California Environmental Protection Agency AIR RESOURCES BOARD

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours) 8000		
2008	8VEXL04.5DAB	4.5	Diesel			
SPECIAL	FEATURES & EMISSION					
Direct Diesel Injection, Turbocharger, Charge Air Cooler, and Smoke Puff Limiter			Loader, Tractor, Generator and Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
56 <u>&lt;</u> kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT			4.2	1.1	0.26	13	7	20

**BE IT FURTHER RESOLVED**: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_ day of October 2007.

Annette Hebert, Chief Mobile Source Operations Division

## ATTACHHEUT Pg (of ) Engine Model Summary Form

## U-R-015-0127

Manufacturer:	IVECO S.p.A.
Engine category:	Nonroad and Stationary Cl
EPA Engine Family.	8VEXL04.5DAB
Mfr Family Name:	F4GE948
Process Code:	New Submission

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (Ibs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate; (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
445TA/MNK	F4GE9484F*J	99 @ 2200	78	N/A	305 @ 1320	99	N/A	EM. SPL. CAC., DOL
445TA/MNB	F4GE9484P*J	99 @ 2100	85	N/A	305 @ 1260	95	N/A	EM. SPL. CAC.
445TA/MNC	F4GE9484C*J	97 @ 2200	77	N/A	299 @ 1320	97	N/A	EM. SPL. CAC.
445TA/MND	F4CE9484M*J	95 @ 2300	75	N/A	288 @ 1380	92	N/A	EM. SPL. CAC.
445TA/MNE	F4CE9487N*J	94 @ 2500	70	N/A	277 @ 1500	86	N/A	EM. SPL. CAC.
445TA/MNF	F4CE9487M*J	87 @ 2500	65	N/A	258 @ 1500	80	N/A	EM. SPL. CAC.
445TA/MNG	F4CE9484N*J	84 @ 2300	67	N/A	260 @ 1380	84	N/A	EM. SPL. CAC.
445TA/MNJ	F4CE9484A*J	75 @ 2300	61	N/A	229 @ 1380	73	N/A	EM. SPL. CAC. V