



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 December 15, 1998 Settlement Agreement between the Air Resources Board and the manufacturer, and any modifications thereof to the Settlement Agreement;

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)
2007	7CPXL15.2ESK	15.2	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Engine Control Module			Loader, Tractor, Dozer, 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
225 ≤ KW < 560	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.7	3.4	0.17	10	3	15

**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 11<sup>th</sup> day of October 2006.

  
Annette Hebert, Chief  
Mobile Source Operations Division

# Engine Model Summary Form

ATTACHMENT 1 of 3

U-R-001-0308

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 Mfr Family Name: **NA**  
 Process Code: **New Submission**

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: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
1	Cert Engine	C15	717@1800	399	241.7	NA	NA	EM,DI,TC,ECM,CAC
2		C15	412@2100	222	156.5	1465@1400	137.7	EM,DI,TC,ECM,CA
3		C15	361@2100	194	137.0	1283@1400	122.1	EM,DI,TC,ECM,CA
4		C15	347@1850	197	122.8	1449@1300	129.4	EM,DI,TC,ECM,CA
5		C15	475@2100	248	175.1	1601@1400	154.1	EM,DI,TC,ECM,CA
6		C15	433@1800	246	148.8	1516@1400	148.7	EM,DI,TC,ECM,CA
7		C15	447@1800	261	157.8	1305@1350	122.0	EM,DI,TC,ECM,CA
8		C15	430@1800	254	153.5	1322@1425	130.1	EM,DI,TC,ECM,CA
9		C15	457@1700	273	155.8	1779@1200	145.4	EM,DI,TC,ECM,CA
10		C15	469@1800	269	162.6	1779@1200	143.6	EM,DI,TC,ECM,CA
11		C15	436@1700	255	145.8	1692@1200	138.9	EM,DI,TC,ECM,CA
12		C15	413@1700	244	139.4	1606@1200	130.8	EM,DI,TC,ECM,CA
13		C15	540@2000	288	193.8	1736@1400	165.5	EM,DI,TC,ECM,CA
14		C15	540@2100	280	198.0	1817@1400	171.2	EM,DI,TC,ECM,CA
15		C15	580@2100	309	218.3	1954@1400	183.1	EM,DI,TC,ECM,CA
16		C15	595@2100	318	224.3	2005@1400	187.3	EM,DI,TC,ECM,CA
17		C15	401@1800	235	142.0	1387@1250	120.1	EM,DI,TC,ECM,CA
18		C15	375@1800	219	132.4	1354@1250	116.9	EM,DI,TC,ECM,CA
19		C15	401@1900	218	139.0	1438@1200	119.4	EM,DI,TC,ECM,CA
20		C15	408@1700	244	139.4	1589@1200	131.7	EM,DI,TC,ECM,CA
21		C15	389@1700	232	132.9	1512@1200	125.7	EM,DI,TC,ECM,CA
22		C15	369@1700	221	126.4	1435@1200	120.6	EM,DI,TC,ECM,CA
23		C15	394@1800	231	139.7	1498@1200	124.2	EM,DI,TC,ECM,CA
24		C15	359@1800	210	127.0	1286@1200	107.4	EM,DI,TC,ECM,CA
25		C15	354@1800	202	122.2	1285@1200	105.8	EM,DI,TC,ECM,CA
26		C15	331@1800	192	116.0	1232@1200	101.4	EM,DI,TC,ECM,CA
27		C15	347@1850	207	128.7	1449@1300	130.0	EM,DI,TC,ECM,CA
28		C15	409@1800	240	145.4	1561@1200	129.0	EM,DI,TC,ECM,CA
29		C15	440@2100	231	162.8	1482@1200	141.9	EM,DI,TC,ECM,CA
30		C15	474@2100	244	172.8	1685@1400	161.2	EM,DI,TC,ECM,CA
31		C15	530@2100	281	198.2	1850@1400	175.9	EM,DI,TC,ECM,CA
32		C15	547@1950	300	224.5	1410@1300	120.8	EM,DI,TC,ECM,CA

33	C15	569@1800	332	201	NA	NA	EM,DI,TC,ECM,CA
34	C15	569@1800	332	201	NA	NA	EM,DI,TC,ECM,CA
35	C15	642@1800	373	226	NA	NA	EM,DI,TC,ECM,CA
36	C15	642@1800	363	171.0	NA	NA	EM,DI,TC,ECM,CA
37	C15	713@1800	397	240.0	NA	NA	EM,DI,TC,ECM,CA
38	C15	713@1800	397	240.0	NA	NA	EM,DI,TC,ECM,CA
39	C15	500@1900	292	187	1743@1300	156	EM,DI,TC,ECM,CA
40	C15	460@1800	279	169	1537@1300	142	EM,DI,TC,ECM,CA
41	C15	511@1800	310	188	1711@1300	156	EM,DI,TC,ECM,CA
42	C15	478@1800	280	170	1591@1300	141	EM,DI,TC,ECM,CA
43	C15	437@1800	258	156	1452@1300	129	EM,DI,TC,ECM,CA
44	C15	540@2100	281	198	1817@1400	170	EM,DI,TC,ECM,CA
45	C15	478@1800	280	170	1581@1300	141	EM,DI,TC,ECM,CA
46	C15	437@1800	258	156	1451@1300	129	EM,DI,TC,ECM,CA
47	C15	642@1800	365	220.7	NA	NA	EM,DI,TC,ECM,CA
48	C15	642@1800	365	220.7	NA	NA	EM,DI,TC,ECM,CA
49	C15	503@1500	344	173.6	NA	NA	EM,DI,TC,ECM,CA

