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Test 1815: New Holland 9482 Quadrasync Diesel

Nebraska Tractor Test Lab

University of Nebraska-Lincoln, tractortestlab@unl.edu

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SUMMARY OF OECD TEST 1815—NEBRASKA SUMMARY 282

NEW HOLLAND 9482 QUADRASYNC DIESEL

12 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed (PTO speed-996 rpm)					
273.7 (204.1)	2098	15.59 (59.01)	0.401 (0.244)	17.56 (3.46)	
Standard Power Take-off Speed (996 rpm)					
273.7 (204.1)	2098	15.59 (59.01)	0.401 (0.244)	17.56 (3.46)	
Maximum Power (2 hours)					
283.9 (211.7)	1800	14.92 (56.49)	0.370 (0.225)	19.04 (3.75)	

VARYING POWER AND FUEL CONSUMPTION

273.7 (204.1)	2098	15.59 (59.01)	0.401 (0.244)	17.56 (3.46)	Air temperature
249.4 (186.0)	2251	15.36 (58.15)	0.432 (0.263)	16.24 (3.20)	81°F (27°C)
191.0 (142.4)	2296	12.93 (48.96)	0.477 (0.290)	14.77 (2.91)	Relative humidity
128.9 (96.1)	2326	10.58 (40.06)	0.577 (0.351)	12.18 (2.40)	43%
65.6 (48.9)	2368	8.02 (30.35)	0.860 (0.523)	8.18 (1.61)	Barometer
11.9 (8.9)	2409	5.20 (19.67)	3.107 (1.890)	2.28 (0.45)	29.3" Hg (99.10 kPa)

Maximum Torque - 901 lb.-ft. (1222 Nm) at 1587 rpm
Maximum Torque Rise - 31.5 %
Torque rise at 1700 engine rpm - 28 %

DRAWBAR PERFORMANCE FUEL CONSUMPTION CHARACTERISTICS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel lb/hp.hr (kg/kW.h)	Consumption Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
Maximum Power 5th (M1) Gear									
239.1 (178.3)	16700 (74.29)	5.37 (8.64)	2101	1.4	0.444 (0.270)	15.84 (3.12)	172 (78)	43 (6)	29.6 (100.1)
75% of Pull at Maximum Power 5th (M1) Gear									
194.6 (145.1)	12530 (55.73)	5.82 (9.37)	2269	1.0	0.511 (0.311)	13.76 (2.71)	172 (78)	45 (7)	29.6 (100.1)
50% of Pull at Maximum Power 5th (M1) Gear									
132.5 (98.8)	8360 (37.19)	5.94 (9.56)	2308	0.7	0.615 (0.374)	11.43 (2.25)	170 (77)	43 (6)	29.6 (100.1)
75% of Pull at Reduced Engine Speed 6th (M2) Gear									
194.4 (145.0)	12545 (55.81)	5.81 (9.35)	1935	0.9	0.453 (0.276)	15.48 (3.05)	172 (78)	43 (6)	29.6 (100.1)
50% of Pull at Reduced Engine Speed 6th (M2) Gear									
132.5 (98.8)	8345 (37.12)	5.95 (9.58)	1977	0.6	0.539 (0.328)	13.05 (2.57)	170 (77)	41 (5)	29.6 (100.1)

Location of Test: Prairie Agricultural Machinery Institute(PAMI), Portage La Prairie, Manitoba, Canada R1N 3C5

Dates of Test: October -November, 1998

Manufacturer: New Holland Canada Ltd. Versatile Farm Equipment Operations, Box 7300, 1260 Clarence Ave., Winnipeg, Manitoba, Canada R3C 4E8

FUEL and OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F (15°/15°C)** 0.845 **Fuel weight** 7.034 lbs/gal (0.843 kg/l) **Oil** SAE 15W-40 **API service classification** CF-4 **Transmission and hydraulic lubricant** Esso Hydraul 56 fluid **Final Drive lubricant** SAE 80W90 gear oil

