



**Pusat Penyelidikan Teknologi Alam Sekitar
Environmental Technology Research Centre**

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RESULTS SUMMARY

Company Name : BAE International Inc.
Sdn. Bhd.
Address : Level 2103, Plaza Pengkalan,
3rd mile, Jalan Ipoh,
51100 Kuala Lumpur
(Attn : Mr. K.C. Lim)

Your Ref No.	TQ 118/13
SIRIM Ref. No.	ETC237/16/1120
Job No.	J 087/13
Report No.	R 110/13
Date of Issue	15 July 2013
No. of pages	3

Request : Car Exhaust Emissions Measurement using Testo Gas Analyser

SAMPLE DESCRIPTION

Exhaust emissions from an internal combustion engine were measured by two SIRIM personnel on 9th and 12th of July 2013 at Building 15 of SIRIM, Shah Alam. The test vehicle was supplied by the client for exhaust emissions measurement.

TEST METHOD

- Exhaust emissions tests conducted on a test vehicle before and after Day 3 of installing BAE Progreen.

Test Vehicle	Transmission	Year of Manufacture	Engine Capacity (cc)	Mileage (km)	
				Before Installation	After Installation
Perodua Kembara GX	Manual	2001	1298	182,300	182,311

- *Combustion efficiency reduces the exhaust emissions namely CO₂, CO, NO_x and SO₂ was measured using gas analyser model Testo t350s

Note : * non-accredited method

RESULT

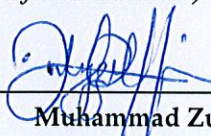
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INFERENCE

Not applicable.

(The inferences expressed herein are outside the scope of accreditation)

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RESULTS

Table 1: Results of Exhaust Emissions Measurement of CO₂, CO, NOx and SO₂

Parameters									
Before installation					Day 3 after installation				
CO ₂ (%)	CO (ppm)	NOx (ppm)	SO ₂ (ppm)	CO ₂ (%)	CO (ppm)	NOx (ppm)	SO ₂ (ppm)	CO ₂ (%)	SO ₂ (ppm)
9.06	1592	158	105	-	2390	39	35		
9.21	1811	157	122	8.46	2030	45	44		
9.23	1856	156	126	8.64	1799	49	46		
9.28	1914	156	127	8.73	1684	49	47		
9.30	1978	154	127	8.86	1412	50	49		
9.32	1994	152	125	9.00	1531	50	50		
9.32	1937	149	124	9.08	1413	52	51		
9.32	1887	150	120	9.33	1467	53	53		
9.24	1839	150	116	9.35	1871	51	52		
9.25	1801	150	114	9.45	1729	51	51		
Average									
9.25	1861	153	121	8.99	1733	49	48		
Removal Efficiency (%)									
-	-	-	-	2.8	6.9	68	60		

Note : * non-accredited method



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Figure 1 : Installation of BAE Progreen on test vehicle



Figure 2 : Exhaust Emission Testing using Testo Gas Analyser



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