25.0(a)_901_SEMI_ANNUAL_SELF_
MONITORING_SUBMISSION

ALS Environmental

08-Jun-2021

Jim Satterlee
Safety-Kleen Systems
601 Riley Rd
East Chicago, IN 46312-1638

Re: **(SK) Semi Annual Wastewater 05-25-21** Work Order: **21052332**

Dear Jim,

ALS Environmental received 2 samples on 26-May-2021 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved 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 Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Alex J. Csaszar

Alex J. Csaszar
Project Manager

ALS Group, USA

Date: 08-Jun-21

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21
Work Order: **21052332**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21052332-01	City Discharge Well (Composite)	Wastewater		5/25/2021 13:15	5/26/2021 13:00	☐
21052332-02	City Discharge Well (Grab)	Wastewater		5/25/2021 14:15	5/26/2021 13:00	☐

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21
Work Order: 21052332

Case Narrative

Samples for the above noted Work Order were received on 05/26/2021. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

No other deviations or anomalies were noted.

Extractable Organics:

Batch 177694, Method E625.1, Sample City Discharge Well (Composite) (21052332-01F): n-Decane & n-Octadecane not found.

Metals:

No other deviations or anomalies were noted.

Wet Chemistry:

Batch 177754, Method E1664A, Sample City Discharge Well (Grab) (21052332-02B): Total Recoverable Petroleum Hydrocarbons value determined by calculation.

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21
WorkOrder: 21052332

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
°C	Degrees Celcius
µg/L	Micrograms per Liter
as noted	
mg NH3-N/L	Milligrams Ammonia-Nitrogen per Liter
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group, USA

Date: *08-Jun-2021*

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21
Sample ID: City Discharge Well (Composite)
Collection Date: 5/25/2021 01:15 PM

Work Order: 21052332
Lab ID: 21052332-01
Matrix: WASTEWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**E245.1**		Prep: E245.1 6/2/21 14:10	Analyst: **MTW**
Mercury	**0.00039**		**0.00020**	**mg/L**	1	6/2/2021 03:17 PM
METALS BY ICP-MS			**E200.8**		Prep: CEM-NPDES 6/4/21 13:55	Analyst: **STP**
Antimony	ND		0.0050	mg/L	1	6/5/2021 12:14 AM
Arsenic	**0.0146**		**0.0050**	**mg/L**	1	6/5/2021 12:14 AM
Barium	**0.0353**		**0.0050**	**mg/L**	1	6/5/2021 12:14 AM
Chromium	**0.0178**		**0.0050**	**mg/L**	1	6/2/2021 09:13 PM
Cobalt	ND		0.0050	mg/L	1	6/5/2021 12:14 AM
Copper	**0.0247**		**0.0050**	**mg/L**	1	6/2/2021 09:13 PM
Lead	ND		0.0050	mg/L	1	6/5/2021 12:14 AM
Molybdenum	**0.0674**		**0.0050**	**mg/L**	1	6/5/2021 12:14 AM
Nickel	**0.0271**		**0.0050**	**mg/L**	1	6/5/2021 12:14 AM
Tin	ND		0.0050	mg/L	1	6/5/2021 12:14 AM
Zinc	**0.229**		**0.010**	**mg/L**	1	6/2/2021 09:13 PM
SEMI-VOLATILE ORGANIC COMPOUNDS			**E625.1**		Prep: E625.1 6/1/21 14:23	Analyst: **EE**
Bis(2-ethylhexyl)phthalate	ND		5.0	µg/L	1	6/2/2021 09:25 PM
Carbazole	ND		5.0	µg/L	1	6/2/2021 09:25 PM
Fluoranthene	**0.780**		**0.10**	**µg/L**	1	6/2/2021 09:25 PM
Phenanthrene	ND		0.10	µg/L	1	6/2/2021 09:25 PM
Surr: 2,4,6-Tribromophenol	*41.5*		*27-83*	*%REC*	1	6/2/2021 09:25 PM
Surr: 2-Fluorobiphenyl	*26.2*		*26-79*	*%REC*	1	6/2/2021 09:25 PM
Surr: 2-Fluorophenol	*20.2*		*13-56*	*%REC*	1	6/2/2021 09:25 PM
Surr: 4-Terphenyl-d14	*51.8*		*43-106*	*%REC*	1	6/2/2021 09:25 PM
Surr: Nitrobenzene-d5	*64.0*		*29-80*	*%REC*	1	6/2/2021 09:25 PM
Surr: Phenol-d6	*27.2*		*10-35*	*%REC*	1	6/2/2021 09:25 PM
SCAN FOR SEMI-VOLATILE ORGANICS			**E625.1**		Prep: E625.1 6/1/21 14:23	Analyst: **EE**
SVOC Scan	*See narrative.*			as noted	1	6/2/2021
CHEMICAL OXYGEN DEMAND			**E410.4 R2.0**			Analyst: **KF**
Chemical Oxygen Demand	**2,000**		**250**	**mg/L**	5	5/27/2021 06:22 PM
FLUORIDE			**A4500-F C-11**			Analyst: **QTN**
Fluoride	**2.5**		**0.10**	**mg/L**	1	5/27/2021 07:26 PM
AMMONIA AS NITROGEN (DISTILLED)			**A4500-NH3 G-11**		Prep: A4500-NH3 B 6/3/21 14:50	Analyst: **JMT**
Ammonia as Nitrogen	**54**		**6.0**	**mg NH3-N/L**	40	6/3/2021 04:43 PM
PHOSPHORUS, TOTAL			**E365.1 R2.0**		Prep: E365.1 R2.0 6/1/21 12:11	Analyst: **JMT**
Phosphorus, Total	**0.99**		**0.25**	**mg/L**	1	6/1/2021 03:51 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA **Date:** *08-Jun-2021*

