

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)
2003	3CPXL34.5ERK	34.5	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Loader, Dozer, Pump, Compressor, Generator and 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
KW >560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.4	7.9	--	0.8	0.21	12	2	26

**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 12<sup>TH</sup> day of November 2002.

  
 Allen Lyons, Chief  
 Mobile Source Operations Division

Engine Model Summary Form

U-R-001-0203

Manufacturer: Caterpillar Inc  
 Engine category: Nonroad CI  
 EPA Engine Family: 3CPXL34.5ERK  
 Mfr Family Name:  
 Process Code: New Submission

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: @peak torque	9.Emission Control Device Per SAE J1930	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: @peak torque	9.Emission Control Device Per SAE J1930								
3508	1676@1800	714	4887@1800	NA	NA	EM,DI,TC,ECM															
3508	936@1800	413	3618@1300	524	305	EM,DI,TC,ECM															
3508	880@1750	394	3325@1300	471	275	EM,DI,TC,ECM															
3508	1000@1750	462	3599@1300	525	306	EM,DI,TC,ECM															
3508	861@1750	376	3046@1300	426	249	EM,DI,TC,ECM															
3508	784@1200	524	3431@1200	NA	NA	EM,DI,TC,ECM															
3508	915@1200	599	4000@1200	NA	NA	EM,DI,TC,ECM															
3508	988@1200	663	4322@1200	NA	NA	EM,DI,TC,ECM															
3508	1234@1800	526	3597@1800	NA	NA	EM,DI,TC,ECM															
3508	1341@1800	583	3910@1800	NA	NA	EM,DI,TC,ECM															
3508	1502@1800	635	4379@1800	NA	NA	EM,DI,TC,ECM															
3508	915@1200	578	4000@1200	NA	NA	EM,DI,TC,ECM															
3508	1298@1800	545	3785@1800	NA	NA	EM,DI,TC,ECM															
3508	915@1200	578	4000@1200	NA	NA	EM,DI,TC,ECM															
3508	920@1750	413	3311@1300	472	275	EM,DI,TC,ECM															
3508	1019@1800	434	2971@1800	NA	NA	EM,DI,TC,ECM															
3508	900@1200	583	4434@900	668	270	EM,DI,TC,ECM															
3508	1000@1800	418	3233@1350	494	299	EM,DI,TC,ECM															
3508	1050@1800	436	3233@1350	494	299	EM,DI,TC,ECM															
3508	1100@1800	455	3233@1350	494	299	EM,DI,TC,ECM															
3508	760@1200	504	3840@900	586	237	EM,DI,TC,ECM															
3508	1000@1800	418	3233@1350	494	299	EM,DI,TC,ECM															