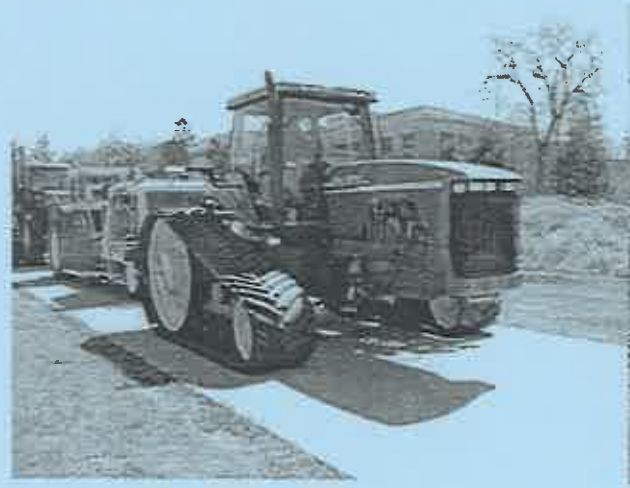
OECD APPROVAL NO. 2/1 937/1
CODE 2
DATE OF APPROVAL: 3 November 2000
EXTENSION DATE OF APPROVAL: 13 March 2003

NEBRASKA TRACTOR TEST LABORATORY
DEPARTMENT OF BIOLOGICAL SYSTEMS ENGINEERING
INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
UNIVERSITY OF NEBRASKA - EAST CAMPUS
LINCOLN, NEBRASKA 68583-0832, USA

REPORT ON TEST IN ACCORDANCE WITH OECD STANDARD CODE 2 FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTORS



JOHN DEERE 8410T POWERSHIFT



JOHN DEERE 8420T POWERSHIFT

Rubber Tracked - 30 km/h Version

MANUFACTURED BY:	**John Deere Tractor Works** **3500 East Donald Street, P.O. Box 270** **Waterloo, Iowa 50704-0270**
NEBRASKA TEST NO.	**1778**
TEST DATES:	**April 7-27, 2000**

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This test report provides the results of the tests conducted in accordance with the OECD Standard Test Code for the Official Testing of Agricultural Tractor Performance - C(87)53 Final, Code 2.

Extension: This report also applies to the John Deere 8420T diesel. The John Deere 8420T varies from the John Deere 8410T in model designation. The performance results on this report are valid for the extended model. Additional tests of hydraulic power and lift for the 8420T were conducted on a similar chassis and included in this report.

This report has been approved by the OECD Coordinating Centre in Paris on 3 November 2000 for the John Deere 8410T Powershift, Rubber Tracked - 30 km/h version, 16-speed transmission with OECD Number 2/1937. The extension has been approved by the OECD Coordinating Centre in Paris on 13 March 2003 with OECD Number 2/1 937/1.

No reproduction of this report or any part of it can be made without prior approval by the Nebraska Tractor Test Laboratory, Lincoln, Nebraska USA.

Dr. Leonard L. Bashford, Director
Nebraska Tractor Test Laboratory and
Chair, Nebraska Tractor Test Board

David L. Morgan, Assistant Director
Nebraska Tractor Test Laboratory

Brent T. Sampson, Test Engineer
Nebraska Tractor Test Laboratory

Date: MAR 1 7 2003

- Manufacturers Name/Address	John Deere Tractor Works 3500 East Donald St. P.O. Box 270 Waterloo, Iowa 50704-0270
- Location of tractor assembly	Same
- Submitted for test by	The Manufacturer
- Selected for test by	The Manufacturer in agreement with the Nebraska Tractor Test Laboratory
- Place of running in	John Deere Product Engineering Center, Waterloo, Iowa
- Duration of running in	138 hr
- Location of test	Nebraska Tractor Test Laboratory Lincoln, Nebraska U.S.A.

1. SPECIFICATIONS OF TRACTOR

1.1 IDENTIFICATION

1.1.1 - Make of the tractor	John Deere
- Model	8410T
- Type	Unit construction, rubber tracklaying tractor, Powershift, 30 km/h version
- Number of driving wheels	2 tracks (rubber belts)
1.1.2 Numbers	
- 1st Serial number	*RW8310T901001*
- Serial Number	*RW8410T901086*
1.1.3 Other Specifications	
- Equivalent model	John Deere 8420T

1.2 ENGINE

- Make	John Deere
- Model	6081HRW18
- Type	4-stroke Diesel; turbocharged, air-to-air aftercooled, direct injection
- Serial Number	*RG6081H098907*

1.2.1 Cylinders

- Number and Disposition	6, in-line, vertical
- Bore x Stroke	115.8 mm x 128.5 mm
- Cubic Capacity	8134 cm^3
- Compression Ratio	16.5:1
- Arrangement of Valves	Overhead
- Cylinder Liner (wet or dry)	Wet; replaceable

1.2.2 Supercharging

- Make	Schwitzer
- Model	RE56488
- Type	Exhaust gas driven
- Pressure	0.159 ± 0.015 MPa (at rated engine speed and load)

1.2.3 Fuel System

- Fuel Feed System	Transfer pump integral with injection pump
- Make/Model/Type of Filter(s)	Stanadyne/RE65431/Water coalescing nylon
primary	Stanadyne/AR86745/Paper element
secondary	
- Fuel Tank Capacity	492 dm^3
- Fuel Cooler	Heat exchanger with air in fuel return line
- Make/Model/Type of Injection Pump	Bosch/RE501676/In-line; electric shut off
- Injection Pump Serial Number	9712505046
- Production setting of injection Pump	
· Flow Rate	51.8 ± 2.0 dm^3/h (at rated engine speed and full load)
· Fuel Density	0.847 g/cm^3
- Make/Model/Type of Injectors	Bosch/RE61593/P-type nozzle
- Injection Pressure	29.0 +1.2/-0.0 MPa
- Timing	18.0° ± 1° BTDC

1.2.4 Governor

- Make/Model/Type	John Deere Focus/Electronic Control
- Governed engine speed range	800 - 2400 rev/min
- Rated engine speed	2200 rev/min
- High idle speed range	2300 ± 25 rev/min

1.2.5 Air Cleaner

- Pre-cleaner	
· Make/Model/Type	Donaldson/RE164286/Strato-tube pre-cleaner with aspirator
· Air intake location	Under hood, front of tractor
- Main Cleaner	
· Make/Model/Type	Donaldson/RE51629/pleated paper
· Location	Under hood, engine compartment
- Secondary element	
· Make/Model/Type	Donaldson/RE51630/pleated paper
- Maintenance Indicator	Dash mounted warning light and audible signal

1.2.6 Lubrication System

- Type of Feed pump	Full pressure; positive displacement
- Type of filter(s)	Full flow
- Number of filters:	One; spin-on
- Oil Cooler	Heat exchanger with engine coolant

1.2.7 Cooling System

- Type of coolant:	Liquid
- Type of pump	Centrifugal, gear driven
- Fan specification	Belt driven; suction type; variable speed
- Number of Fan Blades	8
- Fan Diameter	711 mm
- Coolant system capacity	34 dm^3
- Type of temperature control	Two thermostats and variable speed fan
- System pressure	69 ± 5 kPa

1.2.8 Starting System

- Make/Model/Type of starter	Nippondenso/RE69704/Solenoid engaged
- Power rating	4.0 kW
- Cold starting aid	Ether spray in intake manifold
- Safety device	Electrical lockout on gearshift lever

1.2.9 Electrical System

- Voltage and grounding	12 Volt DC; negative ground
- Alternator	
· Make/Model/Type	Nippondenso/RE46608/Belt driven
· Power rating	1.9 kW
- Batteries	
· Number and connection	Two; 12 Volt batteries in parallel; SAE tapered post
· Rating	925 Cold Cranking Amps/battery, 175 Ah/battery at 20 hour rating

1.2.10 Exhaust System

- Muffler Make/Model/Type	Nelson/RE44716/Expansion Chamber
- Location	Vertical muffler
- Exhaust stack location	Vertical; right front corner of cab

1.3 TRANSMISSION

1.3.1 Clutch (travel)

- Make/Model/Type	John Deere/Multiple plate/Oil cooled
- Number of plates	7
- Plate diameter	232 mm
- Method of operation	Hydraulic; pedal actuated

1.3.2 Gear Box

- Make/Model/Type	John Deere/full powershift/mechanical
- Arrangement	Countershaft design consisting of 8 multidisc hydraulically cooled clutches and 1 multidisc hydraulically cooled planetary brake
- Number of Gears	16 forward and 4 reverse gears controlled by one lever
- Oil cooler	Heat exchanger with air
- Available options	16 x 5 (specialty market)

1.3.3 Rear axle and final drives

- Make/Model/Type	John Deere/Spiral bevel gear and pinion, outboard planetary final drives with electronically controlled hydrostatic differential steering
- Differential lock	Not applicable

1.3.4 Front axle and final drives

Not applicable

1.3.5 Total ratios and traveling speeds

Gear Number	Number of engine revolutions for one revolution of the driving wheels	Nominal travel speed (*) at rated engine speed of 2200 rev/min (km/h)
Forward		
1	346.0220	1.87
2	270.8786	2.39
3	212.8132	3.04
4	166.5978	3.88
5	137.5825	4.70
6	121.9316	5.31
7	107.7045	6.01
8	95.4524	6.78
9	84.6171	7.65
10	74.9913	8.63
11	66.2413	9.77
12	58.7059	11.02
13	46.1282	14.02
14	36.1109	17.91
15	28.3701	22.80
16	22.2092	29.13
Reverse		
1	-396.6818	-1.63
2	-157.7254	-4.10
3 (**)	-139.7831	-4.63
4 (***)	-52.8817	-8.90
5 (****)	-52.8817	-12.23

(*) Calculated with a rear track dynamic radius index of 780 mm
(**) Engine speed is adjustable to 2400 RPM in the Reverse Gear Number 3
(***) **Engine speed is limited to 1600 RPM** in the Reverse Gear Number 4
(****) Available in Specialty Markets only

1.4 POWER-TAKE-OFF

1.4.1 Main Power-Take-Off

- Type	Independent
- Method of engagement	Electro-hydraulically actuated multi-plate wet clutc operated by single hand control switch
- Number of shafts	One
- Method of changing speeds	None

1.4.1.1 Standard Single Speed PTO-1000 rev/min

- Location	Rear of tractor; center plane
- Diameter of PTO shaft end	44.5 mm
- Number of splines, in conformity with ISO 500/1991	20; conforms to ISO 500/1991
- Height above ground	772.4 mm
- Distance from median plane of tractor	0 mm
- Distance behind rear axle	583.6 mm
- PTO speed at rated engine speed (2200 rev/min)	1009 rev/min
- Engine speed at Standard PTO speed	2179 rev/min
- Ratio of Engine rev/min to PTO rev/min	2.179 : 1
- Power restriction	Maximum power available
- Torque restriction	Maximum torque available
- Direction of rotation (viewed facing driving end)	Clockwise

1.4.1.2 Power-Take-Off Proportional to Ground Speed

Not available

1.5 POWER LIFT

- Make/Model/Type	John Deere/Electro-hydraulic lower link sensing; variable mix of draft and position control (option slip control); adjustable rate of drop
- Type of hydraulic system	Closed center; pressure and flow compensated
- Number/Type of cylinders	Two external/Single acting; 2-100 mm diameter
- Type of linkage lock for transport	Electro-hydraulic (with locking notch for hand lever control)
- Relief valve pressure setting	20.30 ± 0.3 MPa (Pump Stall Pressure)
- Opening pressure of cylinder safety valve	23.25 ± 0.5 MPa
- Lift Pump type	Axial piston, variable pressure and flow, pressure and flow compensated (45 cm^3 & optional 57 cm^3 displacement)
- Transmission between pump and engine	Direct spur gear drive
- Type/Number of filters	Synthetic media, screw-on canister/one
- Location of oil reservoir	Differential case housing
- Type/Number/Location of tapping points	ISO standard breakaway couplers/3 standard with 4th, 5th and additional inlet/outlet pair for externally controlled implements/rear of tractor
- Maximum oil volume available for external cylinders	20 dm^3; additional 10 dm^3 allowable overfill for total of 30 dm^3

