC-4	21	ECCS/CCCS	Sample	05132014 300.1	3.942 ppb	on
2014-05-30 15:23:22 UTC-4	22	ECCS/CCCS	Sample	05132014 300.1	3.856 ppb	on

Control chart

SEOP

Comment

0.5PPB STD



Statistics

Mean value:	0.524 ppb	Absolute standard deviation:	0.048 ppb
Minimum:	0.405 ppb	Relative standard deviation:	9.136 %
Maximum:	0.587 ppb	Number of determinations:	24

Date	Number	Ident	Sample type	Method	0.5PPB STD	Statistics
2014-05-01 12:11:16 UTC-4	1	ICCS/LFB	Sample	04162014 300.1	0.544 ppb	on
2014-05-02 09:34:28 UTC-4	2	ICCS/LFB	Sample	04162014 300.1	0.561 ppb	on
2014-05-02 10:13:11 UTC-4	3	ICCS/LFB	Sample	04162014 300.1	0.573 ppb	on
2014-05-05 09:39:03 UTC-4	4	ICCS/LFB	Sample	04162014 300.1	0.578 ppb	on
2014-05-05 10:17:47 UTC-4	5	ICCS/LFB	Sample	04162014 300.1	0.517 ppb	on
2014-05-06 10:26:31 UTC-4	6	ICCS/LFB	Sample	04162014 300.1	0.572 ppb	on
2014-05-06 11:05:15 UTC-4	7	ICCS/LFB	Sample	04162014 300.1	0.528 ppb	on
2014-05-07 08:05:51 UTC-4	8	ICCS/LFB	Sample	04162014 300.1	0.567 ppb	on
2014-05-09 09:14:03 UTC-4	9	ICCS/LFB	Sample	04162014 300.1	0.573 ppb	on
2014-05-12 16:59:53 UTC-4	10	ICCS/LFB	Sample	04162014 300.1	0.527 ppb	on
2014-05-13 19:49:50 UTC-4	11	ICCS/LFB	Sample	05132014 300.1	0.405 ppb	on
2014-05-15 10:29:35 UTC-4	12	ICCS/LFB	Sample	05132014 300.1	0.529 ppb	on
2014-05-18 10:05:18 UTC-4	13	ICCS/LFB	Sample	05132014 300.1	0.486 ppb	on
2014-05-19 11:19:33 UTC-4	14	ICCS/LFB	Sample	05132014 300.1	0.501 ppb	on
2014-05-20 10:46:56 UTC-4	15	ICCS/LFB	Sample	05132014 300.1	0.483 ppb	on
2014-05-21 10:45:44 UTC-4	16	ICCS/LFB	Sample	05132014 300.1	0.577 ppb	on
2014-05-22 11:32:58 UTC-4	17	ICCS/LFB	Sample	05132014 300.1	0.575 ppb	on
2014-05-23 11:42:43 UTC-4	18	ICCS/LFB	Sample	05132014 300.1	0.510 ppb	on
2014-05-27 11:43:45 UTC-4	19	ICCS/LFB	Sample	05132014 300.1	0.526 ppb	on
2014-05-28 15:18:06 UTC-4	20	ICCS/LFB	Sample	05132014 300.1	0.424 ppb	on
2014-05-29 11:46:08 UTC-4	21	ICCS/LFB	Sample	05132014 300.1	0.523 ppb	on
2014-05-29 12:24:54 UTC-4	22	ICCS/LFB	Sample	05132014 300.1	0.500 ppb	on