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21 **Work Order:** 21052332
Sample ID: City Discharge Well (Composite) **Lab ID:** 21052332-01
Collection Date: 5/25/2021 01:15 PM **Matrix:** WASTEWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PHENOLICS, TOTAL			E420.4			Analyst: JB
Phenolics, Total	0.48		0.050	mg/L	5	5/27/2021 03:42 PM
TOTAL SUSPENDED SOLIDS			A2540 D-11		Prep: FILTER 6/1/21 16:30	Analyst: JB
Total Suspended Solids	328		24	mg/L	1	6/2/2021 05:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA **Date:** *08-Jun-2021*

Client: Safety-Kleen Systems
Project: (SK) Semi Annual Wastewater 05-25-21 **Work Order:** 21052332
Sample ID: City Discharge Well (Grab) **Lab ID:** 21052332-02
Collection Date: 5/25/2021 02:15 PM **Matrix:** WASTEWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)			**A4500-H B-11**			Analyst: **ALS**
pH (field)	6.59			s.u.	1	5/25/2021
TEMPERATURE (FIELD)			**A2550 B-10**			Analyst: **ALS**
Temperature (field)	34.8			°C	1	5/25/2021
CYANIDE, AVAILABLE			**OIA 1677-09**			Analyst: **MB**
Cyanide, Available	170		10	µg/L	5	5/28/2021 01:32 PM
OIL AND GREASE			**E1664A**		Prep: E1664A 6/1/21 14:23	Analyst: **AWH**
Oil and Grease	ND		10	mg/L	1	6/1/2021 09:23 AM
TOTAL REC PET HYDROCARBONS			**E1664A**		Prep: E1664A 6/1/21 14:23	Analyst: **AWH**
Total Rec. Pet Hydrocarbons	*ND*		4.0	mg/L	1	6/1/2021 09:23 AM
FIELD SERVICES - VALPARAISO, IN			**FIELD**			Analyst: **ALS**
Field Services	*Complete*				1	5/25/2021

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 08-Jun-21

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177792** Instrument ID **HG4** Method: **E245.1**

MBLK Sample ID: **MBLK-177792-177792** Units: **mg/L** Analysis Date: **6/2/2021 03:04 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450116** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **LCS-177792-177792** Units: **mg/L** Analysis Date: **6/2/2021 03:06 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450117** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00219	0.00020	0.002	0	110	85-115	0			

MS Sample ID: **21052384-01CMS** Units: **mg/L** Analysis Date: **6/2/2021 03:29 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450130** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00204	0.00020	0.002	0.000003	102	80-120	0			

MS Sample ID: **21052443-02BMS** Units: **mg/L** Analysis Date: **6/2/2021 03:43 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450138** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.002115	0.00020	0.002	-0.000021	107	80-120	0			

MSD Sample ID: **21052384-01CMSD** Units: **mg/L** Analysis Date: **6/2/2021 03:31 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450131** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.002145	0.00020	0.002	0.000003	107	80-120	0.00204	5.02	20	

MSD Sample ID: **21052443-02BMSD** Units: **mg/L** Analysis Date: **6/2/2021 03:51 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450142** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00219	0.00020	0.002	-0.000021	111	80-120	0.002115	3.48	20	

DUP Sample ID: **21052250-01ADUP** Units: **mg/L** Analysis Date: **6/2/2021 03:10 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450119** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	-0.000024	0	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: 177792 **Instrument ID HG4** **Method: E245.1**

DUP Sample ID: **21052387-03ADUP** Units: **mg/L** Analysis Date: **6/2/2021 03:38 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450135** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.0001095	0	20	

DUP Sample ID: **21052575-03ADUP** Units: **mg/L** Analysis Date: **6/2/2021 03:59 PM**
Client ID: Run ID: **HG4_210602A** SeqNo: **7450147** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.0000915	0	20	

The following samples were analyzed in this batch: 21052332-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177836** Instrument ID **ICPMS3** Method: **E200.8**

MBLK Sample ID: **MBLK-177836-177836** Units: **mg/L** Analysis Date: **6/2/2021 08:59 PM**
Client ID: Run ID: **ICPMS3_210602A** SeqNo: **7450541** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	ND	0.0050								
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Chromium	0.0007854	0.0050								J
Cobalt	ND	0.0050								
Copper	0.002732	0.0050								J
Lead	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Tin	ND	0.0050								
Zinc	0.003868	0.010								J

LCS Sample ID: **LCS-177836-177836** Units: **mg/L** Analysis Date: **6/3/2021 04:01 PM**
Client ID: Run ID: **ICPMS3_210603A** SeqNo: **7453869** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	0.0879	0.0050	0.1	0	87.9	85-115	0			
Copper	0.08974	0.0050	0.1	0	89.7	85-115	0			
Zinc	0.09051	0.010	0.1	0	90.5	85-115	0			

