# OECD ABSTRACT OF AGRICULTURAL AND FORESTRY TRACTOR PERFORMANCE TEST

OECD Approval Number 2/2 847

OECD Approval Date 27/11/2014

Make John Deere

Model 7290R

Type 4 WD

Transmission

Speed 40 km/h

Manufacturer John Deere Tractor Works

Testing Station NTTL – U.S.A.







# **SPECIFICATIONS**

#### **ENGINE**

Make John Deere Model 6090RW431 Direct injection *Type* Supercharging Cylinders Disposition vertical in line Capacity 8984 cm<sup>3</sup> Cooling Liquid

## **TRANSMISSION**

Gear box **IVT** 

Number of forward and reverse speeds

Speed at rated engine speed from 0,00 to 40,00 km/h

#### POWER TAKE-OFF SPECIFICATIONS

Standard Power take-off speed 540 min<sup>-1</sup> 1000 min-1 Power take-off speed at rated engine speed - min<sup>-1</sup> 1077 min<sup>-1</sup> 45 mm 45 mm Diameter of the shaft Number of splines 20 6



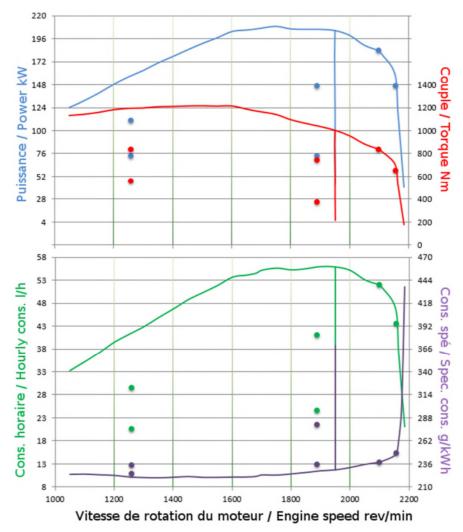


Yes

6

# PTO TEST RESULTS

One hour test at maximum power			
Power, Engine and Power take-off speed	208,84 kW	1751 min <sup>-1</sup>	898 min <sup>-1</sup>
Hourly and specific consumption		55,63 l/h	224 g/kWh
Hourly and specific urea consumption		1,24 l/h	6,5 g/kWh-
Test at maximum power at rated engine speed			
Power, Engine and Power take-off speed	183,43 kW	2100 min <sup>-1</sup>	1077 min <sup>-1</sup>
Hourly and specific consumption		51,97 l/h	238 g/kWh
Hourly and specific urea consumption		1.08 l/h	6.4 g/kWh-
Test at standard Power take-off speed			
Power, Engine and Power take-off speed	204,48 kW	$1950 \; min^{-1}$	1000 min <sup>-1</sup>
Hourly and specific consumption		55,89 l/h	229 g/kWh
Hourly and specific urea consumption		1.24 l/h	6.6 g/kWh-
<u>Torque rise</u>			45,7 %
Maximum torque, Engine speed corresponding		1215,3 Nm	1500 min <sup>-1</sup>







# PARTICULATE FILTER ACTIVE REGENERATION FUEL USE

	l	mm:ss
Rated Engine Speed	3,5	38:18
40% of maximum power at rated engine speed with throttle set to $90%$ of rated engine speed	4,4	40:42
60% of maximum power at rated engine speed with throttle set to 60% of rated engine speed	2,4	38:14

# HYDRAULIC PERFORMANCE AND POWER LIFT TEST

Hydraulic system Closed centre Relief valve pressure setting (tolerance):  $20.4 \pm 0.3$  MPa

#### **HYDRAULIC PERFORMANCES**

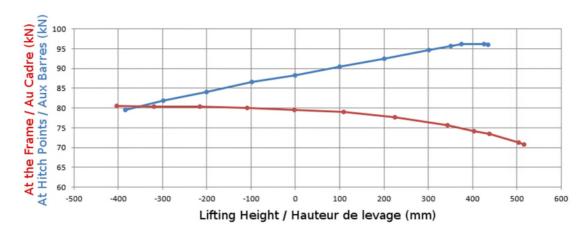
## At maximum hydraulic power

Flow rate, Pressure, Power (couplers: 1 pair)	134,5 l/min	15,85 MPa	35,5 kW
Flow rate, Pressure, Power (couplers: 2 pairs or +)	164,0 l/min	19,04 MPa	52,0 kW

#### **POWER LIFT**

## Maximum lifting force

at the hitch points 79,5 kN at the frame 70,7 kN







## DRAWBAR TEST

Front tyres, Rear tyres 420/90 R30 480/80 R46
Inflation pressure 83 kPa 110 kPa

#### **UNBALLASTED**

Total Mass 11018 kg
Maximum drawbar pull 106,97 kN
at speed of 4,27 km/h
Maximum power 185,34 kW
at speed of 13,36 km/h



### **BALLASTED**

Total Mass

Maximum drawbar pull

at speed of

Maximum power

at speed of

13862 kg

126,16 kN

3,81 km/h

Maximum power

186,26 kW

at speed of

13,26 km/h