Control chart

SE00

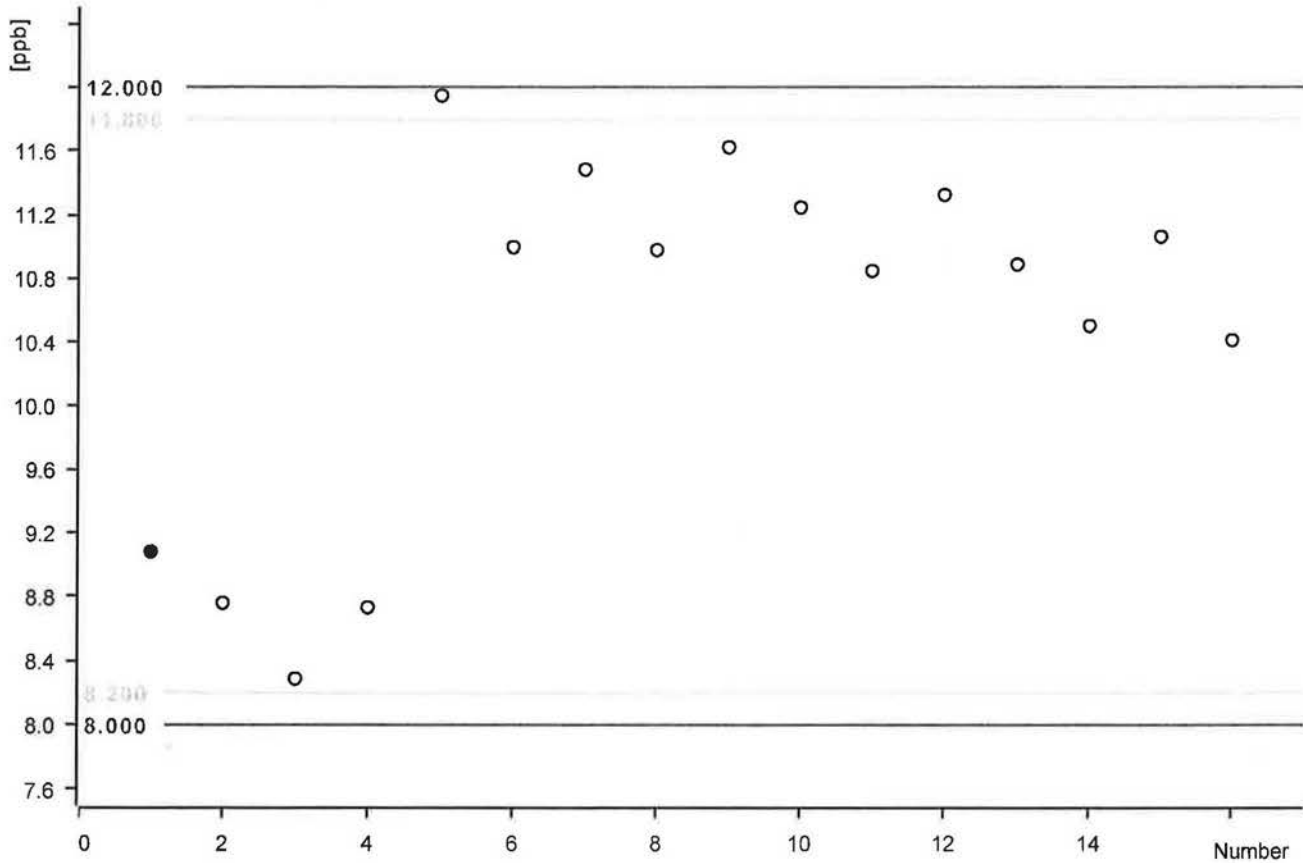
	Date	Number	Ident	Sample type	Method	0,5PPB STD	Statistics
23	2014-05-30 10:40:28 UTC-4	23	ICCS/LFB	Sample	05132014 300.1	0.517 ppb	on
24	2014-05-30 11:19:12 UTC-4	24	ICCS/LFB	Sample	05132014 300.1	0.468 ppb	on

Control chart

SEUP

Comment

10PPB BROMATE qcs



Statistics

Mean value:	10.510 ppb	Absolute standard deviation:	1.145 ppb
Minimum:	8.287 ppb	Relative standard deviation:	10.893 %
Maximum:	11.945 ppb	Number of determinations:	16

