



*...Providing Tomorrows  
Technology  
Today...*

**AMERICAN DIESEL & GAS, INC.**

**SUMMARY REPORT**

**FOR**

**BROWARD COUNTY SCHOOLS**

**2005 INTERNATIONAL BUSES**

**CONVENTIONAL & REAR-ENGINE**

**PRIOR TO AND AFTER**

**UPGRADE WITH**

**Q-SHIELD™ TECHNOLOGY**

**ANALYSIS OF BROWARD COUNTY BUS #204849**  
**A 2005 INTERNATIONAL CONVENTIONAL BUS**  
**WITH A DT 466 EGR ENGINE TEST RESULTS**

**Results of Base Line Test – Prior to Technology Installation**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
5/4-8/9/06	1380	282.2	4.89

**Results of 1<sup>st</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
8/10-9/20/07	1249	242.5	5.15

**Improvement In MPG over Base Line**

Base Line MPG	4.89
Improved MPG	<u>5.15</u>
<b>Increase In MPG</b>	<b>+0.26</b>

Increase in MPG +0.26 over by Base Line 4.89 MPG = **+5.32% MPG Increase**

**Results of 2<sup>nd</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
2/28-5/31/07	3190	593.3	5.38

**Improvement In MPG over Base Line**

Base Line MPG	4.89
Improved MPG	<u>5.38</u>
<b>Increase In MPG</b>	<b>+0.49</b>

Increase in MPG +0.49 over by Base Line 4.89 MPG = **+10.02% MPG Increase**

**ANALYSIS OF BROWARD COUNTY BUS #990118**  
**A 2005 INTERNATIONAL REAR-ENGINE BUS**  
**WITH A 466 ENGINE TEST RESULTS**

**Results of Base Line Test – Prior to Technology Installation**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
7/11-8/10/06	2298	393.4	5.84

**Results of 1<sup>st</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
8/11-9/20/07	1756	286.9	6.12

**Improvement In MPG over Base Line**

Base Line MPG	5.84
Improved MPG	<u>6.12</u>
<b>Increase In MPG</b>	<b>+0.28</b>

Increase in MPG +0.28 over by Base Line 5.84 MPG = **+4.78% MPG Increase**

**Results of 2<sup>nd</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
2/28-5/31/07	4641	777.3	6.0

**Improvement In MPG over Base Line**

Base Line MPG	5.84
Improved MPG	<u>5.97</u>
<b>Increase In MPG</b>	<b>+0.13</b>

Increase in MPG +0.13 over by Base Line 5.84 MPG = **+2.22% MPG Increase**

**ANALYSIS OF BROWARD COUNTY BUS #990106**  
**A 2005 INTERNATIONAL REAR-ENGINE BUS**  
**WITH A 466 ENGINE TEST RESULTS**

**Results of Base Line Test – Prior to Technology Installation**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
7/11-8/9/06	1632	296	5.51

**Results of 1<sup>st</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
8/14-9/20/07	1245	212.4	5.86

**Improvement In MPG over Base Line**

Base Line MPG	5.51
Improved MPG	<u>5.86</u>
<b>Increase In MPG</b>	<b>+0.35</b>

Increase in MPG +0.35 over by Base Line 5.51 MPG = **+6.35% MPG Increase**

**Results of 2<sup>nd</sup> Field Test After Installation of Q-Shield™ Technology**

<u>Date</u>	<u>Distance Miles</u>	<u>Fuel/Gallons</u>	<u>MPG</u>
3/6-5/30/07	3758	637.6	5.89

**Improvement In MPG over Base Line**

Base Line MPG	5.51
Improved MPG	<u>5.89</u>
<b>Increase In MPG</b>	<b>+0.38</b>

Increase in MPG +0.38 over by Base Line 5.51 MPG = **+6.90% MPG Increase**