MS Sample ID: **21052298-01AMS** Units: **mg/L** Analysis Date: **6/2/2021 09:08 PM**
Client ID: Run ID: **ICPMS3_210602A** SeqNo: **7450546** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1113	0.0050	0.1	0.0001606	111	70-130	0			
Arsenic	0.1123	0.0050	0.1	0.002284	110	70-130	0			
Barium	0.14	0.0050	0.1	0.0339	106	70-130	0			
Chromium	0.1133	0.0050	0.1	0.000913	112	70-130	0			
Cobalt	0.1064	0.0050	0.1	0.0003366	106	70-130	0			
Copper	0.1062	0.0050	0.1	0.00146	105	70-130	0			
Lead	0.1051	0.0050	0.1	0.0006589	104	70-130	0			
Molybdenum	0.1021	0.0050	0.1	0.0000308	102	70-130	0			
Nickel	0.1068	0.0050	0.1	0.001361	105	70-130	0			
Tin	0.1093	0.0050	0.1	0.001063	108	70-130	0			
Zinc	0.1142	0.010	0.1	0.007786	106	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177836** Instrument ID **ICPMS3** Method: **E200.8**

MS Sample ID: **21060033-05AMS** Units: **mg/L** Analysis Date: **6/2/2021 09:37 PM**
Client ID: Run ID: **ICPMS3_210602A** SeqNo: **7450562** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1095	0.0050	0.1	0.0000495	109	70-130	0			
Arsenic	0.1098	0.0050	0.1	0.0004862	109	70-130	0			
Barium	0.1293	0.0050	0.1	0.02082	109	70-130	0			
Chromium	0.1101	0.0050	0.1	0.001287	109	70-130	0			
Cobalt	0.1674	0.0050	0.1	0.06824	99.2	70-130	0			
Copper	0.1086	0.0050	0.1	0.009293	99.3	70-130	0			
Lead	0.1064	0.0050	0.1	0.0005269	106	70-130	0			
Molybdenum	0.1055	0.0050	0.1	0.003322	102	70-130	0			
Nickel	0.217	0.0050	0.1	0.1212	95.8	70-130	0			
Tin	0.1105	0.0050	0.1	0.0003949	110	70-130	0			
Zinc	0.2492	0.010	0.1	0.1525	96.8	70-130	0			

MSD Sample ID: **21052298-01AMSD** Units: **mg/L** Analysis Date: **6/2/2021 09:10 PM**
Client ID: Run ID: **ICPMS3_210602A** SeqNo: **7450547** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1089	0.0050	0.1	0.0001606	109	70-130	0.1113	2.16	20	
Arsenic	0.1099	0.0050	0.1	0.002284	108	70-130	0.1123	2.2	20	
Barium	0.1388	0.0050	0.1	0.0339	105	70-130	0.14	0.823	20	
Chromium	0.1113	0.0050	0.1	0.000913	110	70-130	0.1133	1.76	20	
Cobalt	0.1055	0.0050	0.1	0.0003366	105	70-130	0.1064	0.882	20	
Copper	0.1045	0.0050	0.1	0.00146	103	70-130	0.1062	1.57	20	
Lead	0.1044	0.0050	0.1	0.0006589	104	70-130	0.1051	0.643	20	
Molybdenum	0.1016	0.0050	0.1	0.0000308	102	70-130	0.1021	0.493	20	
Nickel	0.1067	0.0050	0.1	0.001361	105	70-130	0.1068	0.109	20	
Tin	0.1084	0.0050	0.1	0.001063	107	70-130	0.1093	0.872	20	
Zinc	0.1171	0.010	0.1	0.007786	109	70-130	0.1142	2.53	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177836** Instrument ID **ICPMS3** Method: **E200.8**

MSD Sample ID: **21060033-05AMSD** Units: **mg/L** Analysis Date: **6/2/2021 09:39 PM**
Client ID: Run ID: **ICPMS3_210602A** SeqNo: **7450563** Prep Date: **6/2/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1062	0.0050	0.1	0.0000495	106	70-130	0.1095	2.98	20	
Arsenic	0.1076	0.0050	0.1	0.0004862	107	70-130	0.1098	2.03	20	
Barium	0.126	0.0050	0.1	0.02082	105	70-130	0.1293	2.64	20	
Chromium	0.107	0.0050	0.1	0.001287	106	70-130	0.1101	2.94	20	
Cobalt	0.164	0.0050	0.1	0.06824	95.8	70-130	0.1674	2.05	20	
Copper	0.1055	0.0050	0.1	0.009293	96.2	70-130	0.1086	2.89	20	
Lead	0.1028	0.0050	0.1	0.0005269	102	70-130	0.1064	3.35	20	
Molybdenum	0.1026	0.0050	0.1	0.003322	99.3	70-130	0.1055	2.76	20	
Nickel	0.2138	0.0050	0.1	0.1212	92.6	70-130	0.217	1.49	20	
Tin	0.1063	0.0050	0.1	0.0003949	106	70-130	0.1105	3.8	20	
Zinc	0.2432	0.010	0.1	0.1525	90.8	70-130	0.2492	2.44	20	