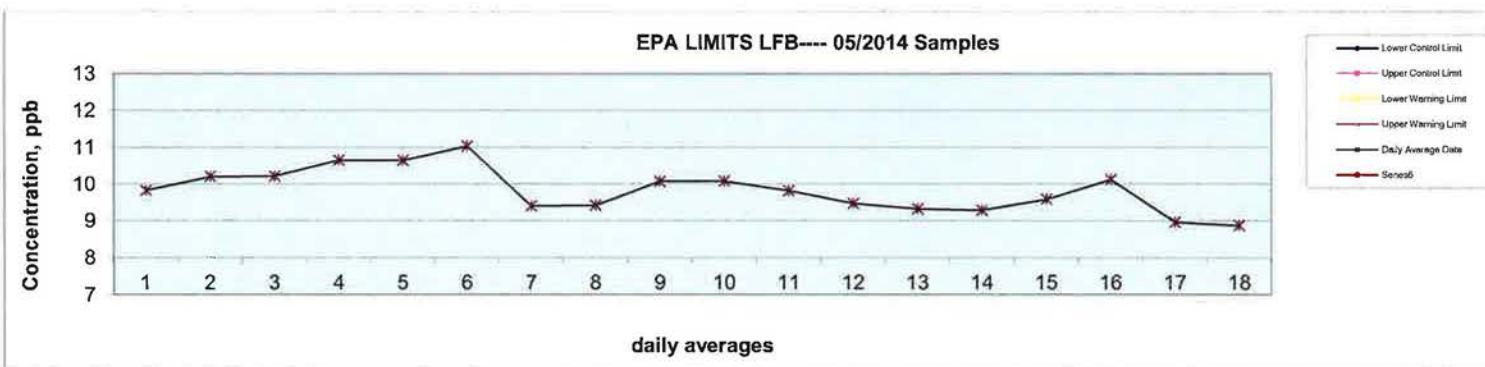
Date	Number	Ident	Sample type	Method	10PPB BROMATE qcs	Statistics
2014-05-06 21:21:37 UTC-4	1	QCS	Sample	04162014 300.1	9.082 ppb	on
2014-05-07 18:25:43 UTC-4	2	QCS	Sample	04162014 300.1	8.760 ppb	on
2014-05-09 23:48:41 UTC-4	3	QCS	Sample	04162014 300.1	8.287 ppb	on
2014-05-13 00:50:40 UTC-4	4	QCS	Sample	04162014 300.1	8.732 ppb	on
2014-05-14 11:19:22 UTC-4	5	QCS	Sample	05132014 300.1	11.545 ppb	on
2014-05-15 19:31:53 UTC-4	6	QCS	Sample	05132014 300.1	10.996 ppb	on
2014-05-16 19:07:27 UTC-4	7	QCS	Sample	05132014 300.1	11.481 ppb	on
2014-05-19 20:21:46 UTC-4	8	QCS	Sample	05132014 300.1	10.976 ppb	on
2014-05-20 19:49:11 UTC-4	9	QCS	Sample	05132014 300.1	11.621 ppb	on
2014-05-21 19:47:55 UTC-4	10	QCS	Sample	05132014 300.1	11.245 ppb	on
2014-05-23 02:23:39 UTC-4	11	QCS	Sample	05132014 300.1	10.847 ppb	on
2014-05-23 18:48:40 UTC-4	12	QCS	Sample	05132014 300.1	11.322 ppb	on
2014-05-27 22:03:17 UTC-4	13	QCS	Sample	05132014 300.1	10.897 ppb	on
2014-05-28 22:24:02 UTC-4	14	QCS	Sample	05132014 300.1	10.505 ppb	on
2014-05-29 20:09:47 UTC-4	15	QCS	Sample	05132014 300.1	11.060 ppb	on
2014-05-30 16:40:49 UTC-4	16	QCS	Sample	05132014 300.1	10.414 ppb	on

Control Chart for 05/2014 LFB

Analyst: Susan E.O. Peters

GC/MS Data: #1
 Report Date: 6/4/2014
 Chemist: Susan E.O. Peters
 Dept: Environmental
 Analyte: 1,4-dioxane
 Start date: 5/1/2014
 End date: 5/31/2014
 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								
5/1/2014	10.04	9.96	9.67	9.94	9.54		9.83	9.92	0.21	0.60	8.14	11.71	8.73	11.11
5/2/2014	10.13	9.86	10.62				10.20	9.92	0.39					
5/5/2014	10.09	10.41	10.42	10.30	9.85		10.21	9.92	0.24					
5/6/2014	10.61	11.08	10.26	10.47	10.85		10.65	9.92	0.32					
5/7/2014	10.85	10.42	10.70	10.78	10.48		10.65	9.92	0.19					
5/9/2014	11.41	10.42	11.28				11.04	9.92	0.54					
5/13/2014	9.36	9.37	9.48				9.40	9.92	0.07					
5/14/2014	9.34	9.43	9.50				9.42	9.92	0.08					
5/15/2014	9.77	10.01	10.15	10.22	10.50	9.79	10.07	9.92	0.28					
5/16/2014	9.83	9.84	10.56				10.08	9.92	0.42					
5/19/2014	10.12	9.42	9.92				9.82	9.92	0.36					
5/20/2014	9.25	9.45	9.71				9.47	9.92	0.23					
5/21/2014	9.47	9.09	9.41				9.32	9.92	0.20					
5/22/2014	9.16	9.42	9.28				9.29	9.92	0.13					
5/23/2014	9.24	9.60	9.92				9.59	9.92	0.34					
5/28/2014	10.03	10.03	10.31				10.12	9.92	0.16					
5/29/2013	8.68	9.00	9.21				8.96	9.92	0.27					
5/30/2014	8.96	8.80					8.88	9.92	0.11					