1.6 THREE POINT LINKAGE

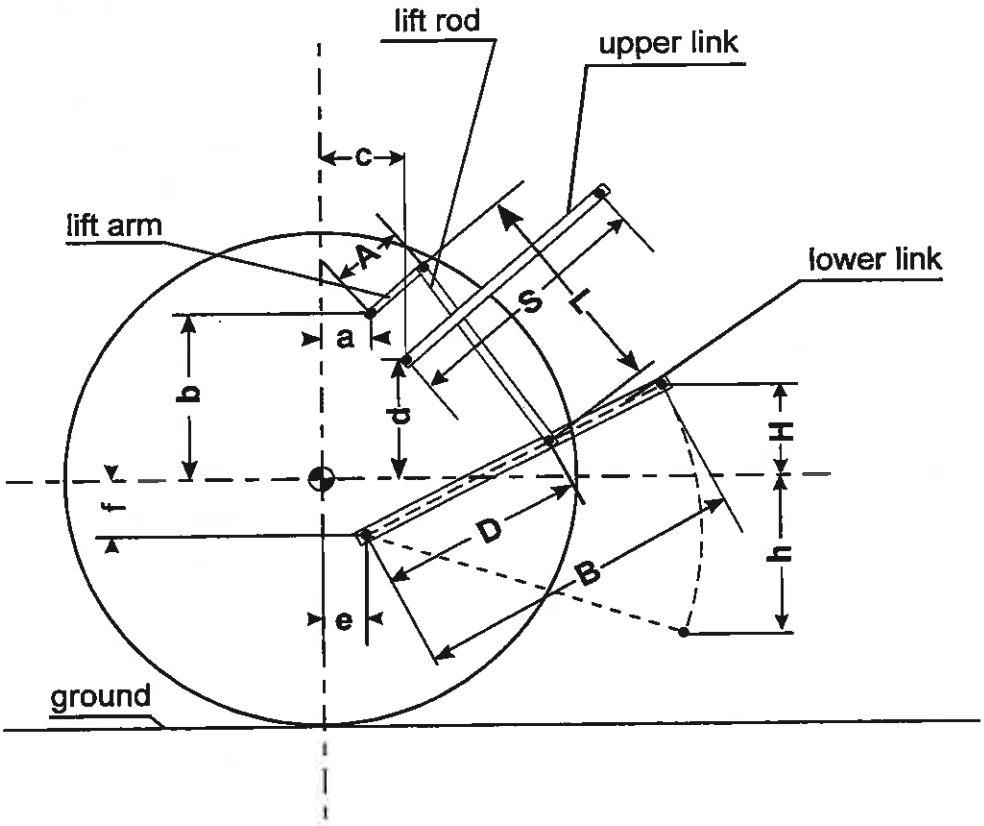


Figure 2.1
Lift test - Linkage Geometry

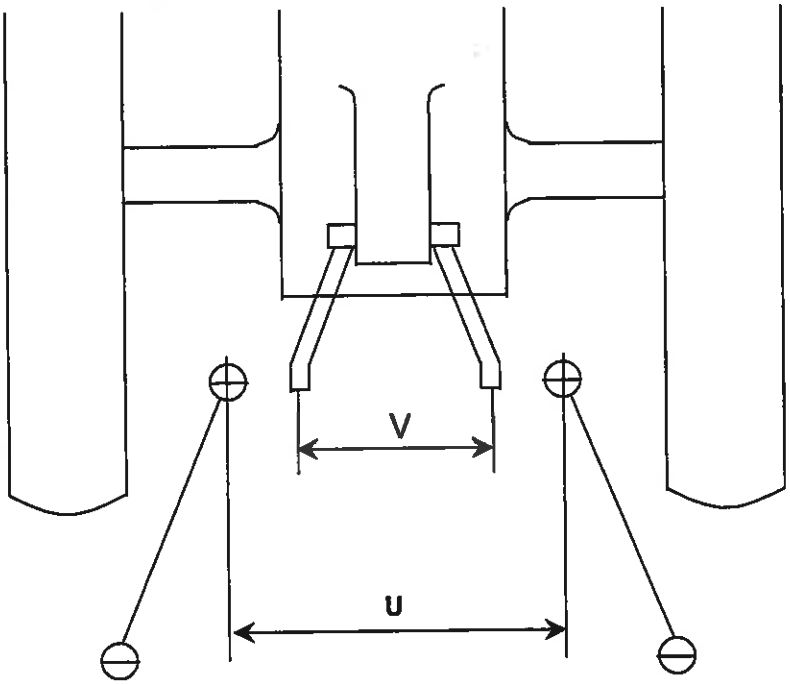


Figure 2.2
Lift test - Linkage Geometry

Table 1.6.1 - Linkage Geometry Dimensions - SM version

- Category 3 in conformity with ISO 730-1:1994 and ISO 730-2:1979
- Category Adapter Convertible to Category - None

Category adapter: Walterscheid lower links		Dimension or range (mm)	Setting used on test (mm)
Lift category		III	III
Length of lift arms	(A)	495	same
Length of lower links	(B)	1065	same
Distance of lift arm pivot point from rear-wheel axis:			
horizontally	(a)	-140	same
vertically	(b)	565	same
Horizontal distance between the two lower link points	(U)	600	same
Horizontal distance between the two lift arm ends points	(V)	750	same
Length of upper link	(S)	729 to 900	822
Distance of upper link pivot point from rear-wheel axis:			
horizontally	(c)	395, 395, 424	424
vertically	(d)	192.5, 259.5, 321.1	321
Distance of lower link pivot point from rear-wheel axis:			
horizontally	(e)	175	same
vertically	(f)	280	same
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	720	same
Length of lift rods	(L)	968 to 1072	1072
Height of lower hitch points relative to rear wheel axis:			
In low position	(h)	500 to 650	650
In high position	(H)	206 to 339	206
Height above ground of lower hitch points when locked in transport position		1059 to 1191	1059

Rear track static radius index of 852.55 mm

Table 1.6.2 - Linkage Geometry Dimensions - North American version

- Category 3 in conformity with ISO 730-1:1994 and ISO 730-2:1979
- Category Adapter Convertible to Category - None

Category adapter: Quick Attach linkage		Dimension or range (mm)	Setting used on test (mm)
Lift category		III	III
Length of lift arms	(A)	495	same
Length of lower links	(B)	1065	same
Distance of lift arm pivot point from rear-wheel axis:			
horizontally	(a)	-140	same
vertically	(b)	565	same
Horizontal distance between the two lower link points	(U)	600	same
Horizontal distance between the two lift arm ends points	(V)	750	same
Length of upper link	(S)	694 to 865	733
Distance of upper link pivot point from rear-wheel axis:			
horizontally	(c)	395	same
vertically	(d)	192.5, 259.5	259.5
Distance of lower link pivot point from rear-wheel axis:			
horizontally	(e)	175	same
vertically	(f)	280	same
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	720	same
Length of lift rods	(L)	968 to 1089	1089
Height of lower hitch points relative to rear wheel axis:			
In low position	(h)	482 to 650	650
In high position	(H)	140 to 299	140
Height above ground of lower hitch points when locked in transport position		993 to 1161	993

Rear track static radius index of 852.55 mm

1.7.1 SWINGING DRAWBAR
(John Deere 8410T)

	NA Option Tested Version	SM Option Not Tested
- Type	Oscillating	same
- Height above ground · Maximum (offset flipped up) · Minimum (offset flipped down)	 565.4 mm 467.4 mm	 same same
- Type of adjustment	Removable Clevis	same
- Distance of hitch point from rear wheel axis, horizontally	1040, 1091 mm	1089, 1178 mm
- Distance of hitch point from PTO shaft end		
· Vertically · Horizontally (shaft diameter)	305, 207 mm 457, 508 mm	same 506, 595 mm
- Lateral adjustment:		
· Right side · Left side	203.75, 211.4 mm 203.75, 211.4 mm	212, 225.5 mm 212, 225.5 mm
- Distance of pivot point from rear wheel axis, horizontally	290.5 mm (forward)	same
- Diameter of drawbar pin hole	40 mm	33 mm
- Maximum vertical static permissible load:		
· Short position · Extended position	17.35 kN 17.35 kN	23.58 kN 16.24 kN

1.7.2 SWINGING DRAWBAR
(John Deere 8420T)

	NA Cat III Option Tested Version	NA Cat IV Option Not Tested	SM Option Not Tested
- Type	Oscillating	same	same
- Height above ground · Maximum (offset flipped up) · Minimum (offset flipped down)	 565.4 mm 467.4 mm	 564 mm 440 mm	 565.4 mm 467.4 mm
- Type of adjustment	Removable Clevis	same	same
- Distance of hitch point from rear wheel axis, horizontally	1040, 1091 mm	1091 mm	1089, 1178 mm
- Distance of hitch point from PTO shaft end			
· Vertically · Horizontally (shaft diameter)	152, 250 mm 457, 508 mm	153, 277 mm 508 mm	152, 250 mm 506, 595 mm
- Lateral adjustment:			
· Right side · Left side	203.75, 211.4 mm 203.75, 211.4 mm	178 mm 178 mm	212, 225.5 mm 212, 225.5 mm
- Distance of pivot point from rear wheel axis, horizontally	190.5 mm (forward)	same	same
- Diameter of drawbar pin hole	40 mm	50.8 mm	33 mm
- Maximum vertical static permissible load:			
· Short position · Extended position	17.35 kN 17.35 kN	21.8 kN 21.8 kN	23.58 kN 16.24 kN

1.8 TRAILER HITCH
Not available

1.9 HOLED DRAWBAR
Not available

1.10 STEERING

- Make/Model/Type: John Deere Hydrostatic Differential Steering/Pump and motor/Electro-Hydraulic Differential steering controlled by steering wheel
- Method of operation: Steering wheel angle determines difference in speed between the 2 rubber track drive wheels
- Pump(s): Axial Piston Variable Displacement Pump and Axial Piston Fixed Displacement Motor
- Ram(s): None
- Working pressure: Up to 45.0 MPa +0.5/+2.5 MPa
- Filter Make/Model/Type: Donaldson/RE69054/Paper Element

1.11 BRAKE SYSTEM

1.11.1 Service Brakes

- Make/Model/Type: Vickers-John Deere/ Load sensing power with manual backup
- Method of operation: Hydraulically actuated oil immersed disc operated by one pedal
- Trailer Brake type: Not available

1.11.2 Parking Brake

- Type: Spring applied, hydraulically released multi-disc
- Method of operation: Gear selector lever

1.12 WHEELS

- Number
  - · Front: None
  - · Rear: Two; Driving and steering
- Wheelbase: Not applicable
- Track width adjustment

	Minimum mm	Maximum mm	Adjustment method
Rear	2235	3035	8 positions available by adjusting track frame and rear wheel: 2235,2435,2485*,2535,2635,2735,2835, and 3035