ENGINE: Make Cummins Diesel **Type** six cylinder vertical with turbocharger and intercooler **Serial No.** 34911850 **Crankshaft** lengthwise **Rated engine speed** 2100 **Bore and stroke** 4.921" x 5.787" (125.0 mm x 147.0 mm) **Compression ratio** 16.1 to 1 **Displacement** 660 cu in (10824 ml) **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements and aspirator **Oil filter** one full flow cartridge **Oil cooler** engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil **Fuel filter** one paper element **Muffler** vertical **Cooling medium temperature control** thermostat

CHASSIS: **Type** Four wheel drive with duals **Serial No.** D107555 **Tread width** rear 72.0" (1829 mm) and 128.9" (3275 mm) front 72.0" (1829 mm) and 128.9" (3275 mm) **Wheel base** 133.0"(3380 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Nominal travel speeds mph (km/h)** first 2.96 (4.77) second 3.47 (5.58) third 4.04 (6.51) fourth 4.71 (7.58) fifth 5.38 (8.66) sixth 6.30 (10.13) seventh 7.34 (11.81) eighth 8.55 (13.75) ninth 11.15 (17.95) tenth 13.04 (20.98) eleventh 15.21 (24.48) twelfth 17.70 (28.49) reverse 3.84 (6.18), 4.49 (7.23), 5.24 (8.43), 6.10 (9.82) **Clutch** multiple wet disc hydraulically operated by foot pedal **Brakes** caliper disc hydraulically operated by foot pedal **Steering** hydrostatic and articulated **Power take-off** 1000 rpm at 2106 engine rpm **Unladen tractor mass** 30000 lb (13608 kg)

REPAIRS AND ADJUSTMENTS: No repairs or adjustments

DRAWBAR PERFORMANCE

MAXIMUM POWER IN SELECTED GEARS

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Temp.°F(°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
1st (L1) Gear								
229.7 (171.3)	33490 (148.96)	2.57 (4.14)	1982	9.2	0.455 (0.277)	15.47 (3.05)	172 (78)	29.6 (100.1)
2nd (L2) Gear								
243.7 (181.7)	32325 (143.80)	2.83 (4.55)	1800	6.0	0.430 (0.262)	16.37 (3.23)	172 (78)	29.6 (100.1)
3rd (L3) Gear								
250.5 (186.8)	27690 (123.17)	3.39 (5.46)	1801	3.3	0.408 (0.248)	17.26 (3.40)	172 (78)	29.6 (100.1)
4th (L4) Gear								
254.5 (189.8)	23925 (106.42)	3.99 (6.42)	1803	2.4	0.414 (0.252)	17.00 (3.35)	172 (78)	29.6 (100.2)
5th (M1) Gear								
253.7 (189.2)	20805 (92.54)	4.57 (7.36)	1799	1.9	0.397 (0.242)	17.72 (3.49)	172 (78)	29.6 (100.2)
6th (M2) Gear								
252.9 (188.6)	17620 (78.39)	5.38 (8.66)	1802	1.4	0.400 (0.243)	17.58 (3.46)	172 (78)	29.6 (100.3)
7th (M3) Gear								
250.5 (186.8)	14950 (66.51)	6.28 (10.11)	1800	1.2	0.404 (0.246)	17.41 (3.43)	172 (78)	29.6 (100.3)
8th (M4) Gear								
247.6 (184.6)	12670 (56.36)	7.33 (11.79)	1800	1.0	0.406 (0.247)	17.31 (3.41)	172 (78)	29.6 (100.3)

NOTE: This tractor was not equipped with a 3 point hitch when tested. The 3 point hitch performance data shown on this report is from a test series done on the New Holland 9282 Diesel.

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. This tractor did not meet the manufacturers claim of 45 gal/ min (170.3 l/min) hydraulic flow, nor torque rise of 35%. The pull in 1st (L1) gear was limited do to tire hop. The performance results on this summary were taken from OECD tests conducted under the Code II Test Code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1815**, Nebraska Summary 282, July 12, 1999.

