

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

AP42 Section:	9.12.1
Background Chapter	4
Reference:	17
Title:	Stack Emissions Survey, Adolph Coors Company Brewery Complex, Golden, Colorado, Western Environmental Services and Testing, Inc., Casper, WY, November, 1990.

D. Emission Data/Mass Flux Rates/Emission Factors

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
1	Stack temperature	Deg F	105	108	114	
COMBINED COOKER STACK	Moisture	%	7.45	8.82	12.23	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	5955	7104	6758	
	Volumetric flow, standard	dscfm	4187	4898	4432	4505.667
	Isokinetic variation	%	100.68	103.11	105.72	
Circle: Production or feed rate Capacity:		1000 bbl/hr	1.13	1.13	1.13	
Pollutant concentrations:						
	TOC as propane	ppmdv	2	5	6	
	Filterable PM	gr/dscf	0.004	0.0019	0.0043	
	SO2	ppmdv	0.4	ND	ND	
	NOx	ppmdv	ND	ND	ND	
Pollutant mass flux rates:						
	TOC as propane	lb/hr	0.05738	0.168	0.182	
	Filterable PM	lb/hr	0.144	0.0798	0.163	
	SO2	lb/hr	0.0171	ND	ND	
	NOx	lb/hr	ND	ND	ND	
Emission factors:						Average
	TOC as propane	lb/1000 bbl	0.0508	0.148	0.161	0.120
	Filterable PM	lb/1000 bbl	0.127	0.071	0.145	0.114
	SO2	lb/1000 bbl	0.0151	ND	ND	ND
	NOx	lb/1000 bbl	ND	ND	ND	ND

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
2	Stack temperature	Deg F	136	130	138	
BREW KETTLE STACK W/ HEAT RECLAIM	Moisture	%	20.46	18.82	21.45	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	19241	20153	24127	
	Volumetric flow, standard	dscfm	11019	11905	13610	12178
	Isokinetic variation	%	105.09	97.07	99.12	
Circle: Production or feed rate Capacity:		1000 bbl/hr	1.13	1.13	1.13	
Pollutant concentrations:						
	TOC as propane	ppmdv	10	10	9	
	Filterable PM	gr/dscf	0.0029	0.0025	0.0013	
	SO2	ppmdv	0.4	0.4	0.2	
	NOx	ppmdv	ND	ND	ND	
Pollutant mass flux rates:						
	TOC as propane	lb/hr	0.75500	0.816	0.839	
	Filterable PM	lb/hr	0.274	0.255	0.152	
	SO2	lb/hr	0.0450	0.0487	0.0278	
	NOx	lb/hr	ND	ND	ND	
Emission factors:						Average
	TOC as propane	lb/1000 bbl	0.668	0.722	0.743	0.711
	Filterable PM	lb/1000 bbl	0.242	0.226	0.134	0.201
	SO2	lb/1000 bbl	0.0399	0.0431	0.0246	0.0358
	NOx	lb/1000 bbl	ND	ND	ND	ND

COORS REPORT 7 TEST DATA SUMMARY

Test ID	Parameter	Units	Values reported			
			Run 1	Run 2	Run 3	Run 4
3	Stack temperature	Deg F	140	147	148	
BREW KETTLE STACK	Moisture	%	23.34	27.54	29.24	
	Oxygen	%	20.9	20.9	20.9	
	Volumetric flow, actual	acfm	25706	23022	21652	
	Volumetric flow, standard	dscfm	14086	11797	10810	12231
	Isokinetic variation	%	91.17	102.81	104.53	
Circle: Production or feed rate Capacity:		1000 bbl/hr	1.13	1.13	1.13	
Pollutant concentrations:						
	TOC as propane	ppmdv	11	16	16	
	Filterable PM	gr/dscf	0.0039	0.0027	0.0068	
	SO2	ppmdv	ND	ND	ND	
	NOx	ppmdv	ND	ND	ND	
Pollutant mass flux rates:						
	TOC as propane	lb/hr	1.06	1.29	1.19	
	Filterable PM	lb/hr	0.471	0.273	0.630	
	SO2	lb/hr	ND	ND	ND	
	NOx	lb/hr	ND	ND	ND	
Emission factors:						Average
	TOC as propane	lb/1000 bbl	0.940	1.14	1.05	1.04
	Filterable PM	lb/1000 bbl	0.417	0.242	0.558	0.405
	SO2	lb/1000 bbl	ND	ND	ND	ND
	NOx	lb/1000 bbl	ND	ND	ND	ND

PROCESS RATE ESTIMATED FROM BREWLINE CAPACITY OF 3.3×10^6 BBL/YR PER BREWLINE,
WITH 3 BREWLINES OPERATING FOR 8,760 HR/YR