* Requires exchange of right and left track frames

1.13.1 PROTECTIVE STRUCTURE (John Deere 8410T)

- Make/Model/Type: John Deere/SG-058/Command View™ Cab
- Manufacturer's Name/Address: John Deere Waterloo Works, Waterloo, Iowa, USA
- Protective device
  - · Cab/frame/rollguard/other: Cab
  - · Tiltable/not tiltable: Not Tiltable
- OECD Approval Number: 4/0 547 (Certified to SAE-J2194 and CSA-B352.0, including OSHA #1928.51)
- Date of Approval: 2 September 1998
- Nos. of Minor Modification Certificates, if any: MOD 1: 1, 24 August 1999

1.13.2 PROTECTIVE STRUCTURE (John Deere 8420T)

- Make/Model/Type	John Deere/SG-076/Command View™ Cab
- Manufacturer's Name/Address	John Deere Waterloo Works Waterloo, Iowa, USA
- Protective device	
· Cab/frame/rollguard/other	Cab
· Tiltable/not tiltable	Not Tiltable
- OECD Approval Number	4/0 719
- Date of Approval	4 April 2002
- Nos. of Minor Modification Certificates, if any:	None

1.14.1 DRIVER'S SEAT (8410T & 8420T)

- Make/Model/Type	John Deere/ComfortCommand™/Air cushion suspensio
- Seat and steering wheel reversible	No
- Type of suspension	Air
- Type of damping	Adjustable damping, viscous damping
- Range of adjustment	
· Longitudinal	178 mm
· Vertical	172 mm travel, 106 mm adjustable range
· Right Rotation	20°
· Left Rotation	15°
- Safety Belt	Yes

1.14.2 OPTIONAL DRIVER'S SEAT Not available

1.14.3 PASSENGER SEAT Not available

1.15 LIGHTING

	Height above ground of center (mm)	Size (mm)	Distance from outside edge to median plane of tractor (mm)
Headlights			
Hood inner	1800	70 x 127	200
outer	1800	71 x 127	335
Roof inner	3040	51 x 127	350
outer	3040	51 x 127	500
Upper mid body	2150	70 x 127	725
Lower mid body			
left	1380	70 x 127	1400
right	1300	70 x 127	1010
Rearlights			
roof	3050	70 x 127	640
fender	2100	70 x 127	890
Tail lights	1920	89 x 210	870
Reflectors			
roof front	3040	82 x 240 (*)	770
roof rear	3050	82 x 240 (*)	790

(*) Wrap-around lights

2. TEST CONDITIONS

2.1 OVERALL DIMENSIONS

Length-Overall:	without front weights	5487 mm
	with front weights	6012 mm
Width:	minimum	3404 mm
	maximum	3810 mm
Height at top of:	protective structure	3135 mm
	exhaust	3245 mm

2.2 GROUND CLEARANCE

360 mm

Clearance-limiting part: Drawbar rear support (Rear hitch frame)

2.3 TRACTOR MASS

With cab, full fuel tank

	Unballasted		Ballasted	
	Without driver (kg)	With driver (kg)	Without driver (kg)	With driver (kg)
Total	11965	12040	12986	13061

Ballast Added

	Number of weights	Total mass (kg)	Liquid (kg)
Front Weight Support	1	130	0
Front Weights	20	891	0

2.4 TRACK SPECIFICATIONS

Make	Goodyear (Trackman™)
Track Materials	Rubber with steel reinforcement
Track width and base	762.0 mm and 2261 mm
Dynamic rolling radius under drive wheel	780 mm
Static distance of rear axle to ground	852.55 mm
Track support system	Oscillating front idler & three mid-rollers supported by midframe and rear wheel attached to drive axle
Treadbars Total per track Number per meter Bar length at top Bar width at top Bar width at center Bar height	 54 6.56 per meter 369 mm 40 mm 53 mm 50.8 mm
Track length	8230 mm
Track ground contact length	2261 mm

2.5 TIRE AND TRACK WIDTH SPECIFICATIONS

Track Width: 2835 mm

2.6 FUEL

- Type/grade — Grade 2-D, in conformity with the national standard
- Density at 15° C:
  - (PTO tests) — 0.847 g/cm^3
  - (Drawbar tests) — same as PTO tests

2.7 OILS AND LUBRICATION

2.7.1 Capacity and change interval

	Capacity	Oil Change	Filter(s) Change
	dm^3	hours	hours
Engine (with filter)	27.0	250 (375 with John Deere PLUS-50 oil and filter)	Same as Oil Change
Transmission, rear axle, Hydraulics and Steering	246	1500	As required or 750
Wheel Hubs	50	1500	No filter

2.7.2 Specifications (SAE, API, CCMC, ACEA, Mil.L, ISO)

Engine Oil:	Recommended	Used During Test
Type	John Deere, Torq-Gard Supreme Plus 50; SAE 15W-40 or 10W-40	John Deere; Torq-Gard Supreme, PLUS-50; SAE 15W-40
Viscosity	12.8 cSt at 100° C	
Classification	API CH-4; ACEA E-2	
Transmission oils		
Type	John Deere, HY-GARD (J20C); SAE 10W-30	Same
Viscosity	58 cSt at 40° C	
Classification	JDM J20C	
Hydraulic Fluid		
Type	Same as transmission	Same
Viscosity		
Classification		
Steering oil		
Type	Same as transmission	Same
Viscosity		
Classification		
Grease	John Deere Moly High Temperature EP Grease	Same

2.7.3 Grease

- Number of lubrication points: 17

3. COMPULSORY TESTS RESULTS

3.1 Main power take-off

- Date and location of tests: 7-Apr-00 Nebraska Tractor Test Laboratory, Lincoln, NE, USA
- Type of dynamometer bench: Eaton

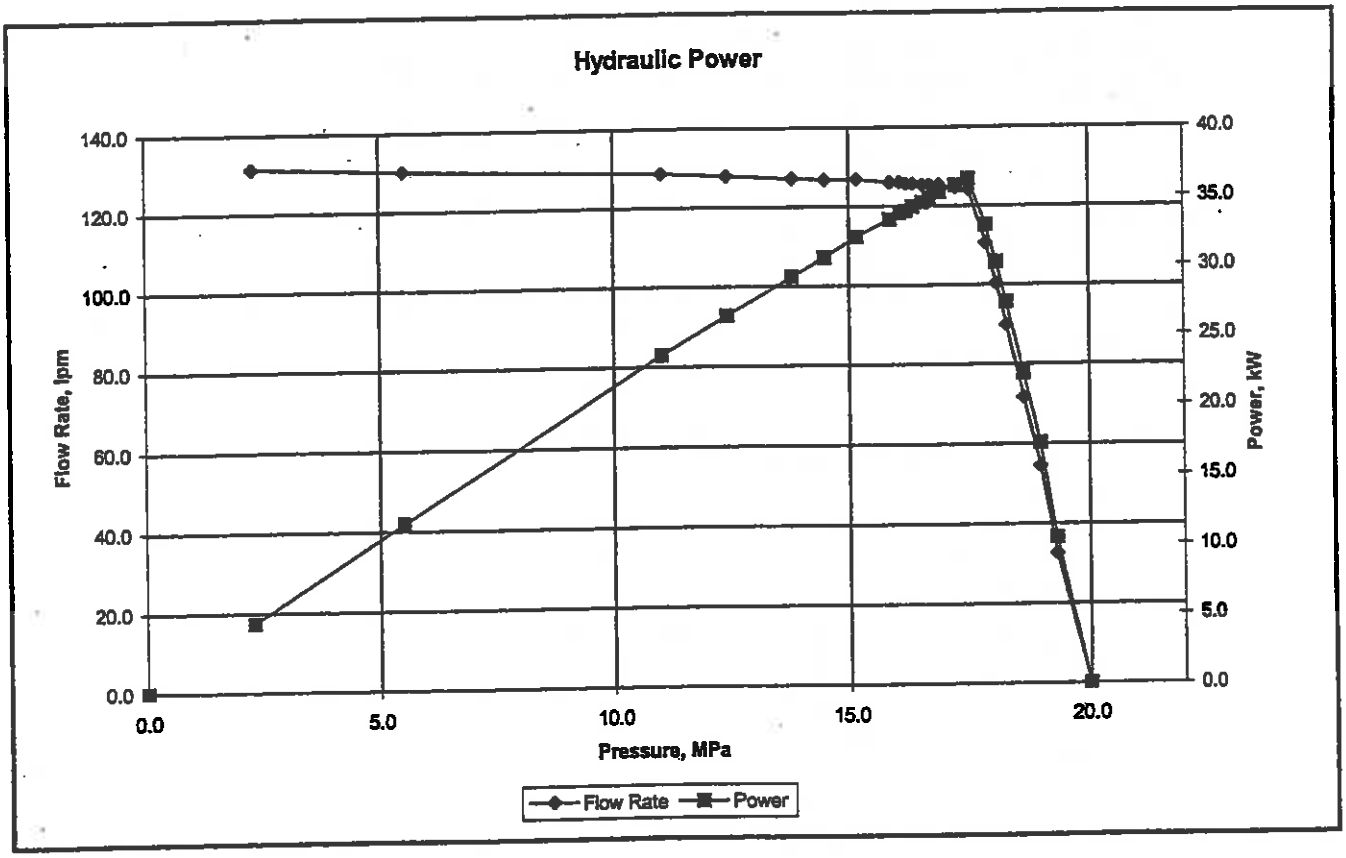
	Speed		Fuel consumption			Specific
Power	Engine	PTO	Hourly		Specific	energy
kW	rev/min		kg/h	l/h	g/kWh	kW-h/l
3.1 MAXIMUM POWER - TWO HOUR TEST						
201.80	2000	917	46.79	55.25	232	3.65
3.1.2 POWER AT RATED ENGINE SPEED						
176.54	2200	1009	43.78	51.70	248	3.41
3.1.3 STANDARD POWER TAKE-OFF SPEED (1000 +/- 25 rev/min)						
176.54	2200	1009	43.78	51.70	248	3.41
3.1.4 PART LOADS						
3.1.4.1 the torque corresponding to maximum power at rated engine speed						
176.54	2200	1009	43.78	51.70	248	3.41
3.1.4.2 85% of torque obtained in 3.1.4.1						
153.78	2254	1034	39.73	46.92	258	3.28
3.1.4.3 75% of torque defined in 3.1.4.2						
115.73	2264	1038	31.71	37.44	274	3.09
3.1.4.4 50% of torque defined in 3.1.4.2						
77.89	2275	1043	24.36	28.76	313	2.71
3.1.4.5 25% of torque defined in 3.1.4.2						
38.72	2285	1048	16.47	19.44	425	1.99
3.1.4.6 unloaded						
1.87	2293	1052	9.80	11.57	5248	0.16
3.1.5 PART LOADS AT STANDARD POWER TAKE-OFF SPEED (1000 +/- 25 rev/min)						
3.1.5.1 the torque corresponding to maximum power						
176.54	2200	1009	43.78	51.70	248	3.41
3.1.5.2 85% of torque obtained in 3.1.5.1						
153.78	2254	1034	39.73	46.92	258	3.28
3.1.5.3 75% of torque defined in 3.1.5.2						
115.73	2264	1038	31.71	37.44	274	3.09
3.1.5.4 50% of torque defined in 3.1.5.2						
77.89	2275	1043	24.36	28.76	313	2.71
3.1.5.5 25% of torque defined in 3.1.5.2						
38.72	2285	1048	16.47	19.44	425	1.99
3.1.5.6 unloaded						
1.87	2293	1052	9.80	11.57	5248	0.16

- No load maximum engine speed: 2293 rev/min
- Torque (equivalent crankshaft) at rated speed:
  - At rated engine speed 766 Nm
  - At 2-hour test 964 Nm
- Maximum torque (equivalent crankshaft): 1144 Nm
  (engine speed: 1400 rev/min)

Mean atmospheric conditions:		
Dry bulb	24	°C
Pressure	97.9	kPa
Relative Humidity	43	%
Maximum temperatures:		
Coolant	102	°C
Engine oil	117	°C
Fuel	62	°C
Engine air intake	36	°C

3.2.1 Hydraulic Power Test – Standard pump, 2 outlets

Date of Test:	5-May-00		
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	19.99 MPa		
	2900 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	131.4 l/min		
	34.7 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	100.3 l/min	18.06 MPa	30.2 kW
	26.5 gpm	*2620 psig*	*40.5 hp*
	Maximum hydraulic power:		
	124.2 l/min	17.51 MPa	36.2 kW
	32.8 gpm	*2540 psig*	*48.6 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	56.9 °C		
	134 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



3.2.2 POWER LIFT TEST: Category III, Specific Market, Walterscheid lower links.
Date of test: 17 March 1998. Tests results extracted from OECD test 2/1792 on the John Deere 8300T, which is mechanically equivalent.