The following samples were analyzed in this batch: 21052332-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **178016** Instrument ID **ICPMS3** Method: **E200.8**

MBLK Sample ID: **MBLK-178016-178016** Units: **mg/L** Analysis Date: **6/5/2021 12:02 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459367** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.004148	0.0050								J
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Chromium	ND	0.0050								
Cobalt	ND	0.0050								
Copper	ND	0.0050								
Lead	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Tin	ND	0.0050								
Zinc	ND	0.010								

LCS Sample ID: **LCS-178016-178016** Units: **mg/L** Analysis Date: **6/5/2021 12:03 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459368** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.111	0.0050	0.1	0	111	85-115	0			
Arsenic	0.1034	0.0050	0.1	0	103	85-115	0			
Barium	0.1102	0.0050	0.1	0	110	85-115	0			
Chromium	0.1055	0.0050	0.1	0	106	85-115	0			
Cobalt	0.09965	0.0050	0.1	0	99.6	85-115	0			
Copper	0.09924	0.0050	0.1	0	99.2	85-115	0			
Lead	0.09999	0.0050	0.1	0	100	85-115	0			
Molybdenum	0.1019	0.0050	0.1	0	102	85-115	0			
Nickel	0.1055	0.0050	0.1	0	105	85-115	0			
Tin	0.1045	0.0050	0.1	0	104	85-115	0			
Zinc	0.1023	0.010	0.1	0	102	85-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **178016** Instrument ID **ICPMS3** Method: **E200.8**

MS Sample ID: **21052336-02CMS** Units: **mg/L** Analysis Date: **6/5/2021 12:21 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459378** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1022	0.0050	0.1	0.0001001	102	70-130	0			
Arsenic	0.09735	0.0050	0.1	0.0000044	97.3	70-130	0			
Barium	0.1048	0.0050	0.1	0.0001881	105	70-130	0			
Chromium	0.09846	0.0050	0.1	0.0006127	97.8	70-130	0			
Cobalt	0.09418	0.0050	0.1	0.0000066	94.2	70-130	0			
Copper	0.09686	0.0050	0.1	-0.004523	101	70-130	0			
Lead	0.09543	0.0050	0.1	0.0000055	95.4	70-130	0			
Molybdenum	0.09561	0.0050	0.1	-0.0001628	95.8	70-130	0			
Nickel	0.09855	0.0050	0.1	0.0002926	98.3	70-130	0			
Tin	0.09856	0.0050	0.1	0.0001914	98.4	70-130	0			
Zinc	0.09728	0.010	0.1	0.002418	94.9	70-130	0			

MS Sample ID: **21052344-02AMS** Units: **mg/L** Analysis Date: **6/5/2021 12:51 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459395** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1032	0.0050	0.1	0.0005445	103	70-130	0			
Arsenic	0.1093	0.0050	0.1	0.00611	103	70-130	0			
Barium	0.1059	0.0050	0.1	0	106	70-130	0			
Chromium	0.1019	0.0050	0.1	0.001167	101	70-130	0			
Cobalt	0.0946	0.0050	0.1	0.0002805	94.3	70-130	0			
Copper	0.09821	0.0050	0.1	0.003771	94.4	70-130	0			
Lead	0.09773	0.0050	0.1	0.001272	96.5	70-130	0			
Molybdenum	0.3151	0.0050	0.1	0.2259	89.1	70-130	0			
Nickel	0.09909	0.0050	0.1	0.001346	97.7	70-130	0			
Tin	0.09941	0.0050	0.1	0	99.4	70-130	0			
Zinc	0.1023	0.010	0.1	0.009041	93.2	70-130	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **178016** Instrument ID **ICPMS3** Method: **E200.8**

MSD Sample ID: **21052336-02CMSD** Units: **mg/L** Analysis Date: **6/5/2021 12:23 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459379** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1029	0.0050	0.1	0.0001001	103	70-130	0.1022	0.718	20	
Arsenic	0.09691	0.0050	0.1	0.0000044	96.9	70-130	0.09735	0.455	20	
Barium	0.1037	0.0050	0.1	0.0001881	104	70-130	0.1048	1.09	20	
Chromium	0.09932	0.0050	0.1	0.0006127	98.7	70-130	0.09846	0.873	20	
Cobalt	0.09422	0.0050	0.1	0.0000066	94.2	70-130	0.09418	0.0432	20	
Copper	0.09606	0.0050	0.1	-0.004523	101	70-130	0.09686	0.834	20	
Lead	0.09334	0.0050	0.1	0.0000055	93.3	70-130	0.09543	2.22	20	
Molybdenum	0.09417	0.0050	0.1	-0.0001628	94.3	70-130	0.09561	1.53	20	
Nickel	0.09805	0.0050	0.1	0.0002926	97.8	70-130	0.09855	0.51	20	
Tin	0.09804	0.0050	0.1	0.0001914	97.8	70-130	0.09856	0.532	20	
Zinc	0.09627	0.010	0.1	0.002418	93.9	70-130	0.09728	1.04	20	

