

EVALUATION OF TECHNOLOGY FOR  
CONTROL OF ARSENIC EMISSIONS  
AT THE CAMPBELL RED LAKE GOLD SMELTER

by

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TABLE 5. GAS STREAM MEASUREMENTS AND  
TRACE ELEMENTS DISTRIBUTION

	<u>ESP Inlet</u>	<u>ESP Outlet</u>	<u>Baghouse Inlet</u>	<u>Baghouse Outlet</u>
Temperature				
°C	380	327	116	113
°F	716	621	240	236
Velocity				
m/sec	21.3	21.9	16.5	16.9
ft/sec	70.0	71.9	54.0	55.3
Crain Loading				
grams/dscm	35.2	1.01	11.40	0.00094
grains/dscf	15.4	0.442	4.98	0.00041
Flow Rate				
dscm/hr	3899	3888	16,779	19,817
dscf/hr	137,680	137,314	592,526	699,833
Trace Elements (total)				
As-Kg/hr	179	152*	105*	0.20
-lb/hr	393	334	232	0.44
Pb-Kg/hr	0.14	0.05	-	0.015
-lb/hr	0.32	0.11	-	0.034
Sb-Kg/hr	2.1	0.40	-	0.011
lb/hr	<del>4.6</del>	<del>0.88</del>	-	0.025
Sa-Kg/hr	0.0045	0.0017	-	0.0004
-lb/hr	0.010	0.0037	-	0.0009
Gas Analysis				
%O <sub>2</sub>	11.3	13.9	19.0	19.5
%SO <sub>2</sub>	8.2	5.9	1.4	1.4
%H <sub>2</sub> O	22.8	21.8	5.5	5.6
%CO <sub>2</sub>	0.3	1.8	0.8	0.0
ppm SO <sub>3</sub>	336	791	187	<2
lb/hr S	1232	300	739	804

\* Not measured simultaneously.

avg 800