	Hitch points	Frame
Lower hitch points above ground - down position:	199 mm	185 mm
Vertical movement - without load:	856 mm	953 mm
with load:	841 mm	917 mm
Maximum corrected force exerted through full range:	56.7 kN	55.8 kN
Corresponding pressure:	18.0 MPa	18.0 MPa
Moment about rear axle:	70.5 kNm	103.2 kNm
Maximum mast tilt angle		6.1 degrees

Lifting height relative to horizontal position of lower links.

mm		-385	-373	-296	-198	-98	1	100	201	301	402	469	532
Corrected lift forces													
At the hitch point	kN	--	56.7	59.7	64.0	67.7	71.2	74.3	77.1	80.5	84.0	86.3	--
At the frame	kN	55.8	57.7	--	60.3	62.6	64.1	65.2	65.8	66.1	--	65.5	64.6
Corresponding pressure	18.0 Mpa												

OECD Drawbar Data (SI)

Date of tests: 12-Apr-00 **Fuel density:** 0.847 kg/l
Type of track: Concrete **Test number:** 1778

3.3.1 Maximum power in tested gears (unballasted, Crwl) **Tire pressure:** trk kPa, rear trk kPa, front **Drawbar Height:** 470 mm

Gear	Gear Designation	Power	Drawbar pull	Speed	Engine speed	Slip	Fuel		Temperature			Atmospheric conditions		
							SFC	SFE	Fuel	Coolant	Oil	Temperature	Relative humidity	Pressure
		kW	kN	km/h	rev/min	%	kg/kW.h	kW.h/l	°C	°C	°C	°C	%	kPa
2	2	69.61	119.98	2.09	2258	15	0.390	2.17	57	82	103	12	72	98.0
3	3	87.48	121.14	2.60	2200	14	0.356	2.38	58	83	103	9	80	98.0
4	4	99.39	104.18	3.43	2135	9	0.321	2.64	59	84	105	10	40	99.2
5	5	119.23	102.86	4.17	2126	8	0.304	2.78	61	85	107	11	30	99.2
6	6	134.34	102.22	4.73	2126	8	0.296	2.86	63	88	109	11	37	99.2
7	7	154.25	102.90	5.40	2147	8	0.294	2.88	63	91	111	11	37	99.1
8	8	165.38	102.48	5.81	2046	8	0.284	2.98	62	94	113	12	28	99.1
9	9	171.29	94.15	6.55	2001	6	0.275	3.08	62	97	118	12	25	99.1
10	10	173.45	82.96	7.53	2000	4	0.271	3.13	62	94	114	13	36	99.0
11	11	172.98	72.19	8.63	1999	3	0.271	3.13	62	95	115	14	39	98.9
12	12	172.39	63.33	9.80	1999	2	0.272	3.12	62	93	114	14	31	98.8
13	13	170.91	48.84	12.60	2004	1	0.272	3.11	61	97	113	14	31	98.8
3.3.2 Fuel consumption														
3.3.2.1			In selected gear at maximum power at rated engine speed.											
10	10	153.50	65.49	8.44	2201	2	0.286	2.96	62	92	112	13	33	99.0
3.3.2.1.1			75% of pull at maximum power at rated engine speed											
10	10	119.05	49.05	8.74	2260	1	0.307	2.76	61	91	110	16	25	98.7
3.3.2.1.2			50% of pull at maximum power at rated engine speed											
10	10	80.25	32.74	8.82	2271	1	0.353	2.40	59	86	106	17	21	98.6
3.3.2.1.3			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.1.1											
11	11	119.18	49.01	8.75	2000	1	0.286	2.96	60	89	110	16	25	98.7
3.3.2.1.4			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.1.2											
11	11	80.37	32.69	8.85	2012	1	0.323	2.62	58	86	106	17	21	98.6
3.3.2.1.5			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.1.1											
12	12	119.07	48.93	8.76	1774	1	0.272	3.12	58	88	108	16	22	98.7
3.3.2.1.6			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.1.2											
12	12	80.25	32.71	8.83	1780	1	0.303	2.79	56	86	105	17	21	98.6
3.3.2.2			In selected gear nearest to 7.5 km/h at rated engine speed.											
9	9	152.96	74.34	7.41	2199	3	0.288	2.95	62	91	114	13	36	99.0
3.3.2.2.1			75% of pull at maximum power at rated engine speed											
9	9	119.91	55.93	7.72	2259	1	0.306	2.77	60	87	108	15	28	98.8
3.3.2.2.2			50% of pull at maximum power at rated engine speed											
9	9	80.85	37.26	7.81	2270	1	0.351	2.41	59	83	105	16	26	98.7
3.3.2.2.3			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.2.1											
10	10	119.45	55.98	7.68	1993	1	0.281	3.01	60	89	109	15	28	98.8
3.3.2.2.4			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.2.2											
10	10	80.89	37.32	7.80	2010	1	0.319	2.66	57	83	103	17	23	98.6
3.3.2.2.5			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.2.1											
11	11	119.93	55.79	7.74	1773	1	0.269	3.15	58	89	108	15	28	98.7
3.3.2.2.6			Higher gear at reduced engine speed, same pull and travel speed as 3.3.2.2.2											
11	11	80.91	37.24	7.82	1779	1	0.298	2.84	56	85	103	17	21	98.6

4.1 Drawbar Power: Ballasted - 2200 rev/min

OECD Drawbar Data (SI)

Date of tests: 17,21-Apr-00					**Fuel density:**	0.847 kg/l								
Type of track: Concrete					**Test number:**	1778								
Maximum power in tested gears (ballasted, Crwl)					**Tire pressure:**	trk kPa, rear		trk kPa, front			**Drawbar Height:**	470 mm		
Gear	**Gear Designation**	**Power**	**Drawbar pull**	**Speed**	**Engine speed**	**Slip**	**Fuel**		**Temperature**			**Atmospheric conditions**		
							SFC	**SFE**	**Fuel**	**Coolant**	**Oil**	**Temperature**	**Relative humidity**	**Pressure**
		kW	kN	km/h	rev/min	%	kg/kW.h	kW.h/l	°C	°C	°C	°C	%	kPa
2	2	77.54	133.83	2.09	2253	15	0.379	2.23	58	82	103	10	69	98.5
3	3	96.06	121.70	2.84	2200	7	0.322	2.63	59	83	104	5	84	98.4
4	4	98.47	94.34	3.76	2201	3	0.313	2.71	59	83	104	6	85	98.4
5	5	118.22	93.48	4.55	2200	3	0.295	2.87	59	84	106	7	85	98.4
6	6	133.25	93.45	5.13	2201	3	0.288	2.94	60	84	107	7	79	98.4
7	7	154.19	95.77	5.80	2199	3	0.282	3.00	61	87	109	8	73	98.4
8	8	154.57	84.34	6.60	2202	3	0.283	2.99	62	92	114	11	64	98.3
9	9	154.07	74.03	7.49	2201	2	0.284	2.98	62	90	111	11	70	98.3
10	10	153.46	65.04	8.49	2201	2	0.283	2.99	61	89	111	12	71	98.2
11	11	150.73	56.23	9.65	2201	1	0.288	2.94	61	91	110	12	66	98.2
12	12	149.42	49.24	10.93	2200	1	0.291	2.91	62	91	113	13	57	98.1
13	13	144.79	37.45	13.92	2201	1	0.300	2.82	61	92	114	14	63	98.0

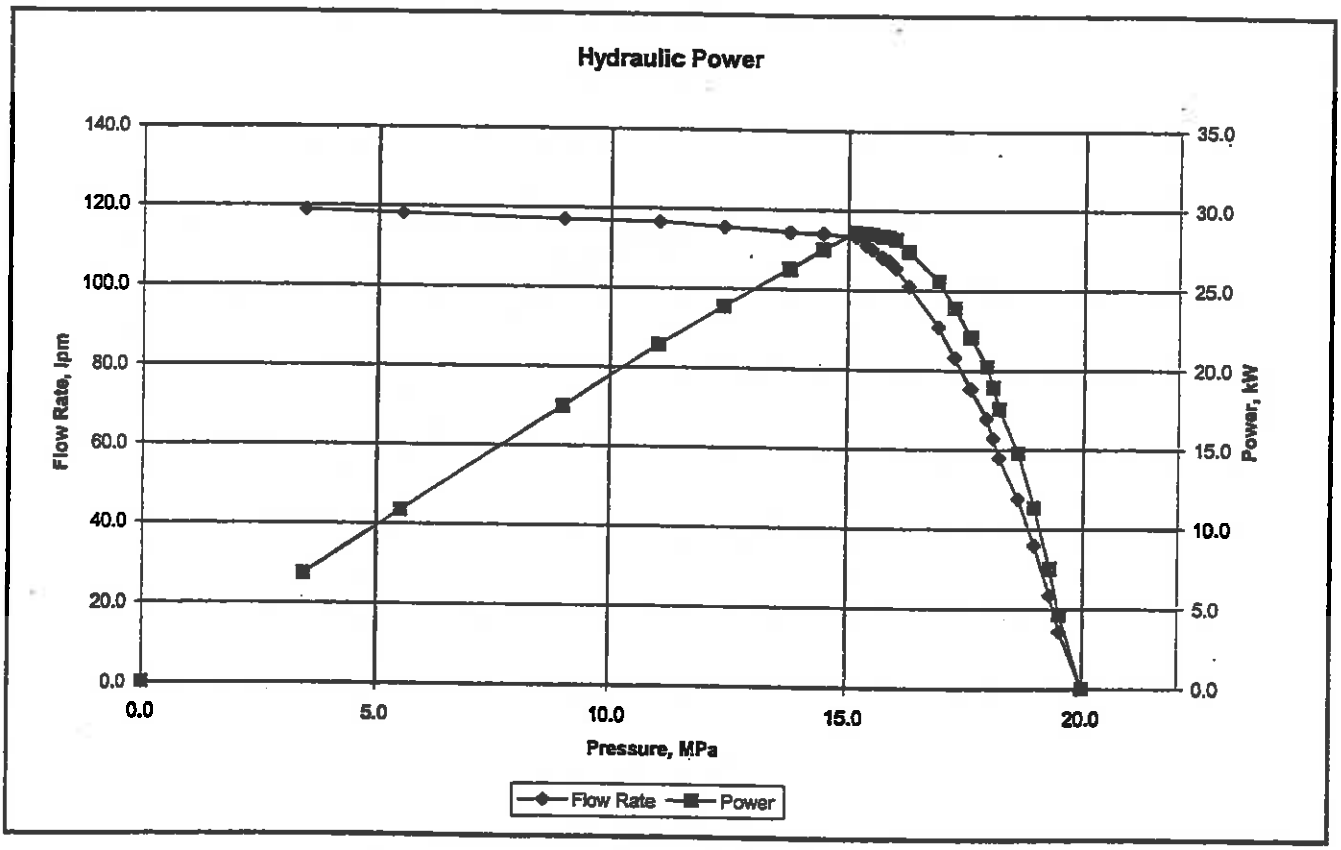
4.2 Drawbar Power: Ballasted - 2000 rev/min

