



CONTROL SISTEM S.r.l.

via Cuneo n.7, 10044 Pianezza (TO) Italy

CYCLE DATA

Cycle number:	4377	Date:	03.12.2014
Performed cycle:	ECE_EUDC 2 fasi DIESEL	Job number:	CS 037/14
Operator:	cassano	Customer:	IO-ENERGIES
Driver:	Pellegrino	Regulation level:	EURO 5
Reference regulation:	UN/ECE Reg. 83.06 updated to supplement 2 (13th April 2012)		

INSTRUMENTATION

Chassis-dyno:	Dynosaur 2WD compact 002 year 2012	CVS:	CVS-R03 001 year 2009
Diluted gas analyzer:	MEXA 7200D S2000130929000010 year 2008	Raw gas analyzer 1:	MEXA 7170DEGR S2000313175000010 y.09
Raw gas analyzer 2:	MEXA 7170DEGR S2000405579000010 y.10	PN counter:	MEXA 2000SPCS S2000274352000010 y.09
PM sampling sys.:	PSS-20 H-048-A year 2009	Micro balance:	XP2U 1123492753 year 2010
Ambient management:	CS/702/08 003 year 2009		

VEHICLE

Manufacturer:	Audi	Inertia [Kg]:	1260
Model:	A3	Road resistance 20km/h [N]:	0
Code:	EV214FJ	Road resistance 40km/h [N]:	0
Chassis number:		Road resistance 60km/h [N]:	0
Engine:	1,6	Road resistance 80km/h [N]:	0
Transmission:	Manuale	Road resistance 100km/h [N]:	0
Traction:	Anteriore	Road resistance 120km/h [N]:	0
Fuel:	Diesel	F0 [N]:	7
Tyres pressure [bar]:	3	F1 [N/kmh]:	0,000
Kilometers [km]:	381	F2 [N/kmh ²]:	0,0460

GENERAL DATA

	Phase 1	Phase 2		
Ambient temperature [°C]:	23,5	23,2	Violations [sec]:	1,6
Barometric pressure [mbar]:	995	995	Fuel density [kg/l]:	0,8336
Relative humidity [%]:	46,0	44,5	THC density [g/l]:	0,622
Absolute humidity [g/kg]:	8,43	7,99	CO density [g/l]:	1,25
Pd dry [kPa]:	2,898	2,841	CO ₂ density [g/l]:	1,964

NOx correction factor:	0,930	0,918	NO _x density [g/l]:	2,05
Distance [m]:	4040	6970	NO density [g/l]	1,338
Duration [sec]:	780	415	NO ₂ density [g/l]	2,054
CVS volume [m ³]:	69,99	35,85	CH ₄ density [g/l]	0,71682
CVS dilution factor:	28,22	13,16	Secondary dil. factor	5
Particulate sample volume [nl]:	152,0	78,2		

POLLUTANTS MEASUREMENTS

	THC [ppm]	CO [ppm] / [%]	NO _x [ppm]	CO ₂ [%Vol]	CH ₄ [ppm]	Particulate [mg]	
Phase 1						Filter	5855
Sample	10,9	23,5 0,0	7,6	0,48	6,3	Initial weight	91,5839
Dilution air	4,1	1,6	0,1	0,06	5,7	Final weight	91,6046
						Difference	0,0207
Phase 2						Filter	5856
Sample	7,3	2,2 0,0	13,0	1,02	6,1	Initial weight	87,7137
Dilution air	4,3	1,3	0,2	0,06	5,9	Final weight	87,7514
						Difference	0,0377

RESULTS

	THC [mg/km]	NO _x [mg/km]	THC+NO _x [mg/km]	CO [mg/km]	CO ₂ [g/km]	Cons [l/100km]	CH ₄ [mg/km]
	BAGS						
Phase 1	75,2	245,9	321,1	475,0	143,2	5,5	10,1
Phase 2	10,5	124,2	134,7	6,8	98,0	3,7	2,1
Total	34,3	168,8	203,1	178,6	114,6	4,4	5,0
	DILUTED						
							PM [mg/km]
Phase 1	76,2	247,1	323,3	478,9	144,4	5,5	2,4
Phase 2	11,3	125,4	136,7	4,1	99,8	3,8	2,5
Total	35,1	170,1	205,2	178,3	116,2	4,4	2,4
							PM [# / km]
							1,3E+12
							1,2E+10
							4,7E+11

Start/Stop: ON - OFF Errors: YES / NO Mode: NORM / ECO

NOTES	
con strumento	
TESTING RESPONSIBLE:	CUSTOMER: