

Stack - 2025 (Every 2 Years)

Bureau Veritas Commodities Canada Ltd.
Permit: 1075 / Due Date: September 30, 2025

07 - EF4 Main Hood Exhaust					
Chlorine					
Test Dates:	Jul 22, 2025	Jul 22, 2025	Jul 22, 2025		
Test Results:	4.8300 mg/m3	1.8600 mg/m3	7.1700 mg/m3		
Average of Test Results:	4.62 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	616.000 m3/min	618.000 m3/min	613.000 m3/min		
Average of Flow Results:	615.667 m3/min				
Permitted Flow Limit:	750.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 22, 2025				
Test Results:	1.9390 mg/m3	1.9180 mg/m3	0.7220 mg/m3		
Average of Test Results:	1.526 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	616.000 m3/min	618.000 m3/min	613.000 m3/min		
Average of Flow Results:	615.667 m3/min				
Permitted Flow Limit:	750.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 22, 2025				
Test Results:	0.2680 mg/m3	0.0390 mg/m3	0.0400 mg/m3		
Average of Test Results:	0.116 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	616.000 m3/min	618.000 m3/min	613.000 m3/min		
Average of Flow Results:	615.667 m3/min				
Permitted Flow Limit:	750.00 m3/min				
Flow Result Comments:					

08 - EF5 Main Hood Exhaust					
Chlorine					
Test Dates:	Jul 22, 2025				
Test Results:	2.0800 mg/m3	3.7900 mg/m3	7.2200 mg/m3		
Average of Test Results:	4.363 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	543.000 m3/min	548.000 m3/min	551.000 m3/min		
Average of Flow Results:	547.333 m3/min				
Permitted Flow Limit:	720.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 22, 2025				
Test Results:	1.5700 mg/m3	3.0410 mg/m3	4.3600 mg/m3		
Average of Test Results:	2.99 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	543.000 m3/min	548.000 m3/min	551.000 m3/min		
Average of Flow Results:	547.333 m3/min				
Permitted Flow Limit:	720.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 22, 2025				
Test Results:	0.0250 mg/m3	0.1000 mg/m3	0.2550 mg/m3		
Average of Test Results:	0.127 mg/m3				
Contaminant Permit Limit:	8.0000 mg/m3				
Test Result Comments:					
Flow Results:	543.000 m3/min	548.000 m3/min	551.000 m3/min		
Average of Flow Results:	547.333 m3/min				
Permitted Flow Limit:	720.00 m3/min				
Flow Result Comments:					

09 - EF11 Perchloric Digestion Wet Assay Room					
Chlorine					
Test Dates:	Jul 23, 2025				
Test Results:	4.2000 mg/m3	3.4200 mg/m3	1.9100 mg/m3		
Average of Test Results:	3.177 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	16.200 m3/min	16.100 m3/min	16.100 m3/min		
Average of Flow Results:	16.133 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 23, 2025				
Test Results:	2.1620 mg/m3	2.1970 mg/m3	2.4600 mg/m3		
Average of Test Results:	2.273 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	16.200 m3/min	16.100 m3/min	16.100 m3/min		
Average of Flow Results:	16.133 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
Hydrofluoric acid					
Test Dates:	Jul 23, 2025				
Test Results:	26.5600 mg/m3	8.1000 mg/m3	1.5100 mg/m3		
Average of Test Results:	12.057 mg/m3				
Contaminant Permit Limit:	12.0000 mg/m3				
Out of Compliance Explanation:	There were no samples to run so the team ran a number of mock samples, however they unfortunately overloaded the fume hood (as you can see based on the fact that we ran at 1869% of the previous 90 days production - 40 samples per hour versus previous 90 day average of 2 samples per hour).				
Plan of Action to Obtain Compliance:	We are having the scrubber serviced by Pro-Lite to ensure it is operating correctly, with any future testing being conducted at the average of the previous 90 days production.				
Test Result Comments:					
Flow Results:	16.200 m3/min	16.100 m3/min	16.100 m3/min		
Average of Flow Results:	16.133 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					

Nitric acid					
Test Dates:	Sep 23, 2025				
Test Results:	6.9200 mg/m3	3.9100 mg/m3	0.4900 mg/m3		
Average of Test Results:	3.773 mg/m3				
Contaminant Permit Limit:	30.0000 mg/m3				
Test Result Comments:					
Flow Results:	16.200 m3/min	16.100 m3/min	16.100 m3/min		
Average of Flow Results:	16.133 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
10 - EF6 Perchloric Digestion Hood Geochem					
Chlorine					
Test Dates:	Jul 22, 2025				
Test Results:	0.4400 mg/m3	1.0300 mg/m3	1.9600 mg/m3		
Average of Test Results:	1.143 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	27.800 m3/min	27.600 m3/min	27.600 m3/min		
Average of Flow Results:	27.667 m3/min				
Permitted Flow Limit:	100.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 22, 2025				
Test Results:	0.2260 mg/m3	0.2200 mg/m3	0.1830 mg/m3		
Average of Test Results:	0.21 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	27.800 m3/min	27.600 m3/min	27.600 m3/min		
Average of Flow Results:	27.667 m3/min				
Permitted Flow Limit:	100.00 m3/min				
Flow Result Comments:					

Hydrofluoric acid					
Test Dates:	Jul 22, 2025				
Test Results:	2.7770 mg/m3	2.7070 mg/m3	2.2490 mg/m3		
Average of Test Results:	2.578 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	27.800 m3/min	27.600 m3/min	27.600 m3/min		
Average of Flow Results:	27.667 m3/min				
Permitted Flow Limit:	100.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 22, 2025				
Test Results:	1.1880 mg/m3	32.0000 mg/m3	1.2660 mg/m3		
Average of Test Results:	11.485 mg/m3				
Contaminant Permit Limit:	45.0000 mg/m3				
Test Result Comments:					
Flow Results:	27.800 m3/min	27.600 m3/min	27.600 m3/min		
Average of Flow Results:	27.667 m3/min				
Permitted Flow Limit:	100.00 m3/min				
Flow Result Comments:					
11 - EF7 Perchloric Acid Hood Geochem Digestion Room					
Chlorine					
Test Dates:	Jul 22, 2025				
Test Results:	1.4600 mg/m3	3.3000 mg/m3	1.7000 mg/m3		
Average of Test Results:	2.153 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	25.800 m3/min	25.600 m3/min	25.300 m3/min		
Average of Flow Results:	25.567 m3/min				
Permitted Flow Limit:	50.00 m3/min				
Flow Result Comments:					

Hydrochloric acid					
Test Dates:	Jul 22, 2025				
Test Results:	1.0830 mg/m3	0.2120 mg/m3	0.1740 mg/m3		
Average of Test Results:	0.49 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	25.800 m3/min	25.600 m3/min	25.300 m3/min		
Average of Flow Results:	25.567 m3/min				
Permitted Flow Limit:	50.00 m3/min				
Flow Result Comments:					
Hydrofluoric acid					
Test Dates:	Jul 22, 2025				
Test Results:	2.4730 mg/m3	6.9600 mg/m3	4.2860 mg/m3		
Average of Test Results:	4.573 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	25.800 m3/min	25.600 m3/min	25.300 m3/min		
Average of Flow Results:	25.567 m3/min				
Permitted Flow Limit:	50.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 22, 2025				
Test Results:	25.8000 mg/m3	3.4200 mg/m3	1.8440 mg/m3		
Average of Test Results:	10.355 mg/m3				
Contaminant Permit Limit:	45.0000 mg/m3				
Test Result Comments:					
Flow Results:	25.800 m3/min	25.600 m3/min	25.300 m3/min		
Average of Flow Results:	25.567 m3/min				
Permitted Flow Limit:	50.00 m3/min				
Flow Result Comments:					

12 - EF14 Multi Acid Digestion Hoods Wet Assay					
Chlorine					
Test Dates:	Jul 23, 2025				
Test Results:	3.4300 mg/m3	4.2600 mg/m3	4.2700 mg/m3		
Average of Test Results:	3.987 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	51.600 m3/min	51.900 m3/min	51.600 m3/min		
Average of Flow Results:	51.7 m3/min				
Permitted Flow Limit:	65.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 23, 2025				
Test Results:	1.7610 mg/m3	1.7540 mg/m3	1.7570 mg/m3		
Average of Test Results:	1.757 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	51.600 m3/min	51.900 m3/min	51.600 m3/min		
Average of Flow Results:	51.7 m3/min				
Permitted Flow Limit:	65.00 m3/min				
Flow Result Comments:					
Hydrofluoric acid					
Test Dates:	Jul 23, 2025				
Test Results:	1.3530 mg/m3	0.8980 mg/m3	0.9000 mg/m3		
Average of Test Results:	1.05 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	51.600 m3/min	51.900 m3/min	51.600 m3/min		
Average of Flow Results:	51.7 m3/min				
Permitted Flow Limit:	65.00 m3/min				
Flow Result Comments:					

Nitric acid					
Test Dates:	Jul 23, 2025				
Test Results:	0.3480 mg/m3	0.3470 mg/m3	0.3470 mg/m3		
Average of Test Results:	0.347 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	51.600 m3/min	51.900 m3/min	51.600 m3/min		
Average of Flow Results:	51.7 m3/min				
Permitted Flow Limit:	65.00 m3/min				
Flow Result Comments:					
13 - EF27 Perchloric Acid Digestion Hoods Wet Assay					
Chlorine					
Test Dates:	Jul 23, 2025				
Test Results:	16.2000 mg/m3	2.8300 mg/m3	3.0500 mg/m3		
Average of Test Results:	7.36 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	13.700 m3/min	13.700 m3/min	13.500 m3/min		
Average of Flow Results:	13.633 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
Hydrochloric acid					
Test Dates:	Jul 23, 2025				
Test Results:	5.3010 mg/m3	1.4550 mg/m3	1.5680 mg/m3		
Average of Test Results:	2.775 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	13.700 m3/min	13.700 m3/min	13.500 m3/min		
Average of Flow Results:	13.633 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					

Hydrofluoric acid					
Test Dates:	Jul 23, 2025				
Test Results:	24.8100 mg/m3	11.9200 mg/m3	2.4100 mg/m3		
Average of Test Results:	13.047 mg/m3				
Contaminant Permit Limit:	12.0000 mg/m3				
Out of Compliance Explanation:	We had no samples to run so the team ran a number of mock samples. Unfortunately they overloaded the fume hood as evidenced by the fact we ran at 1961% of the previous 90 days (51 samples per hour run versus previous 90 day average of 11 samples per hour).				
Plan of Action to Obtain Compliance:	We have contracted Pro-Lite to perform maintenance on the scrubber to ensure it is operaing properly, and then any future testing will be run at the same rate as the previous 90 day average.				
Test Result Comments:					
Flow Results:	13.700 m3/min	13.700 m3/min	13.500 m3/min		
Average of Flow Results:	13.633 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 23, 2025				
Test Results:	5.8400 mg/m3	3.1600 mg/m3	1.4700 mg/m3		
Average of Test Results:	3.49 mg/m3				
Contaminant Permit Limit:	30.0000 mg/m3				
Test Result Comments:					
Flow Results:	13.700 m3/min	13.700 m3/min	13.500 m3/min		
Average of Flow Results:	13.633 m3/min				
Permitted Flow Limit:	45.00 m3/min				
Flow Result Comments:					
14 - EF15 Gold Ignition					
Chlorine					
Test Dates:	Jul 23, 2025				
Test Results:	3.5100 mg/m3	3.7000 mg/m3	4.0600 mg/m3		
Average of Test Results:	3.757 mg/m3				
Contaminant Permit Limit:	15.0000 mg/m3				
Test Result Comments:					
Flow Results:	23.400 m3/min	23.300 m3/min	23.100 m3/min		
Average of Flow Results:	23.267 m3/min				
Permitted Flow Limit:	125.00 m3/min				
Flow Result Comments:					

Hydrochloric acid					
Test Dates:	Jul 23, 2025				
Test Results:	1.8070 mg/m3	1.9020 mg/m3	2.0890 mg/m3		
Average of Test Results:	1.933 mg/m3				
Contaminant Permit Limit:	10.0000 mg/m3				
Test Result Comments:					
Flow Results:	23.400 m3/min	23.300 m3/min	23.100 m3/min		
Average of Flow Results:	23.267 m3/min				
Permitted Flow Limit:	125.00 m3/min				
Flow Result Comments:					
Hydrofluoric acid					
Test Dates:	Jul 23, 2025				
Test Results:	1.1100 mg/m3	1.1690 mg/m3	1.2830 mg/m3		
Average of Test Results:	1.187 mg/m3				
Contaminant Permit Limit:	5.0000 mg/m3				
Test Result Comments:					
Flow Results:	23.400 m3/min	23.300 m3/min	23.100 m3/min		
Average of Flow Results:	23.267 m3/min				
Permitted Flow Limit:	125.00 m3/min				
Flow Result Comments:					
Nitric acid					
Test Dates:	Jul 23, 2025				
Test Results:	0.3570 mg/m3	0.3380 mg/m3	0.4130 mg/m3		
Average of Test Results:	0.369 mg/m3				
Contaminant Permit Limit:	25.0000 mg/m3				
Test Result Comments:					
Flow Results:	23.400 m3/min	23.300 m3/min	23.100 m3/min		
Average of Flow Results:	23.267 m3/min				
Permitted Flow Limit:	125.00 m3/min				
Flow Result Comments:					