BTC Automotive Technology
Job Sheet: EP3 – Catalyst efficiency

**Objective:** To familiarize student with the procedure to test exhaust system back pressure.

**Procedure:** Document vehicle. Inspect vehicle to ensure no exhaust leaks. Drill small hole in pipe before catalytic converter. Take a sample before converter and after converter at the same time with two exhaust gas analyzers. Plug hole when finished with exercise. Repair quality must be at an acceptable industry standard.

**Vehicle:** ________________________________

Readings before converter at 2000:

<table>
<thead>
<tr>
<th>HC</th>
<th>CO</th>
<th>CO2</th>
<th>O2</th>
</tr>
</thead>
</table>

Readings after converter at 2000:

<table>
<thead>
<tr>
<th>HC</th>
<th>CO</th>
<th>CO2</th>
<th>O2</th>
</tr>
</thead>
</table>

Was there any O2 left over after the converter?

Why?

Was there a rise in CO2 after the converter?

Why?

Record temperature using IR temp gun before and after converter. Describe why the temperature changed or did not change.

How does an OBDII vehicle check catalyst efficiency?

Related NATEF tasks: VIII.A.10 VIII.D.15 VIII.E.3.4