State of California AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-11-19

Relating to Certification of New Heavy-Duty
Off-road Equipment Engines

CASE CORPORATION

Pursuant to the authority vested in the Air Resources Board by Sections 43000.5, 43013 and 43018 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-45-9;

IT IS ORDERED AND RESOLVED: That the following Case Corp. 1999 model-year engines with rated power between 175 and 750 horsepower and exhaust emission control systems are certified as described below in heavy-duty; off-road equipment:

<u>Typical Equipment Usage:</u>

Crane, Loader, Tractor, Dozer, Pump, Compressor, and Generator Set

Fuel Type:

Diesel

Engine Family		acement <u>Cubic Inches</u>	Exhaust Emission Control Systems and Special Features
XX9XL0505ABB (B413)	8.3	505	Charge Air Cooler Turbocharger

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The total hydrocarbons (THC), carbon monoxide (CO), nitrogen oxides (NOx), and particulate matter (PM) certification exhaust emission standards in grams per brake horsepower-hour (g/hp-h), and the opacity-of-smoke emission standards in percent (%) during acceleration (Accel), lugging (Lug), and peak (Peak) modes for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

<u>Exhaus</u>	<u>Exhaust Emissions (g</u>		<u> 1p - h)</u>	<u>Smoke</u>	<u>Smoke Opacity</u>	
<u>THC</u>	<u>co</u>	<u>N0x</u>	<u>PM</u>	<u>Accel</u>	Lug	<u>Peak</u>
1.0	8.5	6.9	0.4	20	15	50

The THC, CO, NOx, and PM exhaust emissions certification values in grams per brake horsepower-hour, and the opacity-of-smoke emissions certification values in percent for this engine family are:

<u>Exhau</u>	<u>Exhaust Emissions (q/hp-h)</u>		Smoke Opacity (%)			
<u>THC</u>	<u>co</u>	<u>NOx</u>	<u>PM</u> _	<u>Accel</u>	Lug	<u>Peak</u>
0.3	0.5	5.4	0.2	7	2	16

BE IT FURTHER RESOLVED: That the listed engine models comply with the "Exhaust Emission Standards and Test Procedures--Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations Section 2423) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed engine models also comply with the "Emission Control Labels--1996 and Later Heavy-Duty Off-Road Diesel-Cycle Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed engine models the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 et seq.).

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

Executed at El Monte, California this 24 day of November 1998.

R. B. Summerfield, Chief

Mobile Source Operations Division

11/20/97

LARGE ENGINE MOLEL SUMMARY

Manufacturer: Case Corporation Process Code: New Submission

EPA Engine Family: XX9XL0505ABB Manufacturer Family Name:

B413

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1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/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 J193
CPL 2062								
FR 9878	6TA-830	240@2200	123	91.0	750@1500	142	71.8	TC CAL
FR 90162	6TA-830	240@2200	123	91.0	750@1500	142	71.8	TC CAC
FR 90541	6TA-830	240@2200	123	91.0	750@1500	142	71.8	TC inc
FR 90503	6TA-830	240@2200	123	91.0	750@1500	142	71.8	TC CAC
FR 9889	6TA-830	230@2200	118	87.3	730@1500	140	71.0	TC cac
CPL 2007								
FR 9875	6TA-830	215@2200	110	81.8	668@1500	127	64.1	TC CAC
FR 90163	6TA-830	215@2200	109	80.6	616@1500	118	59.5	TO CAC