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-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems 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.

YEAR ENGINE FAMILY (liter 2015 FJDXL13.5300 13.		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
		13.5	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT	APPLICATION		
Charge Air Cooler, Oxidation Catalyst, Electronic Direct Injection, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Turbocharger, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Tractor, Loaders, Dozer, Pump, Compressor, Generator Se Other 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):

POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
			ИМНС	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL				-	0.01			
		CERT	0.03	0.06		0.03	0.003			

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

day of October 2014.

Annette Hebert, Chief

LEmissions Compliance, Automotive Regulations and Science Division

## 9-30-2014 FO#: U-R-004-0493 Attach ment: Page 10f1

## **Engine Model Summary Form**

Manufacturer: Engine category:

John Deere Power Systems

EPA E

Nonroad CI

MfrFa

Engine Family:	FJDXL13.5300
amily Name:	650HCA
ess Code:	<b>New Submission</b>

			4. Fuel Rate:	5. Fuel Rate:	6. Torque (Nm)	7. Fuel Rate:		9. Emission Control
		3. kW@RPM	mm/stroke@peak kW	(kg/hr)@peak kW	@RPM	mm/stroke@peak	8. Fuel Rate:	Device Per
. Engine code	2. Engine Model	(SAE Gross)	(for diesel only)	(for diesels only)	(SEA Gross)	torque	(kW/hr)@peak torque	SAE J1930
6135HDW11	6135	298@2000	205.8@2000	62.9@2000	2099@1500	290.2@1500	68.5@1500	EGR FOTOX OC SCRC NH3OC DFI TC CAC
5135HFC09A	6135	448@2100	314.3@2100	100.9@2100	2750@1550	395@1550	93.6@1550	EGR SC PTOX OC SCRC NH3OC DFI TC CAC
135HFC09B	6135	410@2100	277.2@2100	89.0@2100	2640@1550	370.5@1550	87.8@1550	EGR PC PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09C	6135	410@2100	278.1@2100	89.3@2100	2640@1550	372.6@1550	88.3@1550	EGREC PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09D	6135	392@2100	263.8@2100	84.7@2100	2520@1550	353.6@1550	83.8@1550	EGREC PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09E	6135	392@2100	266.3@2100	85.5@2100	2520@1550	354.9@1550	84.1@1550	EGR SE PTOX OC SCRC NH3OC DFI TC CAC
8135HFC09F	6135	373@2100	252.0@2100	80.9@2100	2397@1550	335@1550	79.4@1550	EGR ES PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09G	6135	373@2100	250.4@2100	80.4@2100	2397@1550	333.8@1550	79.1@1550	EGR SE PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09H	6135	336@2100	227.1@2100	72.9@2100	2180@1550	298.3@1550	70.7@1550	EGR EP PTOX OC SCRC NH3OC DFI TC CAC
6135HFC09I	6135	336@2100	227.7@2100	73.1@2100	2160@1550	297.9@1550	70.6@1550	EGR EPTOX OC SCRC NH3OC DFI TC CAC
6135HFC09J	6135	317@2100	215.8@2100	69.3@2100	2037@1550	281.5@1550	66.7@1550	EGR FOTOX OC SCRC NH3OC DFI TC CAC
3135HFC09K	6135	317@2100	215.8@2100	69.3@2100	2036@1550	281.5@1550	66.7@1550	EGR SE PTOX OC SCRC NH3OC DFI TC CAC
3135HFC09L	6135	309@2100	211.5@2100	67.9@2100	1986@1550	275.1@1550	65.2@1550	EGR EP PTOX OC SCRC NH3OC DFI TC CAC
5135HFC09M	6135	309@2100	212.1@2100	68.1@2100	1985@1550	276.4@1550	65.5@1550	EGR E PTOX OC SCRC NH3OC DFI TC CAC
6135HFG09A	6135	473@1800	366.6@1800	100.9@1800	MIA	NIA	N/A	EGR 50 PTOX OC SCRC NH3OC DFI TC CAC
6135HFG09B	6135	411@1800	311.8@1800	85.8@1800	16/10	ASIA	N/A	EGR 50 PTOX OC SCRC NH3OC DFI TC CAC
6135HFG09C	6135	358@1800	268.9@1800	74.0@1800	MA		(1)	EGR SC PTOX OC SCRC NH3OC DFI TC CAC
6135HH005	6135	460@2100	325.8@2100	104.6@2100	2750@1550	392.9@1650	93.10 1550	EGR EPTOX OC SCRC NH3OC DFI TC CAC
6135HN005	6135	460@2100	320.1@2100	102.8@2100	2750@1550	389@1550.	92.2@1550	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
3135HPRNT2	6135	489@2100	337.6@2100	108.4@2100	2902@1550	416.5@1550	98.7@1550	EGR EPPTOX OC SCRC NH3OC DFI TC CAC
6135HT003	6135	296@2000	205.8@2000	62.9@2000	2099@1500	290.2@1500	66.5@1500	EGR SE PTOX OC SCRC NH3OC DFI TC CAC
6135HT006	6135	296@2000	205.8@2000	62.9@2000	2099@1500	290.2@1500	66.5@1500	EGR 50 PTOX OC SCRC NH3OC DFI TC CAC
6135HZ013	6135	460@2100	325.8@2100	104.8@2100	2750@1550	392.9@1550	93,1@1550	EGR EC PTOX OC SCRC NH3OC DE TC CAC
6135RW403	6135	460@2100	325.8@2100	104.6@2100	2750@1550	392.9@1550	93.1@1550	EGR EC PTOX OC SCRC NH3OC DFI TC CAC
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