

School Bus Fitch Fuel Catalyst Retrofit Opacity Evaluation

Long Beach Unified School District- LBUSD - Bus No. 69 – Long Beach, California USA

*NOTE: The LBUSD can not and does not endorse this or any other commercial products. This test data is for informational purposes only.

Test Period: Nov. 4, 2010 to Mar. 24, 2011

Evaluation Vehicle: 1988 78 Passenger Crown Coach

Engine specs: Detroit 6L71TAC rebuilt engine

Odometer Reading prior to retrofit: 332,902 miles

Odometer reading at conclusion of retrofit: 338,889 miles



Bus #69 Used in test project



Cold Start before baseline



Accumulated soot in tailpipe

Smoke Testing Equipment used: Bosch RTT 100 Smoke Opacimeter

Present for Testing: School District Fleet Maintenance Manager, David Lawson and Mark Phillips, POFUSA

Pre-retrofit Smoke Opacity Readings

Date	Miles	Distance	Opacity	Comments
11/04/10	332,902	0	34.9	On Scale of 55 max

Fitch Fuel Catalyst unit installed Nov. 4, 2010 immediately after testing opacity (see above)



Detroit 671 "pancake" style engine



Mounting Location after filters



FHD75 Fitch Unit Mounted

Retrofit Product: **Fitch Fuel Catalyst**

Model Used: **FHD75 heavy-duty in-line cylinder (superseded by F75HDG)**

Post Retrofit Smoke Opacity Readings

Date	Miles	Distance	Opacity	Comments
11/16/10	333,390	488	27.8	down 20.25% from baseline
12/07/10	334,187	1,285	31.2	down 10.7% from baseline, changed fuel filter, cleaned air cleaner
12/17/10	334,833	1,931	28.3	down 18.82% from baseline
01/14/11	335,492	2,590	26.5	down 23.97% from baseline
01/28/11	336,227	3,325	29.7	down 14.80% from baseline
02/11/11	337,186	4,284	32.3	down 7.35% from baseline
03/07/11	337,724	4,822	28.3	down 18.82% from baseline
03/24/11	338,889	5,987	25.0	down 28.27% from baseline after approx. 90 operational days

Report compiled by: Mark Phillips Power Fuel Savers LLC, website: www.pofusa.net

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