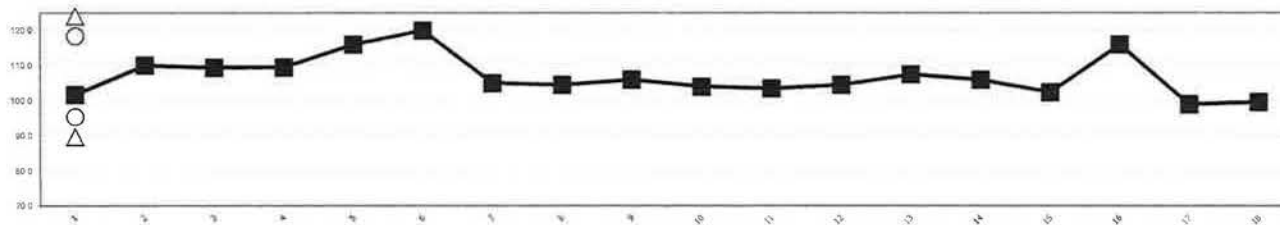
Control Chart for 05/2014 MS/MSD %Recoveries

Analyst: Suzanne E. Peters

GC/MS Data: Instrument #1
Report Date: 6/4/2014
Chemist: Susan E.O. Peters
Dept: Environmental
Analyte: 1,4-dioxane
Start date: 5/1/2014
End date: 5/31/2014
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	Replicate Ave.	Std. Dev.	# data pts									
5/1/2014	104	99			5.43	0.33	2	101.70	106.9	6.1	5.7	89.7	124.1	95.5	118.4	106.9
5/2/2014	113	107			5.52	0.13	2	110.00								
5/5/2014	111	108			5.39	0.28	2	109.40								
5/6/2014	112	107			5.46	0.28	2	109.50								
5/7/2014	117	115			5.62	0.13	2	116.00								
5/9/2014	120	120			5.96	0.14	2	120.00								
5/13/2014	106	104			5.06	0.23	2	105.00								
5/14/2014	103	106			5.12	0.15	2	104.50								
5/15/2014	106	106			4.65	0.08	2	106.00								
5/16/2014	110	98			4.64	0.04	2	104.00								
5/19/2014	104	103			4.66	0.06	2	103.50								
5/20/2014	103	106			5.25	0.04	2	104.50								
5/21/2014	110	105			5.03	0.12	2	107.50								
5/22/2014	107	105			5.39	0.15	2	106.00								
5/23/2014	105	100			5.08	0.01	2	102.45								
5/28/2014	117	115			5.73	0.26	2	116.00								
5/29/2014	100	98			4.28	0.28	2	99.00								
5/30/2014	98	101			4.76	0.07	2	99.65								