OECD Drawbar Data (SI)

Date of tests: 17,21-Apr-00							**Fuel density:**	**0.847 kg/l**						
Type of track: Concrete							**Test number:**	**1778**						
Maximum power in tested gears (ballasted, Crwl)							**Tire pressure:**	**trk kPa, rear**	**trk kPa, front**			**Drawbar Height:**	**470 mm**	
Gear	**Gear Designation**	**Power**	**Drawbar pull**	**Speed**	**Engine speed**	**Slip**	**Fuel**		**Temperature**			**Atmospheric conditions**		
							SFC	**SFE**	**Fuel**	**Coolant**	**Oil**	**Temperature**	**Relative humidity**	**Pressure**
		kW	**kN**	**km/h**	**rev/min**	**%**	**kg/kW.h**	**kW.h/l**	**°C**	**°C**	**°C**	**°C**	**%**	**kPa**
2	2	78.99	135.85	2.09	2253	14	0.376	2.25	58	81	102	7	72	98.5
3	3	99.19	133.85	2.67	2149	10	0.322	2.63	58	83	104	5	84	98.4
4	4	109.94	120.27	3.29	2002	7	0.294	2.88	59	84	104	5	84	98.4
5	5	130.50	117.10	4.01	2000	6	0.278	3.04	59	85	107	7	85	98.4
6	6	147.12	117.43	4.51	2001	6	0.276	3.07	60	86	108	7	85	98.4
7	7	167.90	119.56	5.06	2000	7	0.278	3.05	63	93	114	8	73	98.3
8	8	172.95	106.58	5.84	1998	5	0.269	3.15	63	95	116	9	69	98.3
9	9	175.34	94.19	6.70	2000	4	0.264	3.20	61	96	116	11	76	98.3
10	10	175.65	82.75	7.64	2002	3	0.265	3.20	61	92	115	11	70	98.2
11	11	175.09	72.30	8.72	2003	2	0.266	3.18	62	98	117	13	62	98.1
12	12	173.21	63.16	9.87	2002	1	0.267	3.17	62	93	114	13	57	98.1
13	13	169.78	48.37	12.64	2002	1	0.274	3.10	63	98	117	14	58	98.0

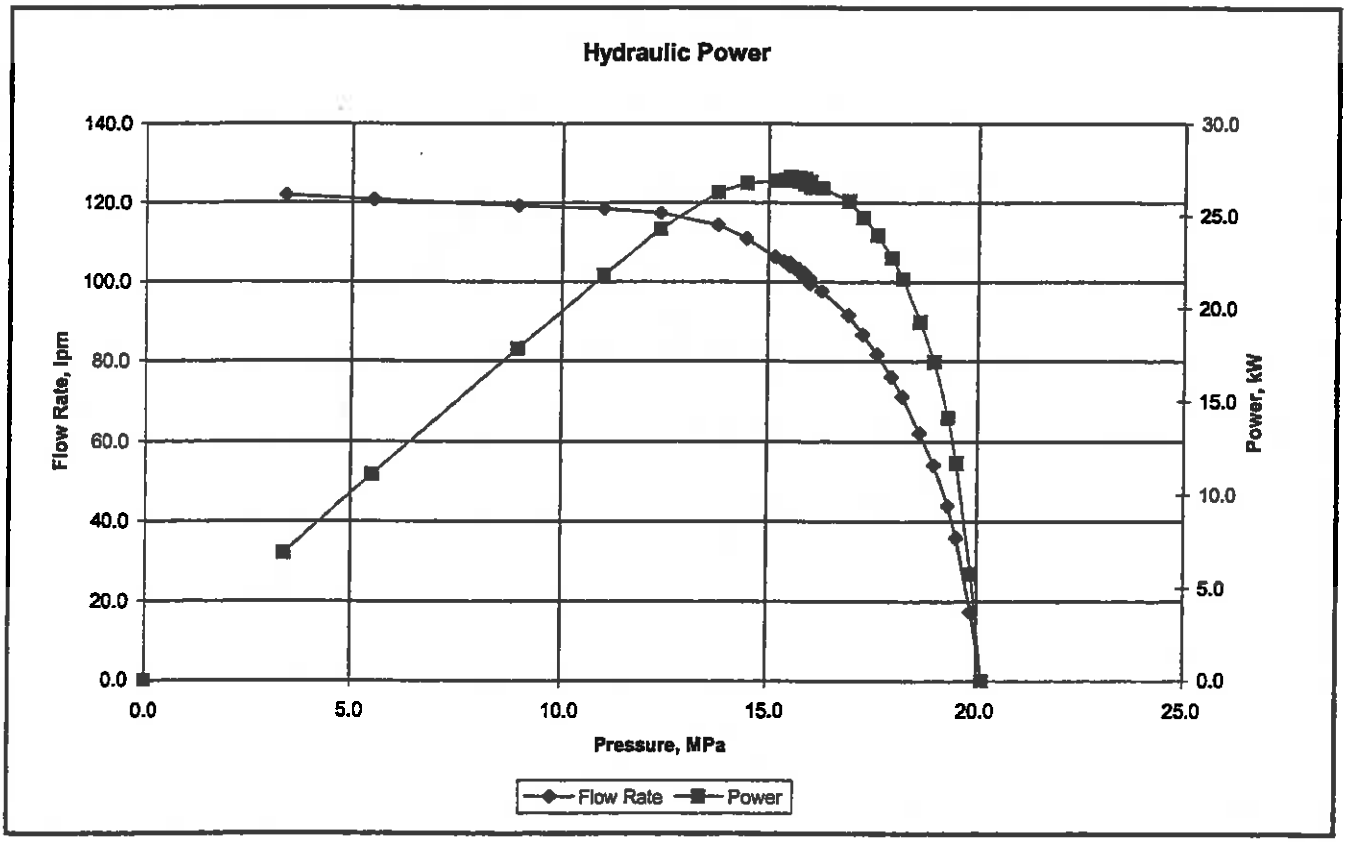
4.3 Hydraulic Power; Standard pump - one outlet

Date of Test:	5-May-00		
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	19.99 MPa		
	2900 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	118.9 l/min		
	31.4 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	67.8 l/min	17.93 MPa	20.2 kW
	17.9 gpm	*2600 psig*	*27.2 hp*
	Maximum hydraulic power:		
	113.2 l/min	15.17 MPa	28.6 kW
	29.9 gpm	*2200 psig*	*38.4 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	68.7 °C		
	156 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



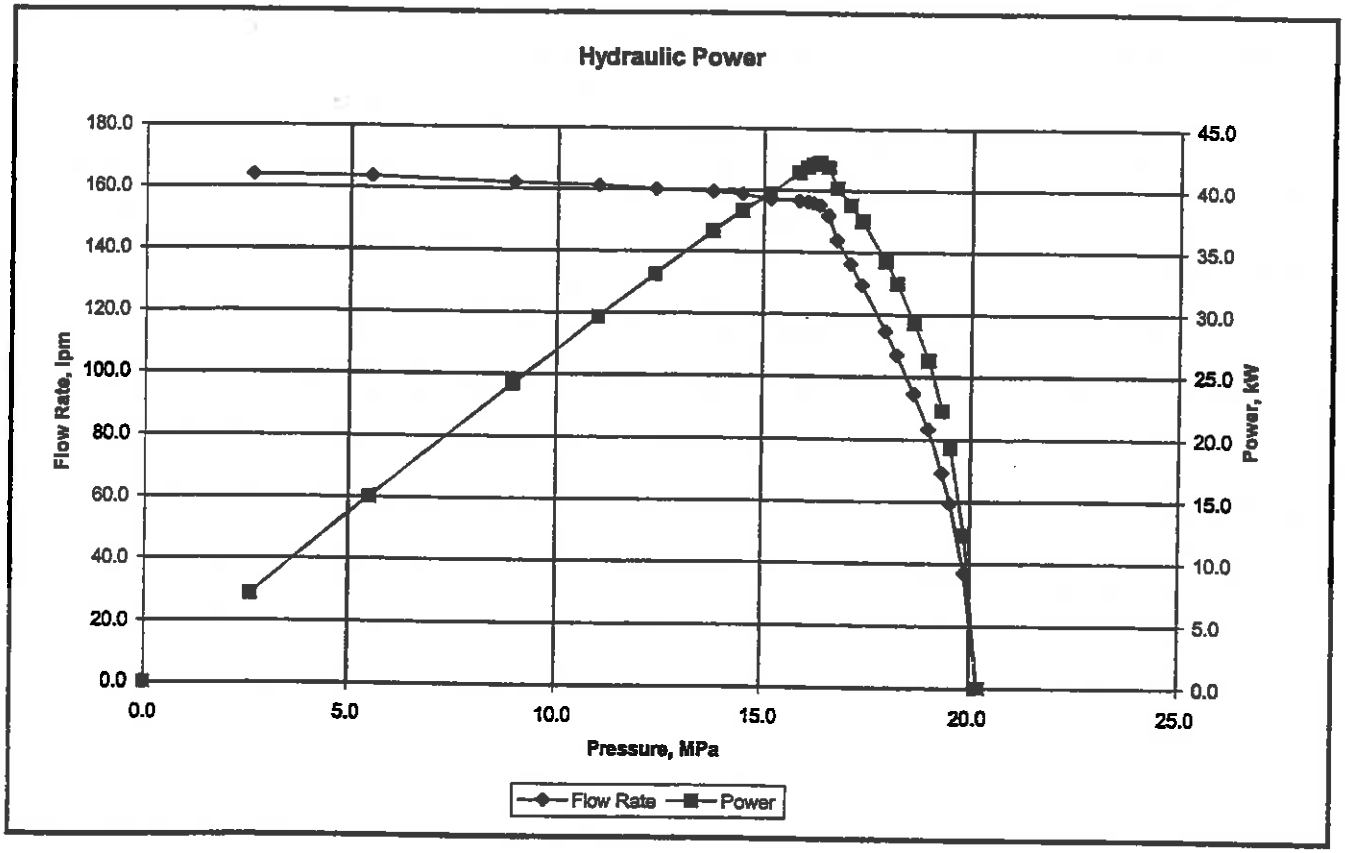
4.4 Hydraulic Power: High flow pump - one outlet

Date of Test:	14-Apr-00	John Deere 8410T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.13 MPa		
	2920 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	121.9 l/min		
	32.2 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	71.2 l/min	18.20 MPa	21.6 kW
	18.8 gpm	*2640 psig*	*29.0 hp*
	Maximum hydraulic power:		
	104.9 l/min	15.51 MPa	27.1 kW
	27.7 gpm	*2250 psig*	*36.4 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	68.0 °C		
	154 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



4.5 Hydraulic Power: High flow pump - two outlets

Date of Test:	14-Apr-00	John Deere 8410T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.20 MPa		
	2930 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	163.9 l/min		
	43.3 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	107.1 l/min	18.20 MPa	32.5 kW
	28.3 gpm	*2640 psig*	*43.6 hp*
	Maximum hydraulic power:		
	155.2 l/min	16.34 MPa	42.3 kW
	41.0 gpm	*2370 psig*	*56.7 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	64.5 °C		
	148 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



4.6 POWER LIFT TEST Category III, N.A. Quick attach linkage.
Date of test: 18 March 1998. Tests results extracted from OECD test 2/1792 on the John Deere 8300T, which is mechanically equivalent.

