PALL Pall Corporation

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Sample Analysis Report

January, 2009

Analyst Initials:

Date: 02/04/09

Sample Name - Date Sampled - Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
Extraction Wells							
AE-3-01-05-09-08:48	102	1.0		5.0		10.0	
HZ-S-01-06-09-09:30	960	1.0		5.0		10.0	
LB-1-01-05-09-08:46	484	1.0		5.0		10.0	
LB-3-01-05-09-08:47	509	1.0		5.0		10.0	
PW-1-01-06-09-10:40	1010	1.0		5.0		10.0	
SW-COMB-01-06-09-10:48	546	1.0		5.0		10.0	
DOLPH-01-06-09-10:46	88	1.0		5.0		10.0	
TW-5-01-06-09-08:55	950	1.0		5.0		10.0	
TW-6-01-06-09-10:44	109	1.0		5.0		10.0	
TW-8-01-06-09-09:55	501	1.0		5.0		10.0	
TW-9-01-06-09-09:22	1326	1.0		5.0		10.0	
TW-10-01-06-09-09:07	991	1.0		5.0		10.0	
TW-13-01-06-09-09:38	610	1.0		5.0		10.0	
TW-14-01-06-09-09:18	130	1.0		5.0		10.0	
TW-17-01-06-09-09:15	105	1.0		5.0		10.0	
TW-18-01-06-09-10:42	400	1.0		5.0		10.0	
TW-19-01-05-09-08:15	914	1.0		5.0		10.0	
TW-19-01-12-09-08:35	894	1.0		5.0		10.0	
TW-19-01-19-09-09:45	900	1.0		5.0		10.0	
TW-19-01-26-09-08:15	910	1.0		5.0		10.0	
TW-20-01-06-09-09:12	2329	1.0		5.0		10.0	
TEMPORARY EXTRACTION WELLS							
MW-50-01-06-09-09:58	751	1.0		5.0		10.0	
RED POND							

Sample Name - Date Sampled - 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							
Red Pond-01-06-09-10:38	579	1.0		5.0		10.0	
Red Pond-01-12-09-08:25	545	1.0		5.0		10.0	
Red Pond-01-19-09-08:15	550	1.0		5.0		10.0	
Red Pond-01-26-09-08:00	507	1.0		5.0		10.0	
OUTFALL001							
OUTFALL-01-01-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-04-09-	4	1.0	6	5.0		10.0	
OUTFALL-01-05-09-	6	1.0	6	5.0		10.0	
OUTFALL-01-06-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-07-09-	5	1.0	nd	5.0		10.0	
OUTFALL-01-08-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-11-09-	5	1.0	nd	5.0		10.0	
OUTFALL-01-12-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-13-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-14-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-15-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-18-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-19-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-20-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-21-09-	4	1.0	nd	5.0		10.0	
OUTFALL-01-22-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-25-09-	5	1.0	5	5.0		10.0	
OUTFALL-01-26-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-27-09-	5	1.0	6	5.0		10.0	
OUTFALL-01-28-09-	6	1.0	5	5.0		10.0	
OUTFALL-01-29-09-	6	1.0	6	5.0		10.0	
Injection Wells							
Maple-Inj-01-02-09-08:40	13	1.0	nd	5.0		10.0	

Sample Name - Date Sampled - Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
Injection Wells							
Maple-Inj-01-05-09-08:10	11	1.0	nd	5.0		10.0	
Maple-Inj-01-06-09-08:05	10	1.0	nd	5.0		10.0	
Maple-Inj-01-07-09-08:15	14	1.0	nd	5.0		10.0	
Maple-Inj-01-08-09-08:10	11	1.0	nd	5.0		10.0	
Maple-Inj-01-09-09-08:20	9	1.0	5	5.0		10.0	
Maple-Inj-01-12-09-08:30	9	1.0	5	5.0		10.0	
Maple-Inj-01-13-09-08:25	16	1.0	nd	5.0		10.0	
Maple-Inj-01-14-09-08:40	8	1.0	nd	5.0		10.0	
Maple-Inj-01-15-09-08:20	8	1.0	6	5.0		10.0	
Maple-Inj-01-16-09-08:25	8	1.0	6	5.0		10.0	
Maple-Inj-01-19-09-09:40	12	1.0	nd	5.0		10.0	
Maple-Inj-01-20-09-08:30	10	1.0	5	5.0		10.0	
Maple-Inj-01-21-09-08:30	15	1.0	nd	5.0		10.0	
Maple-Inj-01-22-09-08:35	20	1.0	nd	5.0		10.0	
Maple-Inj-01-23-09-08:35	12	1.0	nd	5.0		10.0	
Maple-Inj-01-26-09-08:10	10	1.0	6	5.0		10.0	
Maple-Inj-01-27-09-08:10	13	1.0	nd	5.0		10.0	
Maple-Inj-01-28-09-08:35	16	1.0	nd	5.0		10.0	
Maple-Inj-01-29-09-08:40	14	1.0	nd	5.0		10.0	
Maple-Inj-01-30-09-08:30	17	1.0	nd	5.0		10.0	
A-Series Wells							
MW-112s-01-30-09-11:35	nd	1.0		5.0		10.0	
MW-112i-01-30-09-12:10	4	1.0		5.0		10.0	
MW-112d-01-30-09-12:50	nd	1.0		5.0		10.0	
C3							
MW-39s-01-20-09-11:40	28	1.0		5.0		10.0	
MW-105s-01-23-09-12:30	1704	1.0		5.0		10.0	
D0							