U-R-001-0308

ATTACHMENT 2 of 3

Engine Model Summary Form

U-R-001-0308

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 Mfr Family Name:  
 Process Code: **New Sub - continued**

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
50	C15	642@1800	344	173.6	NA	NA	NA	EM, DI, TC, ECM,
51	C15	436@1900	245	156	1538@1425	315	151	EM, DI, TC, ECM,
52	C15	436@1900	246	157	1538@1425	315	151	EM, DI, TC, ECM,
53	C15	394@1800	231	140	1498@1200	308	124	EM, DI, TC, ECM,
54	C15	354@1800	202	122	1285@1200	262	106	EM, DI, TC, ECM,
55	C15	440@2100	231	163	1483@1400	301	142	EM, DI, TC, ECM,
56	C15	475@2100	248	175.2	1601@1400	327	154.0	EM, DI, TC, ECM,
57	C15	393@1800	233	140.8	1330@1200	272	109.9	EM, DI, TC, ECM,
58	C15	362@1800	213	129.2	1282@1200	265	107.1	EM, DI, TC, ECM,
59	C15	362@1800	214	129.8	1283@1200	267	107.7	EM, DI, TC, ECM,
60	C15	333@1800	201	121.9	1235@1200	258	104.0	EM, DI, TC, ECM,

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 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
19			220	140.6		304	122.6	
25			210	126.9		273	110.4	
26			194	117.6		258	104.2	
61	C15	443@2100	230	162.2	1574@1400	317	149.5	EM, DI, TC, ECM,
62	C15	361@2100	188	132.9	1283@1400	263	123.7	EM, DI, TC, ECM,
63	C15	412@2100	213	150.3	1465@1400	300	141.3	EM, DI, TC, ECM,
64	C15	413@1700	244	139.5	1606@1200	324	130.8	EM, DI, TC, ECM,

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 Mfr Family Name:  
 Process Code: **Running Change - 2**

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
65	C15	512@1800	297	180	1631@1350	338	154	EM, DI, TC, ECM,
66	C15	433@1800	249	151	1516@1400	312	147	EM, DI, TC, ECM,
67	C15	436@1700	255	146	1692@1200	344	139	EM, DI, TC, ECM,

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 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 diesels 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
68	C15	475@2100	249	176	1601@1400	333	157	EM, DI, TC, ECM,
69	C15	359@1800	209	127	1286@1200	268	108	EM, DI, TC, ECM,
70	C15	394@1800	229	139	1498@1200	306	123	EM, DI, TC, ECM,
71	C15	394@1800	230	140	1498@1200	307	124	EM, DI, TC, ECM,
72	C15	359@1800	210	128	1286@1200	269	109	EM, DI, TC, ECM,
73	C15	362@1800	215	130	1283@1200	267	108	EM, DI, TC, ECM,
5			249	176		333	157	
56			249	176		333	157	
62			191	135		264	124	

# Engine Model Summary Form

Manufacturer: **CATERPILLAR INC.**  
 Engine category: **Nonroad Over 50 Hp**  
 EPA Engine Family: **7CPXL15.2ESK**  
 Mfr Family Name:  
 Process Code: **Running Change - 5**

W-R - 001 - 0308

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
74	C15	569@1800	331	201	NA	NA	NA	EM, DI, TC, ECM,
75	C15	643@1800	374	227	NA	NA	NA	EM, DI, TC, ECM,
76	C15	713@1800	406	246	NA	NA	NA	EM, DI, TC, ECM,
77	C15	569@1800	331	201	NA	NA	NA	EM, DI, TC, ECM,
78	C15	643@1800	374	227	NA	NA	NA	EM, DI, TC, ECM,
79	C15	713@1800	406	246	NA	NA	NA	EM, DI, TC, ECM,
80	C15	393@1800	248	150	1330@1200	279	113	EM, DI, TC, ECM,
81	C15	362@1800	230	139	1282@1200	272	110	EM, DI, TC, ECM,
82	C15	362@1800	230	139	1282@1200	272	110	EM, DI, TC, ECM,
83	C15	333@1800	214	130	1235@1200	260	105	EM, DI, TC, ECM,