	Hitch points	Frame
Lower hitch points above ground - down position:	203 mm	220 mm
Vertical movement - without load:	790 mm	820 mm
with load:	776 mm	801 mm
Maximum corrected force exerted through full range:	61.9 kN	70.0 kN
Corresponding pressure:	17.8 MPa	17.8 MPa
Moment about rear axle:	76.2 kNm	129.0 kNm
Maximum mast tilt angle		4.0 degrees

Lifting height relative to horizontal position of lower links.

mm	-369	-352	-299	-201	-98	1	99	201	300	382	407	449
Corrected lift forces												
At the Hitch point kN	61.9	--	64.6	68.9	72.7	76.1	78.8	81.6	84.5	86.9	87.5	--
at the frame kN	--	71.0	70.0	70.9	71.7	72.4	72.7	72.7	--	72.1	70.8	70.1
Corresponding pressure 17.8 Mpa												

4.7.1 Results presentation according to OECD standard code (Annex 1)

Gear Number	Drawbar Pull	Measured Traveling Speed	Engine Speed	Number of Driving Wheels	Sound Level		
	kN	km/h	rev/min		dB(A)		
4.7.1.1 Unloaded test in the gear giving the forward speed nearest to 7.5 km/h							
9	0	7.94	2290	Track	75.7		
4.7.1.2 Unloaded test in the gear giving the maximum forward speed							
16	0	29.8	2280	Track	79.1		
4.7.1.3 Tests with a drawbar pull for which the tractor gives the maximum sound level [combination of gear giving the nearest nominal forward speed to 7.5 km/h and also in any gear with a sound level increase of at least 1 dB(A)]							
9	65.0	7.66	2253	Track	76.9		

4.7.2 Results presentation (without load) according to OECD standard code (Annex 2)

Gear Number	Drawbar Pull	Measured Traveling Speed	Engine Speed	Number of Driving Wheels	Sound Level		
	kN	km/h	rev/min		dB(A)		
4.7.2.1 Unloaded test in the gear giving the forward speed nearest to 7.5 km/h							
9	0	7.94	2290	Track	75.7		

4.8 Measurement of External Noise Level

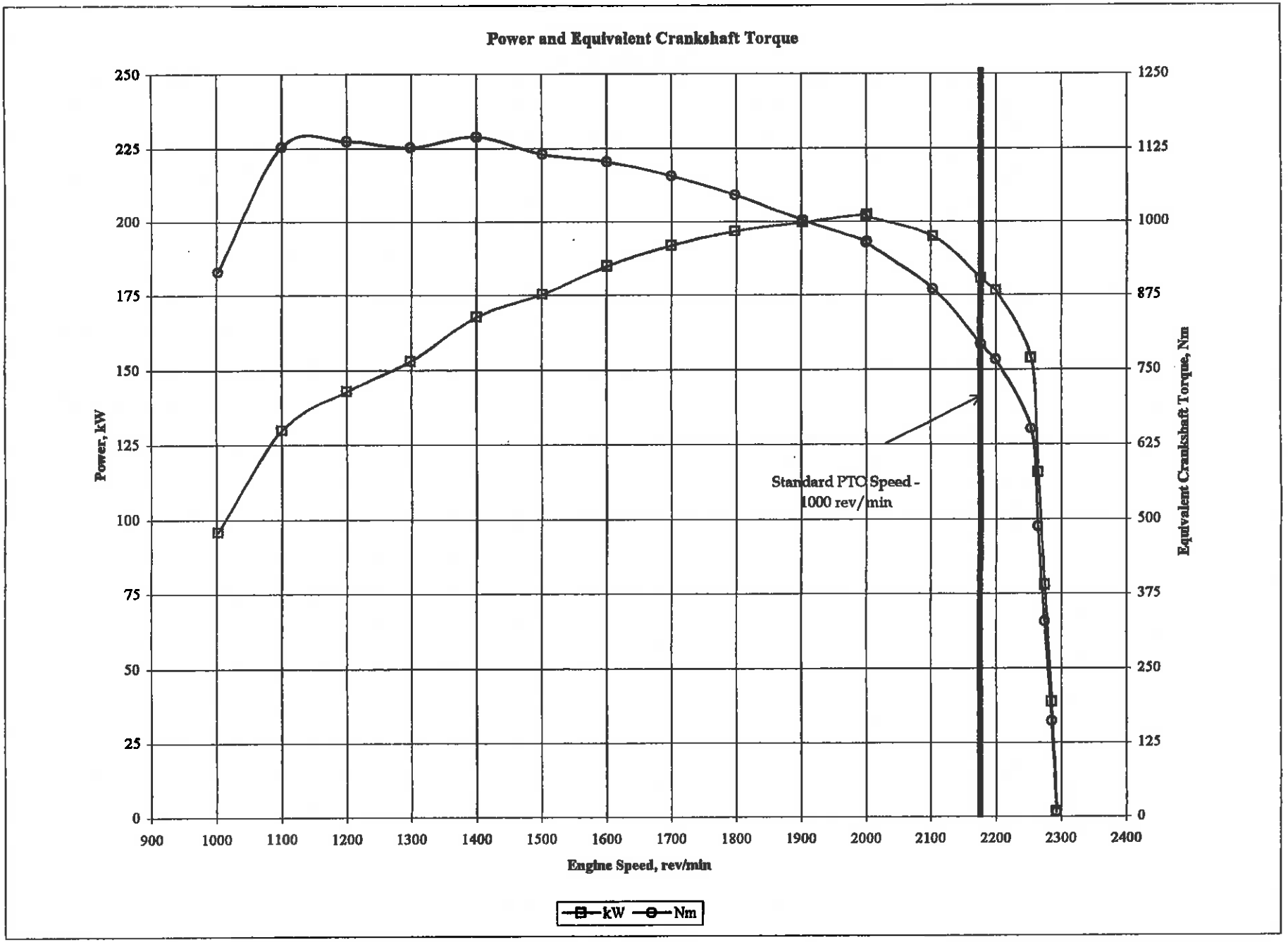
Date of Test	April 13, 2000
Location of Test	Nebraska Tractor Test Laboratory
Sound Level Meter	Bruel and Kjaer 2236
Type of Track	Concrete Oval
Gear Number	16
Speed Prior to Acceleration	22.9 km / h
Noise Level	89.7 dB(A)