Sample Name - Date Sampled - Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
D0							
MW-53i-01-20-09-11:10	47	1.0		5.0		10.0	
5005 Jackson Rd-01-26-09-14:35	41	1.0		5.0		10.0	
A2 Cleaning Supply-01-13-09-13:50	97	1.0		5.0		10.0	
D2							
MW-38d-01-26-09-13:55	117	1.0		5.0		10.0	
MW-39d-01-20-09-12:00	242	1.0		5.0		10.0	
MW-56s-01-09-09-11:35	109	1.0		5.0		10.0	
MW-92-01-08-09-14:00	21	1.0		5.0		10.0	
MW-118-01-13-09-10:15	346	1.0		5.0		10.0	
MW-121s-01-08-09-11:50	nd	1.0		5.0		10.0	
MW-121d-01-08-09-11:00	nd	1.0		5.0		10.0	
545 Allison-01-08-09-14:20	12	1.0		5.0		10.0	
3225 Dexter Rd-01-26-09-13:20	nd	1.0		5.0		10.0	
3249 Dexter Rd-01-28-09-11:10	nd	1.0		5.0		10.0	
453 Dupont-01-28-09-11:35	3	1.0		5.0		10.0	
465 Dupont-01-13-09-14:30	1173	1.0		5.0		10.0	
305 Pinewood-01-28-09-11:20	nd	1.0		5.0		10.0	
E							
MW-30d-01-20-09-13:25	1167	1.0		5.0		10.0	
MW-71-01-27-09-13:55	1268	1.0		5.0		10.0	
MW-72s-01-13-09-11:35	26	1.0		5.0		10.0	
MW-72d-01-13-09-12:40	3021	1.0		5.0		10.0	
MW-79s-01-06-09-13:25	432	1.0		5.0		10.0	
MW-79d-01-06-09-12:40	2	1.0		5.0		10.0	
MW-82s-01-26-09-13:00	59	1.0		5.0		10.0	
MW-83s-01-09-09-10:30	487	1.0		5.0		10.0	
MW-84s-01-09-09-14:20	542	1.0		5.0		10.0	
MW-84d-01-09-09-13:45	nd	1.0		5.0		10.0	

Sample Name - Date Sampled - Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
E							
MW-85-01-05-09-14:20	1466	1.0		5.0		10.0	
MW-87s-01-06-09-11:05	12	1.0		5.0		10.0	
MW-87d-01-06-09-11:40	523	1.0		5.0		10.0	
MW-88-01-05-09-13:20	422	1.0		5.0		10.0	
MW-90-01-13-09-11:00	56	1.0		5.0		10.0	
MW-100-01-07-09-14:10	226	1.0		5.0		10.0	
MW-101-01-08-09-13:10	415	1.0		5.0		10.0	
MW-105d-01-23-09-12:15	654	1.0		5.0		10.0	
MW-106s-01-23-09-12:15	824	1.0		5.0		10.0	
MW-106d-01-23-09-10:55	1	1.0		5.0		10.0	
MW-108s-01-28-09-10:05	2508	1.0		5.0		10.0	
MW-108d-01-28-09-10:40	2816	1.0		5.0		10.0	
MW-115-01-05-09-12:25	960	1.0		5.0		10.0	
MW-116-01-05-09-11:30	453	1.0		5.0		10.0	
TW-15-01-07-09-12:00	140	1.0		5.0		10.0	
None							
HC/HR-01-02-09-09:10		1.0	nd	2.0		10.0	
HC/HR-01-05-09-08:20		1.0	nd	2.0		10.0	
HC/HR-01-06-09-08:15		1.0	nd	2.0		10.0	
HC/HR-01-07-09-08:20		1.0	nd	2.0		10.0	
HC/HR-01-08-09-08:15		1.0	nd	2.0		10.0	
HC/HR-01-09-09-08:20		1.0	nd	2.0		10.0	
HC/HR-01-12-09-08:45		1.0	nd	2.0		10.0	
HC/HR-01-13-09-08:15		1.0	nd	2.0		10.0	
HC/HR-01-14-09-08:50		1.0	nd	2.0		10.0	
HC/HR-01-15-09-08:30		1.0	nd	2.0		10.0	
HC/HR-01-16-09-08:30		1.0	nd	2.0		10.0	
HC/HR-01-19-09-08:30		1.0	nd	2.0		10.0	