05/2014 MS/MSD with Control Limits

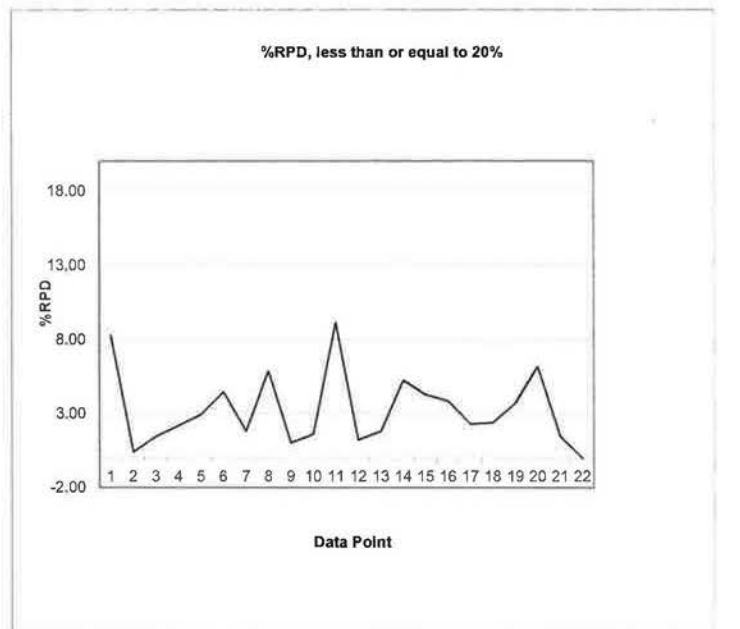
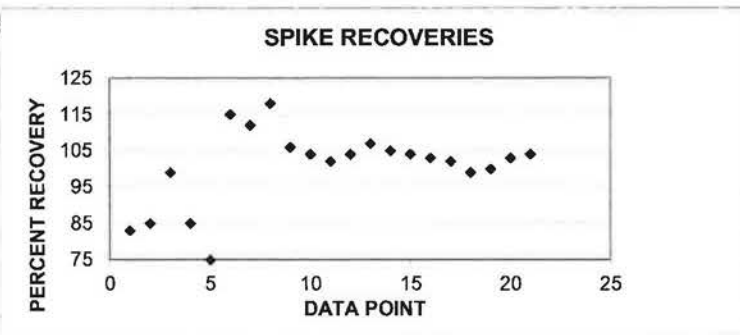


Control Chart for 05/2014 MS/MSD & Repeat %Recoveries

Analyst: Susan E.O. Peters

IC: Metrohm
Report Date: 6/4/2014
Chemist: Susan E.O. Peters
Dept: Environmental
Analyte: Bromate
Start date: 5/1/2014
End date: 5/31/2014
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 =
5/1/2014	80	87	83	8.29	4.95	0.94	0.02	2
5/2/2014	85	85	85	0.42	0.28	0.77	0.14	2
5/5/2014	98	99	99	1.46	0.99	0.71	0.03	2
5/6/2014	86	84	85	2.16	1.41	0.55	0.03	2
5/7/2014	74	76	75	2.92	1.41	na	na	na
5/13/2014	112	118	115	4.48	4.24	1.20	0.01	2
5/13/2014	111	113	112	1.80	1.41	1.08	0.02	2
5/15/2014	114	122	118	5.90	5.66	1.08	0.02	2
5/16/2014	105	106	106	1.01	0.71	1.13	0.13	2
5/19/2014	104	106	104	1.60	1.41	1.20	0.12	2
5/20/2014	97	107	102	9.16	7.00	1.29	0.10	2
5/21/2014	104	105	104	1.21	0.88	1.15	0.10	2
5/22/2014	108	106	107	1.81	1.45	1.12	0.09	2
5/22/2014	108	102	105	5.25	4.28	1.20	0.02	2
5/22/2014	101	106	104	4.27	3.54	1.06	0.06	2
5/23/2014	101	105	103	3.86	2.83	1.10	0.01	2
5/27/2014	103	100	102	2.28	1.91	1.13	0.03	2
5/27/2014	98	100	99	2.4	1.41	0.95	0.07	2
5/28/2014	98	102	100	3.71	2.83	1.11	0.04	2
5/29/2014	99	106	103	6.18	4.93	1.04	0.01	
5/30/2014	103	105	104	1.43	0.71	1.49	0.01	2