MSD Sample ID: **21052344-02AMSD** Units: **mg/L** Analysis Date: **6/5/2021 12:56 AM**
Client ID: Run ID: **ICPMS3_210604A** SeqNo: **7459398** Prep Date: **6/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1036	0.0050	0.1	0.0005445	103	70-130	0.1032	0.416	20	
Arsenic	0.1104	0.0050	0.1	0.00611	104	70-130	0.1093	1.02	20	
Barium	0.1059	0.0050	0.1	0	106	70-130	0.1059	0.0444	20	
Chromium	0.1022	0.0050	0.1	0.001167	101	70-130	0.1019	0.316	20	
Cobalt	0.09511	0.0050	0.1	0.0002805	94.8	70-130	0.0946	0.54	20	
Copper	0.09914	0.0050	0.1	0.003771	95.4	70-130	0.09821	0.944	20	
Lead	0.09804	0.0050	0.1	0.001272	96.8	70-130	0.09773	0.314	20	
Molybdenum	0.3172	0.0050	0.1	0.2259	91.3	70-130	0.3151	0.676	20	
Nickel	0.09954	0.0050	0.1	0.001346	98.2	70-130	0.09909	0.451	20	
Tin	0.09932	0.0050	0.1	0	99.3	70-130	0.09941	0.0919	20	
Zinc	0.1041	0.010	0.1	0.009041	95.1	70-130	0.1023	1.77	20	

The following samples were analyzed in this batch: 21052332-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177694** Instrument ID **SVMS8** Method: **E625.1**

MBLK Sample ID: **SBLKW1-177694-177694** Units: **µg/L** Analysis Date: **6/1/2021 09:21 PM**
Client ID: Run ID: **SVMS8_210601A** SeqNo: **7450021** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	ND	5.0								
Carbazole	ND	5.0								
Fluoranthene	ND	0.10								
Phenanthrene	ND	0.10								
Surr: 2,4,6-Tribromophenol	*29.05*	0	*50*	0	*58.1*	*27-83*	0			
Surr: 2-Fluorobiphenyl	*31.14*	0	*50*	0	*62.3*	*26-79*	0			
Surr: 2-Fluorophenol	*20.98*	0	*50*	0	*42*	*13-56*	0			
Surr: 4-Terphenyl-d14	*40.81*	0	*50*	0	*81.6*	*43-106*	0			
Surr: Nitrobenzene-d5	*32.81*	0	*50*	0	*65.6*	*29-80*	0			
Surr: Phenol-d6	*13.1*	0	*50*	0	*26.2*	*10-35*	0			

LCS Sample ID: **SLCSW1-177694-177694** Units: **µg/L** Analysis Date: **6/1/2021 09:42 PM**
Client ID: Run ID: **SVMS8_210601A** SeqNo: **7450022** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	14.23	5.0	20	0	71.2	10-158	0			
Carbazole	15.56	5.0	20	0	77.8	50-130	0			
Fluoranthene	15.35	0.10	20	0	76.8	26-137	0			
Phenanthrene	15.15	0.10	20	0	75.8	54-120	0			
Surr: 2,4,6-Tribromophenol	*35.27*	0	*50*	0	*70.5*	*27-83*	0			
Surr: 2-Fluorobiphenyl	*30.63*	0	*50*	0	*61.3*	*26-79*	0			
Surr: 2-Fluorophenol	*20.32*	0	*50*	0	*40.6*	*13-56*	0			
Surr: 4-Terphenyl-d14	*39.65*	0	*50*	0	*79.3*	*43-106*	0			
Surr: Nitrobenzene-d5	*33.08*	0	*50*	0	*66.2*	*29-80*	0			
Surr: Phenol-d6	*13.07*	0	*50*	0	*26.1*	*10-35*	0			

MS Sample ID: **21052352-02B MS** Units: **µg/L** Analysis Date: **6/1/2021 11:51 PM**
Client ID: Run ID: **SVMS8_210601A** SeqNo: **7450028** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	260.6	100	400	0	65.2	10-158	0			
Carbazole	261	100	400	0	65.2	50-130	0			
Fluoranthene	261.8	2.0	400	0	65.4	26-137	0			
Phenanthrene	262.2	2.0	400	0	65.6	54-120	0			
Surr: 2,4,6-Tribromophenol	*614.6*	0	*1000*	0	*61.5*	*27-83*	0			
Surr: 2-Fluorobiphenyl	*538.8*	0	*1000*	0	*53.9*	*26-79*	0			
Surr: 2-Fluorophenol	*349.4*	0	*1000*	0	*34.9*	*13-56*	0			
Surr: 4-Terphenyl-d14	*684.8*	0	*1000*	0	*68.5*	*43-106*	0			
Surr: Nitrobenzene-d5	*575.4*	0	*1000*	0	*57.5*	*29-80*	0			
Surr: Phenol-d6	*228.6*	0	*1000*	0	*22.9*	*10-35*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177694** Instrument ID **SVMS8** Method: **E625.1**