Brent T. Sampson
Test Engineer

L. L. Bashford
G. J. Hoffman
R. D. Grisso, Jr
Board of Tractor Test Engineers

TRACTOR SOUND LEVEL WITH CAB

	dB(A)
At 75% Load in 5th(M1) Gear	78.0
Bystander	--

TIRES AND WEIGHT

Rear Tires No., size, ply & psi (kPa)
Front Tires No., size, ply & psi (kPa)
Height of Drawbar
Static Weight with operator Rear
Front
Total

Tested Without Ballast

Four 20.8R42; **, 9 (62)
Four 20.8R42; **, 10 (68)
21.8 in (553 mm)
11785 lb (5345 kg)
18380 lb (8338 kg)
30165 lb (13683 kg)

THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: IVN

Quick Attach: none

Maximum Force Exerted Through Whole Range: 15285 lb (68.0 kN)

- i) Opening pressure of relief valve: NA
 Sustained pressure of the open relief valve: 2900 psi (200 bar)
- ii) Pump delivery rate at minimum pressure: 44.6 GPM (168.8 l/min)
- iii) Pump delivery rate at maximum
 hydraulic power: 42.7 GPM (161.7 l/min)
 Delivery pressure: 2280 psi (157 bar)
 Power: 56.7 HP (42.3 kW)

THREE POINT HITCH PERFORMANCE (SAE Static Test)

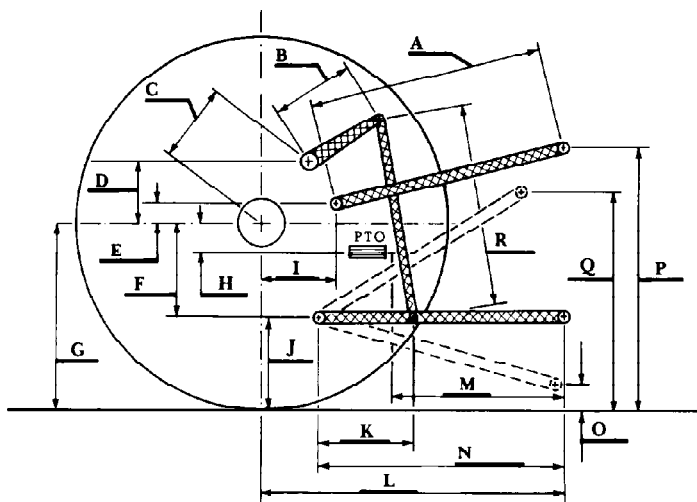
Observed Maximum Pressure psi (bar) 2800 (193)
 Location lift cylinder
 Hydraulic oil Temperature °F (°C) 150 (65)
 Location Hydraulic sump
 Category IVN
 Quick Attach None

System Pressure - 2600 psi (179 bar)

Hitch point distance to ground level in. (mm)	8.0 (203)	19.4 (492)	27.2 (692)	35.1 (892)	44.1 (1120)
Lift force on frame lb.	25955	22535	20220	17905	13430
" " " " " (kN)	(115.4)	(100.2)	(89.9)	(79.6)	(59.7)

ASAE Test - System Pressure - 2800 psi (193 bar)

Hitch point distance to ground level in. (mm)	8.0 (203)	19.4 (492)	27.2 (692)	35.1 (892)	44.1 (1120)
Lift force on frame lb.	28025	24315	21820	19325	14465
" " " " " (kN)	(124.7)	(108.2)	(97.1)	(86.0)	(64.4)



HITCH DIMENSIONS AS TESTED NO LOAD

	inch	mm
A	27.8	705
B	18.6	472
C	27.0	685
D	19.0	483
E	13.4	341
F	10.4	263
G	33.7	855
H	1.7	43
I	25.3	642
J	23.3	592
K	18.0	457
L	53.4	1356
M	25.3	718
N	43.0	1092
O	9.1	230
P	50.3	1277
Q	41.3	1050
R	33.1	842