

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)
2006	6CPXL07.2ESL	7.2	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Loader and Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) or family emission limit(s) (FEL) as applicable, 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
75 ≤ KW < 130	Tier 2	<b>STD</b>	N/A	N/A	6.6	5.0	0.30	20	15	50
130 ≤ KW < 225	Tier 3	<b>STD</b>	N/A	N/A	4.0	3.5	0.20	20	15	50
		<b>CERT</b>	--	--	3.9	2.4	0.20	13	2	19

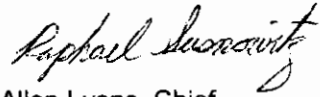
**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**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 21<sup>st</sup> day of December 2005.

  
 for Allen Lyons, Chief  
 Mobile Source Operations Division

# Engine Model Summary Form

ATTACHMENT 1 OF 1

U-R-001-0294

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **6CPXL07.2ESL**  
 Mfr Family Name: **NA**  
 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: (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 J1930
		fuel rates are	nominal values.	Due to product-	ion engine avgs.	these fuel rates	may change.	
1	C7	233@1800	139	84.4	724@1350	152	69.0	EM,DI,TC,ECM,CAC
2	C7	197@1800	120	72.9	690@1350	145	66.0	EM, DI, TC, ECM,
3	C7	197@1800	120	72.8	690@1350	145	66.0	EM, DI, TC, ECM,
4	C7	174@1800	105	63.6	611@1350	132	59.9	EM, DI, TC, ECM,
5	C7	225@2200	117	86.7	646@1500	138	69.4	EM, DI, TC, ECM,
6	C7	216@1800	130	78.9	756@1400	158	74.6	EM, DI, TC, ECM,
7	C7	219@1800	134	81.2	724@1350	152	69.0	EM, DI, TC, ECM,
8	C7	233@1800	142	86.0	724@1350	150	68.1	EM, DI, TC, ECM, Y

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **6CPXL07.2ESL**  
 Mfr Family Name:  
 Process Code: **Running Change -1**

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 J1930
9	C7	225@2200	116	86	758@1400	156	74	EM,DI,TC,ECM,CA
10	C7	197@1800	120	73	690@1400	145	68	EM,DI,TC,ECM,CA
11	C7	232@1800	142	86	715@1400	151	71	EM,DI,TC,ECM,CA
12	C7	219@1800	133	81	715@1400	151	71	EM,DI,TC,ECM,CA

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **6CPXL07.2ESL**  
 Mfr Family Name:  
 Process Code: **Running Change - 3**

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 J1930
15	C7	196@1800	118	72	661@1400	142	67	EM,DI,TC,ECM,CA

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **6CPXL07.2ESL**  
 Mfr Family Name:  
 Process Code: **Running Change - 5**

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 J1930
13Cert Eng	C7	300@1800	174	105	1011@1400	204	96	EM,DI,TC,ECM,CA
14	C7	250@2200	131	97	842@1400	171	81	EM,DI,TC,ECM,CC
16	C7	250@1800	148	90	842@1400	171	81	EM,DI,TC,ECM,CA
17	C7	250@1800	148	90	842@1400	171	81	EM,DI,TC,ECM,CA
18	C7	225@2200	113	84	646@1500	134	68	EM,DI,TC,ECM,CA
19	C7	250@1800	148	90	842@1400	171	61	EM,DI,TC,ECM,CA

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **6CPXL07.2ESL**  
 Mfr Family Name:  
 Process Code: **Running Change - 6**

1.Engine Code	2.Engine Model	3.BHP @RPM (SAE Gross)	4.Fuel Rate: mm <sup>3</sup> /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 <sup>3</sup> /stroke@peak torque	8.Fuel Rate: (lb/hr)@peak torque	9.Emission Control Device Per SAE J1930
18			120	89	657@1500	141	71	
20	C7	205@2100	116	82	578@1500	127	64	EM, DI, TC, ECM,
21	C7	232@1800	142	86	715@1400	151	71	EM, DI, TC, ECM,
22	C7	219@1800	133	81	715@1400	151	71	EM, DI, TC, ECM,
23	C7	232@1800	142	86	715@1400	151	71	EM, DI, TC, ECM,

# Engine Model Summary Form

**Manufacturer:** CATERPILLAR INC.  
**Engine category:** Nonroad Over 50 Hp  
**EPA Engine Family:** 6CPXL07.2ESL  
**Mfr Family Name:**  
**Process Code:** Running Change - 7

1. Engine Code	2. Engine Model	3. BHP @ RPM (SAE Gross)	4. Fuel Rate: mmi/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mmi/stroke @ peak torque	8. Fuel Rate: (lbs/hr) @ peak torque	9. Emission Control Device Per SAE J1930
24	C7	300@2200	152	113	940@1400	189	89	EM, DI, TC, ECM,
25	C7	300@2100	157	111	940@1400	189	89	EM, DI, TC, ECM,