MSD Sample ID: **21052352-02B MSD** Units: **µg/L** Analysis Date: **6/2/2021 12:12 AM**
Client ID: Run ID: **SVMS8_210601A** SeqNo: **7450029** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-ethylhexyl)phthalate	265.2	100	400	0	66.3	10-158	260.6	1.75	82	
Carbazole	278.2	100	400	0	69.6	50-130	261	6.38	40	
Fluoranthene	280.4	2.0	400	0	70.1	26-137	261.8	6.86	66	
Phenanthrene	267.4	2.0	400	0	66.8	54-120	262.2	1.96	39	
Surr: 2,4,6-Tribromophenol	*633.4*	0	*1000*	0	*63.3*	*27-83*	614.6	*3.01*	*40*	
Surr: 2-Fluorobiphenyl	*524.4*	0	*1000*	0	*52.4*	*26-79*	538.8	*2.71*	*40*	
Surr: 2-Fluorophenol	*342.2*	0	*1000*	0	*34.2*	*13-56*	349.4	*2.08*	*40*	
Surr: 4-Terphenyl-d14	*672.2*	0	*1000*	0	*67.2*	*43-106*	684.8	*1.86*	*40*	
Surr: Nitrobenzene-d5	*564.2*	0	*1000*	0	*56.4*	*29-80*	575.4	*1.97*	*40*	
Surr: Phenol-d6	*218.4*	0	*1000*	0	*21.8*	*10-35*	228.6	*4.56*	*40*	

The following samples were analyzed in this batch: 21052332-01F

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177722** Instrument ID **LACHAT** Method: **E365.1 R2.0**

MBLK Sample ID: **MBLK-177722-177722** Units: **mg/L** Analysis Date: **6/1/2021 03:17 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446266** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	ND	0.050								

LCS Sample ID: **LCS2-177722-177722** Units: **mg/L** Analysis Date: **6/1/2021 03:20 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446268** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1.063	0.050	1	0	106	90-110	0			

LCS Sample ID: **LCS-177722-177722** Units: **mg/L** Analysis Date: **6/1/2021 03:52 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446297** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1.076	0.050	1	0	108	90-110	0			

MS Sample ID: **21052192-01C MS** Units: **mg/L** Analysis Date: **6/1/2021 03:38 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446285** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1.479	0.050	1	0.2904	119	90-110	0			S

MS Sample ID: **21052270-02C MS** Units: **mg/L** Analysis Date: **6/1/2021 03:54 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446299** Prep Date: **6/1/2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	6.388	0.25	1	4.849	154	90-110	0			SO

MSD Sample ID: **21052192-01C MSD** Units: **mg/L** Analysis Date: **6/1/2021 03:40 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446286** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1.502	0.050	1	0.2904	121	90-110	1.479	1.5	20	S

MSD Sample ID: **21052270-02C MSD** Units: **mg/L** Analysis Date: **6/1/2021 03:57 PM**
Client ID: Run ID: **LACHAT_210601B** SeqNo: **7446302** Prep Date: **6/1/2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	6.39	0.25	1	4.849	154	90-110	6.388	0.0235	20	SO

The following samples were analyzed in this batch: 21052332-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177754** Instrument ID **O&G** Method: **E1664A**

MBLK Sample ID: **MBLK-177754-177754** Units: **mg/L** Analysis Date: **6/1/2021 09:23 AM**
Client ID: Run ID: **O&G_210601A** SeqNo: **7445703** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	ND	5.0								

LCS Sample ID: **LCS-177754-177754** Units: **mg/L** Analysis Date: **6/1/2021 09:23 AM**
Client ID: Run ID: **O&G_210601A** SeqNo: **7445702** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	36.3	5.0	40	0	90.8	78-114	0			

MS Sample ID: **21052295-02J MS** Units: **mg/L** Analysis Date: **6/1/2021 09:23 AM**
Client ID: Run ID: **O&G_210601A** SeqNo: **7445691** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	38.74	5.3	42.11	1.848	87.6	78-114	0			

DUP Sample ID: **21052295-03J DUP** Units: **mg/L** Analysis Date: **6/1/2021 09:23 AM**
Client ID: Run ID: **O&G_210601A** SeqNo: **7445693** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	ND	5.0	0	0	0	0-0	0.9	0	18	

The following samples were analyzed in this batch: 21052332-02B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177784** Instrument ID **TSS** Method: **A2540 D-11**

MBLK Sample ID: **MBLK-177784-177784** Units: **mg/L** Analysis Date: **6/2/2021 05:30 PM**
Client ID: Run ID: **TSS_210602A** SeqNo: **7450290** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Suspended Solids	ND	0.60								

LCS Sample ID: **LCS-177784-177784** Units: **mg/L** Analysis Date: **6/2/2021 05:30 PM**
Client ID: Run ID: **TSS_210602A** SeqNo: **7450291** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Suspended Solids	103	6.0	100	0	103	70-113	0			

DUP Sample ID: **21052332-01D DUP** Units: **mg/L** Analysis Date: **6/2/2021 05:30 PM**
Client ID: **City Discharge Well (Composite)** Run ID: **TSS_210602A** SeqNo: **7450305** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Suspended Solids	332	24	0	0	0	0-0	328	1.21	10	

DUP Sample ID: **21052468-01A DUP** Units: **mg/L** Analysis Date: **6/2/2021 05:30 PM**
Client ID: Run ID: **TSS_210602A** SeqNo: **7450309** Prep Date: **6/1/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Suspended Solids	880	60	0	0	0	0-0	890	1.13	10	