Sample Name - Date Sampled - Time Sampled	1,4-Dioxane Results (ppb)	R.L. (ppb)	Bromate Results (ppb)	R.L. (ppb)	Bromide Results (ppb)	R.L. (ppb)	Comments
None							
HC/HR-01-20-09-08:30		1.0	nd	2.0		10.0	
HC/HR-01-21-09-08:15		1.0	nd	2.0		10.0	
HC/HR-01-22-09-08:20		1.0	nd	2.0		10.0	
HC/HR-01-23-09-08:30		1.0	nd	2.0		10.0	
HC/HR-01-26-09-08:30		1.0	nd	2.0		10.0	
HC/HR-01-27-09-08:10		1.0	nd	2.0		10.0	
HC/HR-01-28-09-08:15		1.0	nd	2.0		10.0	
HC/HR-01-29-09-08:45		1.0	nd	2.0		10.0	
HC/HR-01-30-09-09:15		1.0	nd	2.0		10.0	

nd=Not detected at or above the Reporting Limit (R.L.)

1,4-Dioxane Precision and Accuracy Control Charting

Analysis Date	*Method Blank*	*CVS True Value*	*CVS Result*	*CVS % Recovery*	*LFB True Value:*	*LFB Result:*	*LFB % Recovery:*	*Sample Result:*	*MS/MSD True Value:*	*MS Result:*	*MSD Result:*	*MS % Recovery:*	*MSD % Recovery:*	*MS/MSD Mean:*	*MS/MSD RSD:*	*MS/MSD RPD:*
1/2/2009	0	10.00	10.59	105.9%	10.00	10.57	105.7%	12.80	10.00	24.11	23.82	113.1%	110.2%	23.97	0.86	1.21%
1/5/2009	0	10.00	10.71	107.1%	10.00	10.71	107.1%	10.98	10.00	21.67	22.09	106.9%	111.1%	21.88	1.36	1.92%
1/6/2009	0	10.00	10.04	100.4%	10.00	10.20	102.0%	10.37	10.00	20.29	19.85	99.2%	94.8%	20.07	1.55	2.19%
1/7/2009	0	10.00	9.56	95.6%	10.00	10.07	100.7%	14.45	10.00	24.03	23.97	95.8%	95.2%	24.00	0.18	0.25%
1/8/2009	0	10.00	10.71	107.1%	10.00	10.71	107.1%	10.98	10.00	21.67	22.09	106.9%	111.1%	21.88	1.36	1.92%
	0	10.00	9.90	99.0%	10.00	10.11	101.1%	11.25	10.00	21.39	21.02	101.4%	97.7%	21.21	1.23	1.74%
1/9/2009	0	10.00	9.80	98.0%	10.00	10.01	100.1%	9.46	10.00	19.09	19.60	96.3%	101.4%	19.35	1.86	2.64%
1/12/2009	0	10.00	10.08	100.8%	10.00	10.16	101.6%	8.99	10.00	18.29	18.44	93.0%	94.5%	18.37	0.58	0.82%
1/13/2009	0	10.00	10.12	101.2%	10.00	10.23	102.3%	15.82	10.00	25.27	25.34	94.5%	95.2%	25.31	0.20	0.28%
1/14/2009	0	10.00	10.07	100.7%	10.00	10.03	100.3%	8.08	10.00	18.02	17.63	99.4%	95.5%	17.83	1.55	2.19%
1/15/2009	0	10.00	10.00	100.0%	10.00	10.06	100.6%	7.98	10.00	17.53	16.96	95.5%	89.8%	17.25	2.34	3.31%
1/16/2009	0	10.00	10.08	100.8%	10.00	10.24	102.4%	7.52	10.00	17.59	18.21	100.7%	106.9%	17.90	2.45	3.46%
1/19/2009	0	10.00	10.25	102.5%	10.00	10.29	102.9%	12.41	10.00	21.67	22.45	92.6%	100.4%	22.06	2.50	3.54%
1/20/2009	0	10.00	10.34	103.4%	10.00	10.38	103.8%	10.17	10.00	20.60	20.36	104.3%	101.9%	20.48	0.83	1.17%
1/21/2009	0	10.00	10.10	101.0%	10.00	10.51	105.1%	15.10	10.00	24.09	25.29	89.9%	101.9%	24.69	3.44	4.86%
1/22/2009	0	10.00	10.29	102.9%	10.00	10.33	103.3%	20.12	10.00	30.48	30.32	103.6%	102.0%	30.40	0.37	0.53%
1/23/2009	0	10.00	10.18	101.8%	10.00	10.27	102.7%	12.11	10.00	21.67	21.32	95.6%	92.1%	21.50	1.15	1.63%
1/26/2009	0	10.00	10.12	101.2%	10.00	10.34	103.4%	10.20	10.00	20.74	20.35	105.4%	101.5%	20.55	1.34	1.90%
1/27/2009	0	10.00	10.23	102.3%	10.00	10.29	102.9%	13.34	10.00	23.62	24.19	102.8%	108.5%	23.91	1.69	2.38%
1/28/2009	0	10.00	10.07	100.7%	10.00	10.42	104.2%	15.61	10.00	26.46	26.38	108.5%	107.7%	26.42	0.21	0.30%
1/29/2009	0	10.00	10.61	106.1%	10.00	10.65	106.5%	14.46	10.00	24.94	25.16	104.8%	107.0%	25.05	0.62	0.88%

CVS Mean: **10.18** 2 Standard Dev.: **0.58** Upper Warning Limit: **10.76** Upper Control Limit: **11.05**

CVS Standard Dev: **0.29** 3 Standard Dev.: **.87** Lower Warning Limit: **9.60** Lower Control Limit: **9.31**

Bromate Precision and Accuracy Control Charting

Analysis Date	Method Blank	ICCS Result / Actual	ICCS % Recovery	LFB Result / Actual	LFB % Recovery	CCCS Result / Actual	CCCS % Recovery	ECCS Result / Actual	ECCS % Recovery	Non-Spike Result	LFM & LFMD Results / Actual	LFM & LFMD % Recovery	LFM & LFMD Mean	LFM & LFMD RSD	LFM & LFMD RPD
1/2/2009	0	1.9 / 2.0	95.0%	1.7 / 2.0	85.0%			15.3 / 16.0	95.6%	6.2	10.1 9.8 / 4.0	97.5% / 90.0%	10.0	2.13	3.0%
1/5/2009	0	1.8 / 2.0	90.0%	2.0 / 2.0	100.0%			16.0 / 16.0	100.0%	6.4	10.9 10.3 / 4.0	112.5% / 97.5%	10.6	4.00	5.7%
1/6/2009	0	2.0 / 2.0	100.0%	2.0 / 2.0	100.0%			16.5 / 16.0	103.1%	5.9	9.7 10.2 / 4.0	95.0% / 107.5%	10.0	3.55	5.0%
1/7/2009	0	1.9 / 2.0	95.0%	1.9 / 2.0	95.0%			15.3 / 16.0	95.6%	6.0	9.4 9.3 / 4.0	85.0% / 82.5%	9.4	0.76	1.1%
1/8/2009	0	1.6 / 2.0	80.0%	1.5 / 2.0	75.0%			14.2 / 16.0	88.8%	4.3	8.1 7.6 / 4.0	95.0% / 82.5%	7.9	4.50	6.4%
1/9/2009	0	1.9 / 2.0	95.0%	1.9 / 2.0	95.0%			17.1 / 16.0	106.9%	5.3	9.3 9.8 / 4.0	100.0% / 112.5%	9.6	3.70	5.2%
1/12/2009	0	1.9 / 2.0	95.0%	2.1 / 2.0	105.0%			16.2 / 16.0	101.3%	4.9	8.7 8.5 / 4.0	95.0% / 90.0%	8.6	1.64	2.3%
1/13/2009	0	1.8 / 2.0	90.0%	1.8 / 2.0	90.0%			16.6 / 16.0	103.8%	5.1	9.1 9.1 / 4.0	100.0% / 100.0%	9.1	0.00	0.0%
1/14/2009	0	2.0 / 2.0	100.0%	2.0 / 2.0	100.0%			17.0 / 16.0	106.3%	5.0	9.3 9.0 / 4.0	107.5% / 100.0%	9.2	2.32	3.3%
1/15/2009	0	2.0 / 2.0	100.0%	2.1 / 2.0	105.0%			17.6 / 16.0	110.0%	5.3	9.9 9.6 / 4.0	115.0% / 107.5%	9.8	2.18	3.1%
1/16/2009	0	2.0 / 2.0	100.0%	2.1 / 2.0	105.0%			17.3 / 16.0	108.1%	5.6	10.1 10.0 / 4.0	112.5% / 110.0%	10.1	0.70	1.0%
1/19/2009	0	2.1 / 2.0	105.0%	1.8 / 2.0	90.0%			18.0 / 16.0	112.5%	5.5	10.1 9.9 / 4.0	115.0% / 110.0%	10.0	1.41	2.0%