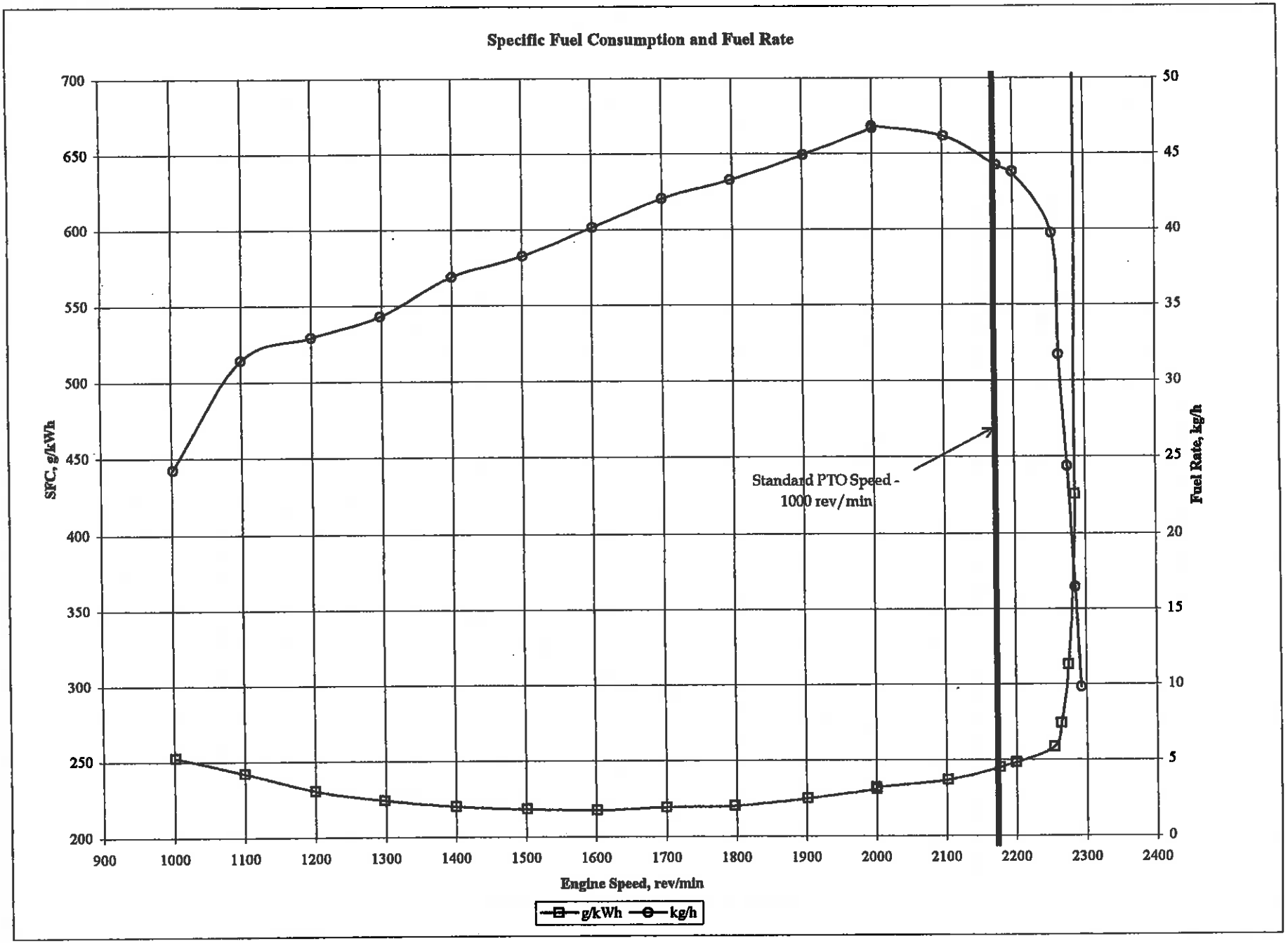
5. REPAIRS

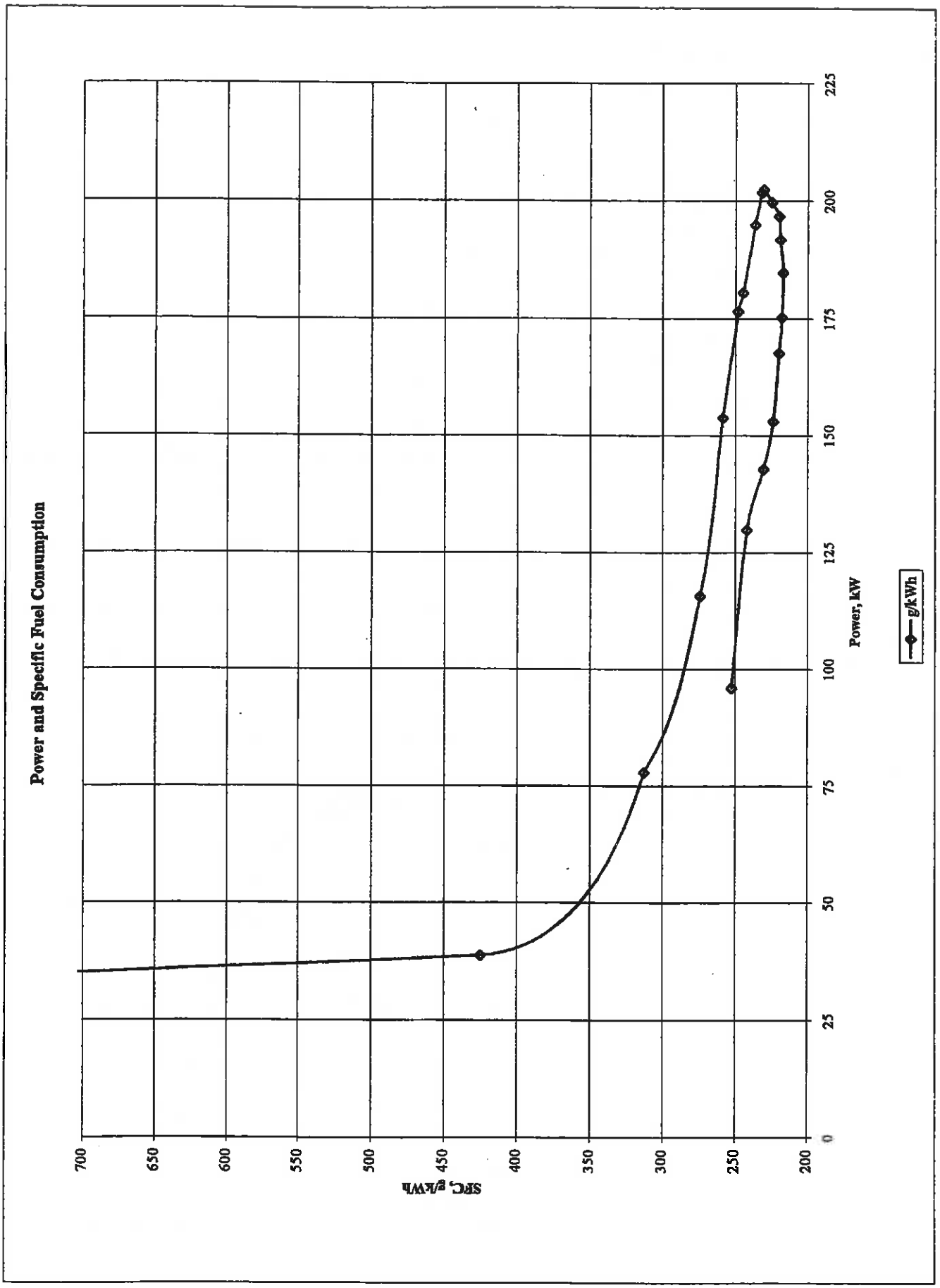
None

6. REMARKS

The 8410T engine has an electronic control system which provides a vehicle protection system to avoid overloading the drive train. This system provides four different engine power levels. The engine produces up to 165 PTO hp when the transmission is in forward gears 1 through 4 and the PTO is not engaged. The engine produces up to 185 PTO hp when the transmission is in the 5th forward gear and the PTO is not engaged. The engine produces up to 205 PTO hp when the transmission is in the 6th forward gear and the PTO is not engaged. The engine produces up to 235 PTO hp in all other applications.

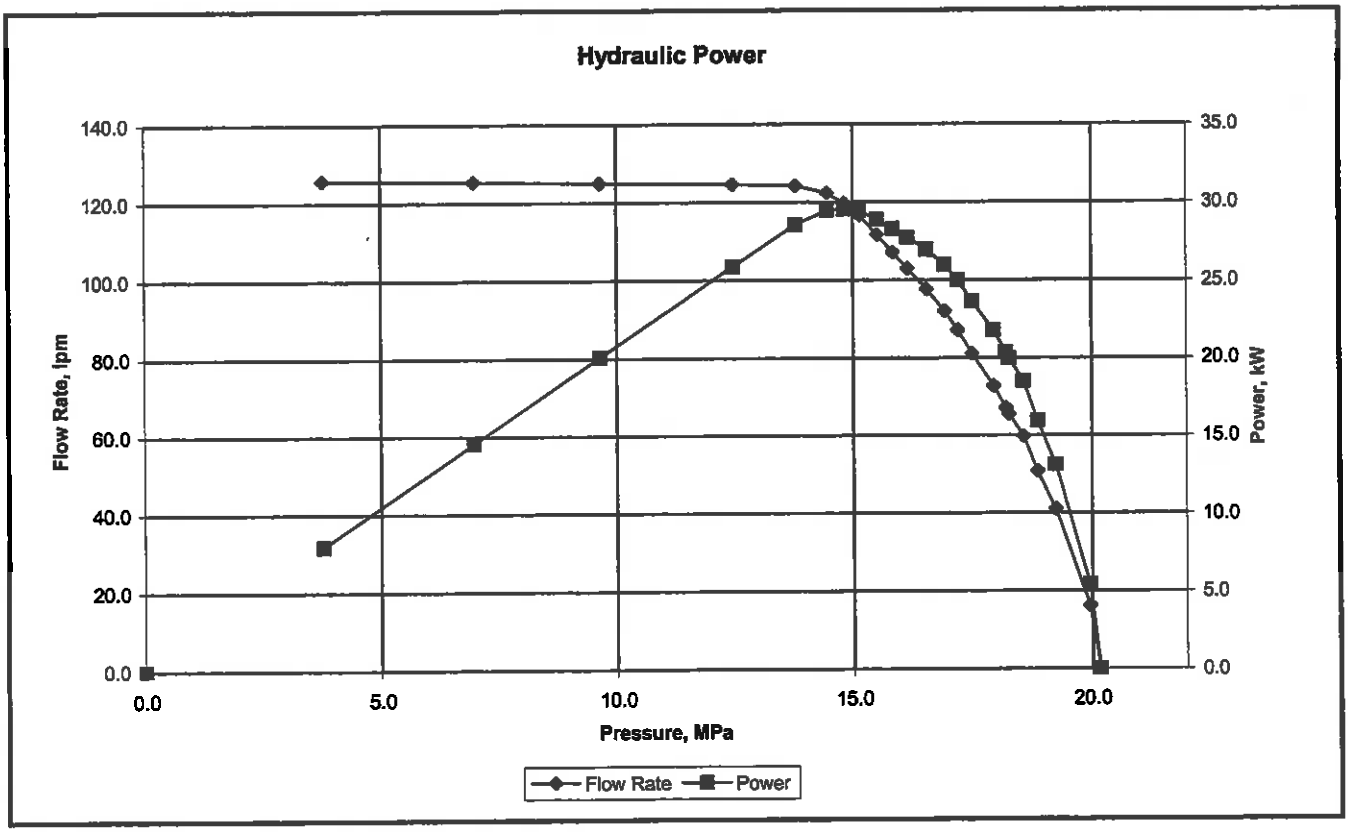

Power and Equivalent Crankshaft Torque
Power, kW
Equivalent Crankshaft Torque, Nm
Engine Speed, rev/min
Standard PTO Speed - 1000 rev/min
kW
Nm
250
225
200
175
150
125
100
75
50
25
0
1250
1125
1000
875
750
625
500
375
250
125
0
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400


Specific Fuel Consumption and Fuel Rate
SFC, g/kWh
Fuel Rate, kg/h
Engine Speed, rev/min
Standard PTO Speed - 1000 rev/min
g/kWh
kg/h
700
650
600
550
500
450
400
350
300
250
200
50
45
40
35
30
25
20
15
10
5
0
900
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400


Power and Specific Fuel Consumption
SFC, g/kWh
700
650
600
550
500
450
400
350
300
250
200
0
25
50
75
100
125
150
175
200
225
Power, kW
g/kWh

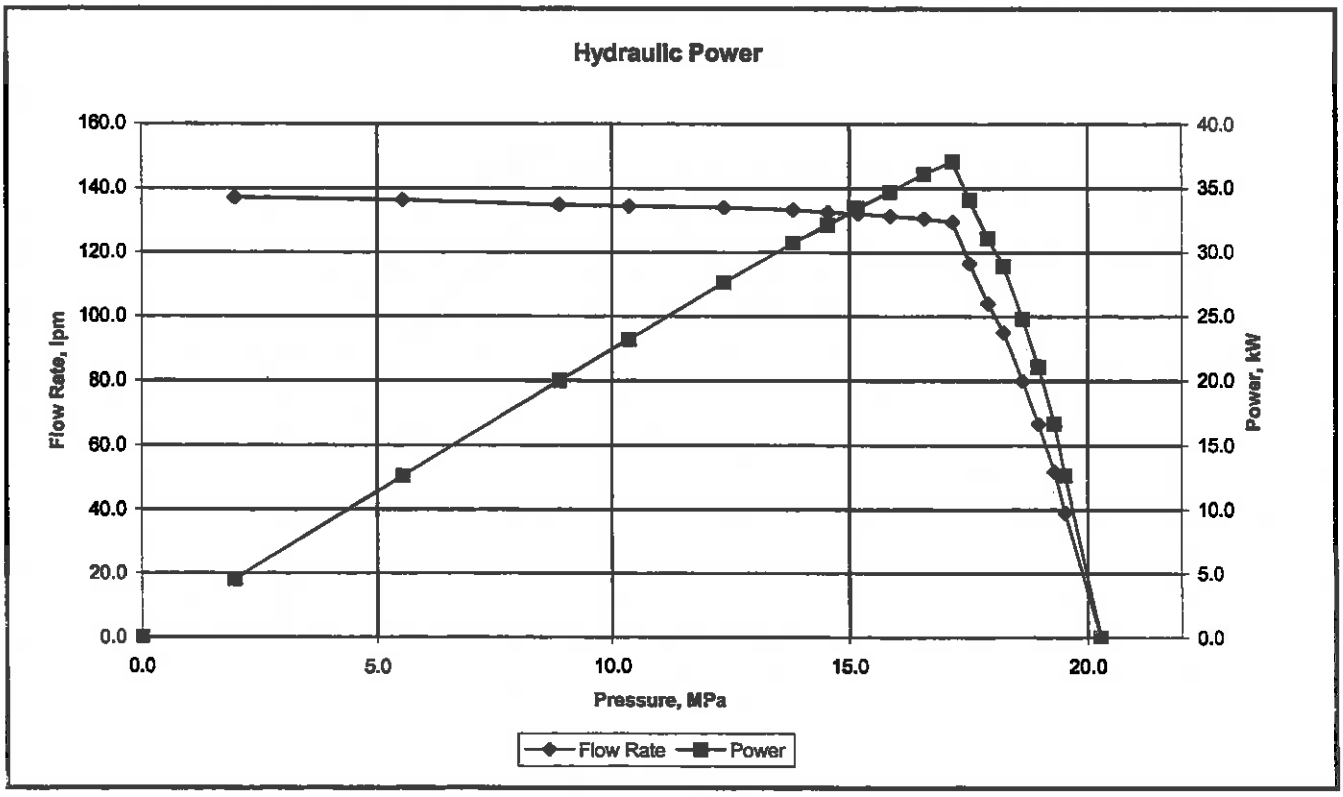
8.1 Hydraulic Power (Standard Pump - one outlet - test data from 8320T)

Date of Test:	31-May-02	John Deere 8320T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.17 MPa		
	2926 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	125.7 l/min		
	33.2 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	67.0 l/min	18.21 MPa	20.3 kW
	17.7 gpm	*2641 psig*	*27.3 hp*
	Maximum hydraulic power:		
	119.6 l/min	14.82 MPa	29.5 kW
	31.6 gpm	*2149 psig*	*39.6 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	67 °C		
	153 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