The following samples were analyzed in this batch: 21052332-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **177943** Instrument ID **LACHAT** Method: **A4500-NH3 G-11**

MBLK Sample ID: **MBLK-177943-177943** Units: **mg NH3-N/L** Analysis Date: **6/3/2021 04:13 PM**
Client ID: Run ID: **LACHAT_210603A** SeqNo: **7454137** Prep Date: **6/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	ND	0.15								

LCS Sample ID: **LCS-177943-177943** Units: **mg NH3-N/L** Analysis Date: **6/3/2021 04:15 PM**
Client ID: Run ID: **LACHAT_210603A** SeqNo: **7454138** Prep Date: **6/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	1.088	0.15	1	0	109	75-119	0			

MS Sample ID: **21052370-02C MS** Units: **mg NH3-N/L** Analysis Date: **6/3/2021 04:34 PM**
Client ID: Run ID: **LACHAT_210603A** SeqNo: **7454154** Prep Date: **6/3/2021** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	12.32	1.5	1	9.683	264	75-119	0			SO

MSD Sample ID: **21052370-02C MSD** Units: **mg NH3-N/L** Analysis Date: **6/3/2021 04:35 PM**
Client ID: Run ID: **LACHAT_210603A** SeqNo: **7454155** Prep Date: **6/3/2021** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	10.79	1.5	1	9.683	110	75-119	12.32	13.3	20	O

The following samples were analyzed in this batch: 21052332-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318451** Instrument ID **SKALAR1** Method: **E420.4**

MBLK Sample ID: **MBLK-1-R318451** Units: **mg/L** Analysis Date: **5/27/2021 02:10 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435704** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	ND	0.010								

MBLK Sample ID: **MB-R318451-R318451** Units: **mg/L** Analysis Date: **5/27/2021 02:10 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435756** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	ND	0.0064								

LCS Sample ID: **LCS-1-R318451** Units: **mg/L** Analysis Date: **5/27/2021 02:13 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435705** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1011	0.010	0.1	0	101	90-110	0			

LCS Sample ID: **LCS-R318451-R318451** Units: **mg/L** Analysis Date: **5/27/2021 02:13 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435757** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1011	0.0064	0.1	0	101	90-110	0			

MS Sample ID: **21052247-01B MS** Units: **mg/L** Analysis Date: **5/27/2021 02:29 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435712** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.09995	0.010	0.1	-0.000421	100	90-110	0			

MS Sample ID: **21052295-03K MS** Units: **mg/L** Analysis Date: **5/27/2021 02:55 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435723** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1088	0.010	0.1	0.01256	96.3	90-110	0			

MS Sample ID: **21052265-03D MS** Units: **mg/L** Analysis Date: **5/27/2021 03:27 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435737** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1029	0.0064	0.1	0.000868	102	90-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318451** Instrument ID **SKALAR1** Method: **E420.4**

MSD Sample ID: **21052247-01B MSD** Units: **mg/L** Analysis Date: **5/27/2021 02:31 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435713** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1033	0.010	0.1	-0.000421	104	90-110	0.09995	3.32	20	

MSD Sample ID: **21052295-03K MSD** Units: **mg/L** Analysis Date: **5/27/2021 02:57 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435724** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1089	0.010	0.1	0.01256	96.4	90-110	0.1088	0.0808	20	

MSD Sample ID: **21052265-03D MSD** Units: **mg/L** Analysis Date: **5/27/2021 03:30 PM**
Client ID: Run ID: **SKALAR1_210527A** SeqNo: **7435738** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	0.1045	0.0064	0.1	0.000868	104	90-110	0.1029	1.5	20	

The following samples were analyzed in this batch: 21052332-01E

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318488** Instrument ID **Titrator 1** Method: **A4500-F C-11**

MBLK Sample ID: **MB-R318488-R318488** Units: **mg/L** Analysis Date: **5/27/2021 07:26 PM**
Client ID: Run ID: **TITRATOR 1_210527B** SeqNo: **7436866** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	ND	0.10								

LCS Sample ID: **LCS-R318488-R318488** Units: **mg/L** Analysis Date: **5/27/2021 07:26 PM**
Client ID: Run ID: **TITRATOR 1_210527B** SeqNo: **7436867** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	5.1	0.10	5	0	102	80-120	0			

MS Sample ID: **21052029-02G MS** Units: **mg/L** Analysis Date: **5/27/2021 07:26 PM**
Client ID: Run ID: **TITRATOR 1_210527B** SeqNo: **7436875** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	5.34	0.10	5	0.07	105	75-125	0			

MSD Sample ID: **21052029-02G MSD** Units: **mg/L** Analysis Date: **5/27/2021 07:26 PM**
Client ID: Run ID: **TITRATOR 1_210527B** SeqNo: **7436876** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	5.37	0.10	5	0.07	106	75-125	5.34	0.56	20	

The following samples were analyzed in this batch: 21052332-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318494** Instrument ID **WETCHEM** Method: **E410.4 R2.0**

MBLK Sample ID: **CCB/MBLK-R318494** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437180** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	ND	50								

LCS Sample ID: **CCV/LCS-R318494** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437179** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	600.8	50	600	0	100	90-110	0			

MS Sample ID: **21052226-01H MS** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437297** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	715.2	50	600	105.6	102	90-110	0			