Analysis Date	Method Blank	ICCS Result / Actual	ICCS % Recovery	LFB Result / Actual	LFB % Recovery	CCCS Result / Actual	CCCS % Recovery	ECCS Result / Actual	ECCS % Recovery	Non-Spike Result	LFM & LFMD Results / Actual	LFM & LFMD % Recovery	LFM & LFMD Mean	LFM & LFMD RSD	LFM & LFMD RPD
1/20/2009	0	2.0 / 2.0	100.0%	2.0 / 2.0	100.0%			18.2 / 16.0	113.8%	5.7	10.0 10.1 / 4.0	107.5% / 110.0%	10.1	0.70	1.0%
1/21/2009	0	2.2 / 2.0	110.0%	2.2 / 2.0	110.0%			17.6 / 16.0	110.0%	6.1	10.2 10.0 / 4.0	102.5% / 97.5%	10.1	1.40	2.0%
1/22/2009	0	1.9 / 2.0	95.0%	2.1 / 2.0	105.0%					5.5	9.2 / 4.0	92.5%		#Error	
1/23/2009	0	1.8 / 2.0	90.0%	2.1 / 2.0	105.0%			15.2 / 16.0	95.0%	5.0	9.1 8.8 / 4.0	102.5% / 95.0%	9.0	2.37	3.4%
1/26/2009	0	2.0 / 2.0	100.0%	2.1 / 2.0	105.0%					5.6					
1/27/2009	0	1.9 / 2.0	95.0%	2.3 / 2.0	115.0%			18.2 / 16.0	113.8%	5.8	10.1 10.0 / 4.0	107.5% / 105.0%	10.1	0.70	1.0%
1/28/2009	0	2.1 / 2.0	105.0%	2.1 / 2.0	105.0%			18.3 / 16.0	114.4%	5.9	10.0 9.7 / 4.0	102.5% / 95.0%	9.9	2.15	3.0%
1/29/2009	0	1.8 / 2.0	90.0%	2.0 / 2.0	100.0%			17.3 / 16.0	108.1%	5.1	9.8 9.7 / 4.0	117.5% / 115.0%	9.8	0.73	1.0%
1/30/2009	0	2.1 / 2.0	105.0%	2.1 / 2.0	105.0%			18.1 / 16.0	113.1%	6.0	10.3 10.0 / 4.0	107.5% / 100.0%	10.2	2.09	3.0%

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

15-Jan-09

Wendy Schultz
Pall Life Sciences
600 South Wagner Road
Ann Arbor, MI 48103-9019

Tel: (734) 913-6598
Fax: (734) 913-6427

Re: Oxalic Acid Analysis Jan. 6, 2009

Work Order : **0901104**

Dear Wendy,

ALS Laboratory Group received 1 sample on 1/8/2009 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Laboratory Group and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 6.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Ann Preston

Electronically approved by: Ann Preston

Ann Preston
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: IL100452

ALS Laboratory Group

Date: 15-Jan-09

Client: Pall Life Sciences
Project: Oxalic Acid Analysis Jan. 6, 2009
Work Order: **0901104**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0901104-01	Outfall 001	Water		1/6/2009 10:30	1/8/2009 10:00	☐