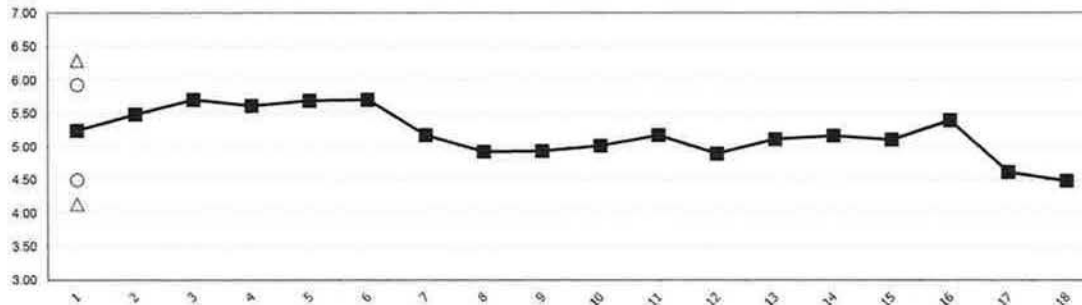
Control Chart for 05/2014 CVS

Analyst: Susan E.O. Peters

GC/MS Data: #2
 Report Date: 6/4/2014
 Chemist: Susan E.O. Peters
 Dept: Environmental
 Analyte: 1,4-dioxane
 Start date: 5/1/2014
 End date: 5/31/2014
 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								
5/1/2014	5.16	5.34			5.25	5.22	0.13	0.36	4.14	6.29	4.50	5.94
5/2/2014	5.49				5.49	5.22	na					
5/5/2014	5.81	5.61			5.71	5.22	0.14					
5/6/2014	5.60	5.64			5.62	5.22	0.03					
5/7/2014	5.65	5.74			5.70	5.22	0.06					
5/9/2014	5.71				5.71	5.22	na					
5/13/2014	5.18				5.18	5.22	na					
5/14/2014	4.93				4.93	5.22	na					
5/15/2014	4.97	4.91			4.94	5.22	0.04					
5/16/2014	5.02				5.02	5.22	na					
5/19/2014	5.18				5.18	5.22	na					
5/20/2014	4.90				4.90	5.22	na					
5/21/2014	5.12				5.12	5.22	na					
5/22/2014	5.17				5.17	5.22	na					
5/23/2014	5.11				5.11	5.22	na					
5/28/2014	5.40				5.40	5.22	na					
5/29/2014	4.62				4.62	5.22	na					
5/30/2014	4.75	4.23			4.49	5.22	0.37					

05/2014 CVS with Control Limits





Brighton Analytical LLC
 2105 Pless Drive
 Brighton, Michigan 48114
 Phone: (810)229-7575 (810)229-8650
 e-mail: bai-brighton@sbcglobal.net
 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 5/22/2014 14:30
 Submit Date/Time: 5/23/2014 15:10
 Report Date: 6/5/2014

Pall Corp.
 600 S. Wagner
 Bldg. 4
 Ann Arbor, MI 48103

BA Project # **29083**
 BA Sample ID **BZ09180**

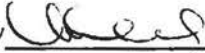
Project Name: **Drinking Water Samples**
 Project Number:
 Sample ID: **697 S. Wagner**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
1,4-Dioxane(SIM)							
1,4-Dioxane (SIM)	Not detected	ug/L	1		EPA 1624(SIM)	10:26	06/04/2014

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by 
 Date 6.5.14



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 Brighton, Michigan 48114
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 MDNRE Certified #9404
 NELAC Accredited #176507

Sample Date/Time: 5/22/2014 15:01
 Submit Date/Time: 5/23/2014 15:10
 Report Date: 6/5/2014

Pall Corp.
 600 S. Wagner
 Bldg. 4
 Ann Arbor, MI 48103

BA Project # **29083**
 BA Sample ID **BZ09181**


Project Name: **Drinking Water Samples**
 Project Number:
 Sample ID: **5005 Jackson**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
1,4-Dioxane(SIM)							
1,4-Dioxane (SIM)	17	ug/L	1		EPA 1624(SIM)	10:26	06/04/2014

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.

Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by 
 Date 6.5.14

GC/MS
VOLATILE METHOD 1624 SIM

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: June 4, 2014 Spike Std. ID: 2228.2 Inst./Delec: Vol 8 GC/MS
 Laboratory ID: BZ09181 Matrix: Water Analyst: CW

	Matrix Spike - Precision				Matrix spike - Accuracy					
	Spike 1	Spike 2	Relative Percent Difference	Spk Conc ug/L	% Recovery	% Recovery	Range (%)	Sample background	Method Blank	LCS
1,4 Dioxane	48.4	47.3	1.0	50	99	91	70-130	1.7	<1	98%

ug/L is equivalent to ppb

Comments: _____