MS Sample ID: **21052295-01G MS** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437332** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	668.5	50	600	23.87	107	90-110	0			

MSD Sample ID: **21052226-01H MSD** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437298** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	719.9	50	600	105.6	102	90-110	715.2	0.651	20	

MSD Sample ID: **21052295-01G MSD** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437333** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	663.8	50	600	23.87	107	90-110	668.5	0.701	20	

DUP Sample ID: **21050101-05A DUP** Units: **mg/L** Analysis Date: **5/27/2021 06:22 PM**
Client ID: Run ID: **WETCHEM_210527R** SeqNo: **7437330** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	129	50	0	0	0	0-0	131.3	1.79	20	

The following samples were analyzed in this batch: 21052332-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318546** Instrument ID **FS3700** Method: **OIA 1677-09**

MBLK Sample ID: **MBLK-1-R318546** Units: **µg/L** Analysis Date: **5/28/2021 01:06 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439501** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	ND	2.0								

MBLK Sample ID: **MBLK-2-R318546** Units: **µg/L** Analysis Date: **5/28/2021 01:40 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439517** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	ND	2.0								

LCS Sample ID: **LCS-1-R318546** Units: **µg/L** Analysis Date: **5/28/2021 01:08 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439502** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	53.3	2.0	50	0	107	82-132	0			

LCS Sample ID: **LCS-2-R318546** Units: **µg/L** Analysis Date: **5/28/2021 01:42 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439518** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	50.9	2.0	50	0	102	82-132	0			

MS Sample ID: **21052265-03E MS** Units: **µg/L** Analysis Date: **5/28/2021 01:22 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439508** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	53.2	2.0	50	0.2	106	82-130	0			

MS Sample ID: **21052366-04A MS** Units: **µg/L** Analysis Date: **5/28/2021 01:46 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439520** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	38.2	2.0	50	13.9	48.6	82-130	0			S

MSD Sample ID: **21052265-03E MSD** Units: **µg/L** Analysis Date: **5/28/2021 01:24 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439509** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	56.7	2.0	50	0.2	113	82-130	53.2	6.37	11	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Safety-Kleen Systems
Work Order: 21052332
Project: (SK) Semi Annual Wastewater 05-25-21

QC BATCH REPORT

Batch ID: **R318546** Instrument ID **FS3700** Method: **OIA 1677-09**

MSD Sample ID: **21052366-04A MSD** Units: **µg/L** Analysis Date: **5/28/2021 01:48 PM**
Client ID: Run ID: **FS3700_210528A** SeqNo: **7439521** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Available	38.5	2.0	50	13.9	49.2	82-130	38.2	0.782	11	S

The following samples were analyzed in this batch: 21052332-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Chain of Custody Form

Page 1 of 1

ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Lee Arnold

210528-12

0000547469

Safety Kleen Oil Recovery Co.
Jim Satterlee
610 Riley Rd.
East Chicago, IN 46312
219-397-1131
219-398-3412

Semi-Annual Wastewater

Safety Kleen Oil Recovery Co.
Accounts Payable
610 Riley Rd.
East Chicago, IN 46312
219-397-1131
219-398-3412

Ammonia, T.Phos, COD
Phenolics
Total Metals (Sb,As,Ba,Cr,Co,Cu,Pb,Mo,Ni,Sn,Zn) + Hg
TSS, Fluoride
SVOCs + Phenanthrene
Available CN
FOG + TRPH
Field pH: 6.59 @ 34.8°C

Sample Description	Date	Time	Matrix	Containers	Preservatives	Ammonia, T.Phos, COD	Phenolics	Total Metals (Sb,As,Ba,Cr,Co,Cu,Pb,Mo,Ni,Sn,Zn) + Hg	TSS, Fluoride	SVOCs + Phenanthrene	Available CN	FOG + TRPH						
City Discharge Well (Composite)	5/25/21	1315	WW	2,3,8	6	X	X	X	X	X								
City Discharge Well (Grab)	5/25/21	1415	WW	3,4,7	2						X	X	X					

Sampler(s): Please Print & Sign: [illegible]

Shipment Method:

Required Turnaround Time: ☐ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[illegible]	5/26/21		—	
Relinquished by: —	Date: 5/26/21	Time: 1300	Received by (Laboratory): [illegible]	
Logged by (Laboratory): DGS	Date: 5/27/21	Time: 0800	Checked by (Laboratory): RL	123 2.9°C pH<2

X

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C

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Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS

ALS Group, USA

Sample Receipt Checklist

Client Name: SAFETY-KLEEN SYS

Date/Time Received: 26-May-21 13:00

Work Order: 21052332

Received by: DS

Checklist completed by Diane Shaw (eSignature) 27-May-21 (Date)

Reviewed by: Alex L. Csaszar (eSignature) 27-May-21 (Date)

Matrices: Wastewater

Carrier name: Courier

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☑	☐	

Temperature(s)/Thermometer(s): 2.9/3.9 c IR3

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 5/27/2021 7:58:17 AM

	Yes	No		
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted	☑
Water - pH acceptable upon receipt?	☑	☐	N/A	☐
pH adjusted?	☐	☑	N/A	☐

pH adjusted by: -

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: