

BOILER INSTALL REPORT

144-90 41 St, Flushing NY

FITCH FUEL CATALYST

Prepared by:
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Measure the effect of Fitch Fuel Catalyst on emissions and burner efficiency.

Fitch Fuel Catalyst - Model HO-75UL manufactured by APSI installed by Marlande Heating.

Property Managers: Kaled Management Corp.

Location: 144-90 41 St, Flushing NY

Oil type: #6

Test Personnel:

Bob Horstmann, Marlande Heating Corp

Marlande Heating measured the Fitch emissions and efficiency readings and ensured the system was operating within specification. . A retest was completed on November 23. Stack temperature was high indicating a dirty boiler. A cleaning was performed and firing rate was set back 20%. A subsequent retest was done on January 13 showing continued improvements.

Location	Combustion & emissions measurements	Base data Nov 5th	With Fitch after 30 minutes	23-Nov retest	13-Jan retest	% Change
Kaled Management	Inlet temp	90.6	86.6	95.1	75	-17.22%
144-90 41st Street	Stack temp	586.5	560	626.2	550	-6.22%
Flushing NY	Nett temp	495.9	473.4	531.1	475	-4.21%
	O2 %	2.7	2.4	3.3	3	11.11%
	Excess air %	14.8	13	17.6	15	1.35%
	CO2 %	13.5	13.7	14.08	14.5	7.41%
	CO PPM	41	47	25	25	-39.02%
	Efficiency %	82.1	83.1	84.1	84.6	3.05%
	Smoke	1	0	0	0	-100.00%
Oil use Prior 12 months vs install period	Gal/ Degree day	5.57			4.75	-14.72%

Conclusion

We have calculated the degree day consumption of the installed period versus the 12 months prior. The estimated consumption has dropped by 14.75%. This is only an indicator but falls in line with the adjustment to the firing rate. It is reasonable to say the fuel savings is greater than 10% based on the degree day calculations and a 3% combustion efficiency improvement. Zero smoke is also an indicator of optimal combustion.

