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.

MODEL YEAR	ENGINE FAMILY DISPLACEMENT (liters)		FUEL TYPE	USEFUL LIFE (hours)			
2017	HJDXL06.8312	6.8	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Charge Air Cooler, Oxidation Catalyst, Electronic Direct Injection, Electronic Control Module, Exhaust Gas Recirculation, Turbocharger, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			Pump, Compressor, Generator Set, 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):

RATED	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			имнс	NOx	NMHC+NOx	co	РМ	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
		CERT	0.02	0.06		0.01	0.02			

**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 December 2016.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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## Engine Model Summary Form

(for diesel only)

¥ 143.5@1800

145.4@15001

(for diesels only)

32.9@1800 . 33.4@1500 33.4

Manufacturer: Engine category:

1. Engine code

John Deere Power Systems

2. Engine Model

Nonroad CI HJDXL06.8312 EPA Engine Family: Mfr Family Name: 350HCF Process Code:

6068HFG05A-W 25-16068 4-W

26068HFG050

New Submission 4. Fuel Rate: 5. Fuel Rate: 3. kW@RPM mm/stroke@peak kW (kg/hr)@peak kW

(SAE Gross)

165@1500 160@1500

192@1800

6. Torque (Nm) 7. Fuel Rate: 9. Emission Control @RPM mm/stroke@peak 8, Fuel Rate: SEA Gross torque (kW/hr)@peak torqu SAF J1930 39.5@1800 EGRIOC SCRONHSOC DELTC CAC ECM 3 EGR OC SCRC NH3OC DFITC CAC ECM EGR OC SCRC NH30C DELTC CAC ECM

(068HFG06A) 1 6068 241@1800 180.4@1800 49.7@1800 EGR OC SCRC NH3OC DELTC CAC ECM 44@1800 216@1800 159.8@1800 EGR OC SCRC NH3OC DFI TC CAC ECM 6068HFG06B 6068 6068HFG06C 606831 £197@1500 176.6@1500 4 40.6@1500 EGR OF SCRONH3OC DELTC CAC ECM \*6068HPRNT7 6068 248@1800 184.6@1800 50.8@1800 EGR OC SCRC NH3OC DFI TC CAC ECM