ALS Laboratory Group

Date: *15-Jan-09*

Client: Pall Life Sciences
Project: Oxalic Acid Analysis Jan. 6, 2009

Work Order: 0901104

Lab ID: 0901104-01A
Client Sample ID: Outfall 001

Collection Date: 1/6/2009 10:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ORGANIC ACIDS BY HPLC			**HPLC**			Analyst: **JD**
Oxalic acid	ND		150	µg/L	1	1/15/2009

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
a - Not accredited
S - Spike Recovery outside accepted recovery limits
P - Dual Column results RPD > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time
n - Not offered for accreditation

ALS Laboratory Group

Client: Pall Life Sciences

Work Order: 0901104

Project: Oxalic Acid Analysis Jan. 6, 2009

Date: *15-Jan-09*

QC BATCH REPORT

Batch ID: **R65063** Instrument ID **HPLC1** Method: **HPLC**

MBLK Sample ID: **MB-R65063-R65063** Units: **mg/L** Analysis Date: **1/15/2009**

Client ID: Run ID: **HPLC1_090115A** SeqNo: **1093733** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oxalic acid	ND	0.15								

LCS Sample ID: **LCS-R65063-R65063** Units: **mg/L** Analysis Date: **1/15/2009**

Client ID: Run ID: **HPLC1_090115A** SeqNo: **1093734** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oxalic acid	466.9	0.15	500	0	93.4	80-120	0			

LCSD Sample ID: **LCSD-R65063-R65063** Units: **mg/L** Analysis Date: **1/15/2009**

Client ID: Run ID: **HPLC1_090115A** SeqNo: **1093738** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oxalic acid	462.8	0.15	500	0	92.6	80-120	466.9	0.876	20	

MS Sample ID: **0901104-01A MS** Units: **mg/L** Analysis Date: **1/15/2009**

Client ID: **Outfall 001** Run ID: **HPLC1_090115A** SeqNo: **1093736** Prep Date: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oxalic acid	743.5	0.30	1000	0	74.3	45-85	0			

MSD Sample ID: **0901104-01A MSD** Units: **mg/L** Analysis Date: **1/15/2009**

Client ID: **Outfall 001** Run ID: **HPLC1_090115A** SeqNo: **1093737** Prep Date: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oxalic acid	754.7	0.30	1000	0	75.5	45-85	743.5	1.51	20	

The following samples were analyzed in this batch: 0901104-01A

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

0901104

PALL Life Sciences

Environmental Laboratory Services
600 South Wagner Rd. Ann Arbor, MI 48103-9019
Phone: (734)-913-6598 * Fax: (734)-913-~~6427~~ 6103

Chain of Custody Record

Page 1 of 1

Company Pall Corporation
Name Wendy Schultz
Street 600 S Wagner Rd
City Ann Arbor State MI Zip 48103
Phone (734)913-6598 Fax (734)913-6103

Required Completion Date: __/__/__ Fax the Report: Yes / No
Requested Turnaround: (Standard) 4 business days * 48 hours
24 hours * 3 business days * ASAP/Same day
Project Name / Number: oxalic acid
Print Sampler Name: Robert Ursing

	Sample Identification or Location (This will appear on the final report)	Sample Date	Sample Time	Water Matrix: Drinking	Ground	Surface	Waste	Number of Containers	Requested Testing	Preservation: None	4°C	HCl	HNO_3	H_2SO_4	Other	Lab ID
1	Outfall001	1/6/09	10:30	treated				1	oxalic acid	X						
2		/ /	:													
3		/ /	:													
4		/ /	:													
5		/ /	:													
6		/ /	:													
7		/ /	:													
8		/ /	:													
9		/ /	:													
10		/ /	:													
11		/ /	:													
12		/ /	:													
13		/ /	:													
14		/ /	:													
15		/ /	:													

Released by: Robert Ursing	Date: 1/6/09	Time: 11:00	Received by: Jessica Reade	Date: 1/8/09	Time: 11:00
Released by: Jessica Reade	Date: 1/07/09	Time: 09:00	Received by:	Date: 1/8/9	Time: 10:00

PINK Copy – Sampler

WHITE copy and YELLOW copy – Forward to laboratory with samples.

Sample temperature upon laboratory receipt 1.6 °C

ALS Laboratory Group

Sample Receipt Checklist

Client Name PALL

Date/Time Received: 1/8/2009 10:00

Work Order Number 0901104

Received by: ARB

Checklist completed by _____ 1/8/9
Signature | Date

Reviewed by _____ 1/8/09
Initials | Date

Matrix: water

Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.6 C		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? W 0 Checked by _____

Login Notes:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

Corrective Action _____

_____

_____