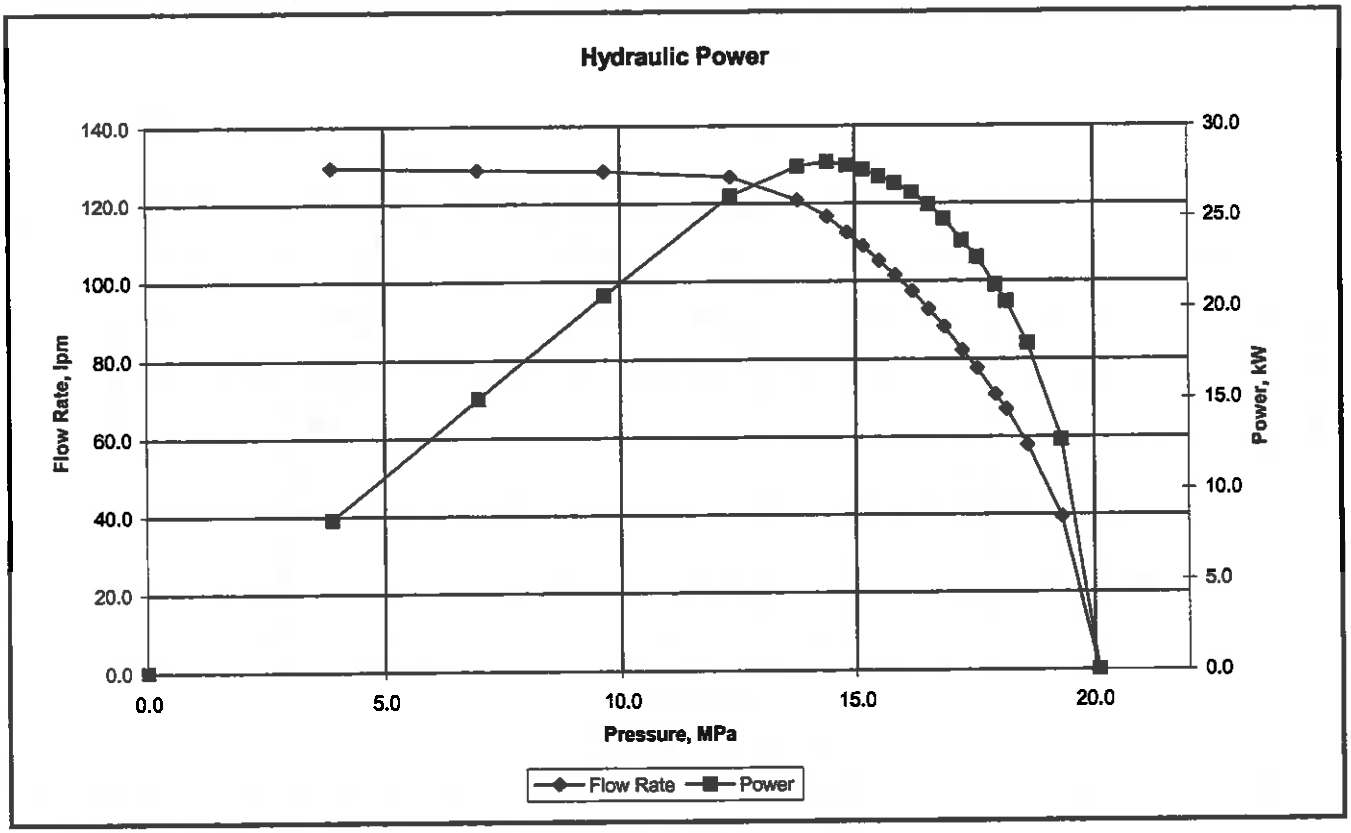
8.2 Hydraulic Power (Standard Pump - two outlet - test data from 8320T)

Date of Test:	31-May-02	John Deere 8320 T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.28 MPa		
	2941 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	137.0 l/min		
	36.2 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	95.0 l/min	18.25 MPa	28.9 kW
	25.1 gpm	*2647 psig*	*38.8 hp*
	Maximum hydraulic power:		
	129.5 l/min	17.17 MPa	37.1 kW
	34.2 gpm	*2491 psig*	*49.7 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	60 °C		
	140 ° F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



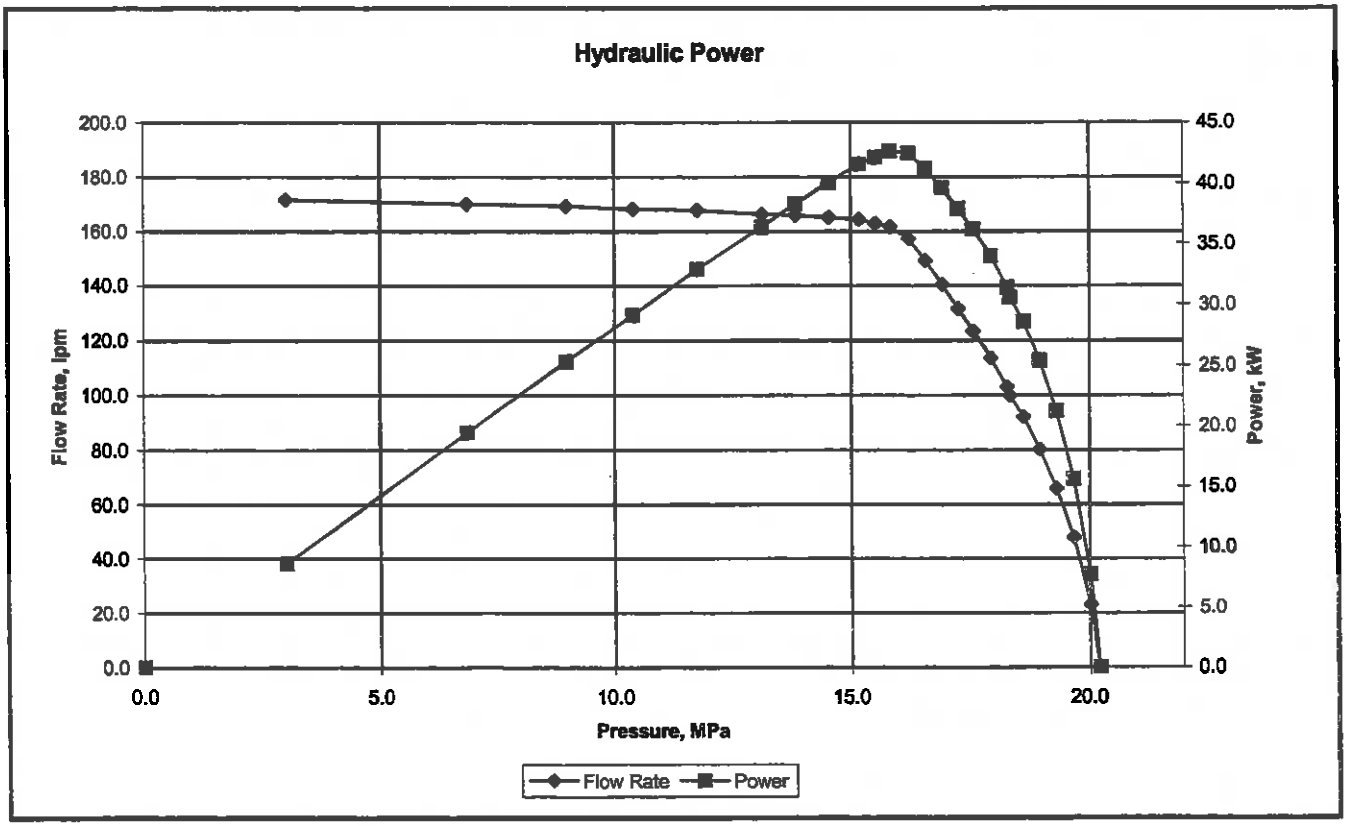
8.3 Hydraulic Power (High Flow Pump - one outlet - test data from 8520T)

Date of Test: 30-May-02		John Deere 8520T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.10 MPa		
	2915 psig		
II.	Pump delivery rate at minimum pressure at rated engine speed:		
	129.5 l/min		
	34.2 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	70.8 l/min	17.96 MPa	21.2 kW
	18.7 gpm	*2605 psig*	*28.4 hp*
	Maximum hydraulic power:		
	116.6 l/min	14.41 MPa	28.0 kW
	30.8 gpm	*2090 psig*	*37.6 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	75 °C		
	168 °F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



8.4 Hydraulic Power (High Flow Pump - two outlet - test data from 8520T)

Date of Test:	30-May-02	John Deere 8520T	
Location of Test-City-State:		Tractor Test Lab, Lincoln, NE, USA	
Tapping point used for test:		Remote hydraulic outlets	
I.	Sustained pressure with pump stalled:		
	20.22 MPa		
	2932 psig		
II.	Pump delivery rate at minimum pressure at full throtle:		
	171.5 l/min		
	45.3 gpm		
III.	Flow rate, pressure, power:		
	90% of relief valve setting		
	103.0 l/min	18.28 MPa	31.4 kW
	27.2 gpm	*2652 psig*	*42.1 hp*
	Maximum hydraulic power:		
	161.6 l/min	15.83 MPa	42.7 kW
	42.7 gpm	*2296 psig*	*57.2 hp*
IV.	Hydraulic fluid temperature at flow meter:		
	66 °C		
	152 ° F		
	This hydraulic system does not use an accumulator. Opening and closing pressures of the unloading valve could not be measured.		



8.5 Linkage Dimensions

8.5.1 Specific Market version - Linkage Dimensions - John Deere 8420T

- Category 3 in conformity with ISO 730-1:1994 and ISO 730-2:1979
- Category Adapter Convertible to Category - None

Category adapter: Walterscheid lower links		Dimension or range (mm)	Setting used on test (mm)
Lift category		III	III
Length of lift arms	(A)	520	same
Length of lower links	(B)	1082	same
Distance of lift arm pivot point from rear-wheel axis:			
horizontally	(a)	140	same
vertically	(b)	565	same
Horizontal distance between the two lower link points	(U)	594	same
Horizontal distance between the two lift arm ends points	(V)	738	same
Length of upper link	(S)	694 to 865	750
Distance of upper link pivot point from rear-wheel axis:			
horizontally	(c)	395	same
vertically	(d)	260	same
Distance of lower link pivot point from rear-wheel axis:			
horizontally	(e)	275	same
vertically	(f)	280	same
Distance of lower link pivot points to lift rod pivot points on lower links	(D)	733	same
Length of lift rods	(L)	1009 to 1187	1150
Height of lower hitch points relative to rear wheel axis:			
In low position	(h)	428 to 681	621
In high position	(H)	99 to 319	132
Height above ground of lower hitch points when locked in transport position		951 to 1171	983

Rear track static radius index of 851 mm

'T

d ISO 730-2:1979

nension or range (mm)	Setting used on test (mm)
III	III
520	same
1082	same
140	same
565	same
594	same
738	same
694 to 865	750
395	same
260	same
275	same
280	same
733	same
1009 to 1187	1150
428 to 681	621
99 to 319	132
951 to 1171	983

locked in transport p...

Rear track static radius index of 851 mm

3.2.2 POWER LIFT TEST Category III, Specific Market, Walterscheid lower links.
Date of test: 28 February 2002.

	Hitch points	Frame
Lower hitch points above ground - down position:	231 mm	213 mm
Vertical movement - without load:	817 mm	977 mm
with load:	803 mm	947 mm
Maximum corrected force exerted through full range:	67.8 kN	66.0 kN
Corresponding pressure:	17.8 MPa	17.8 MPa
Moment about rear axle:	92.0 kNm	129.8 kNm
Maximum mast tilt angle		11.8 degrees

Lifting height relative to horizontal position of lower links.

mm		-351	-333	-302	-203	-103	-3	96	197	297	398	470	596
Corrected lift forces													
At the hitch point	kN	--	67.8	69.2	71.3	73.7	76.1	79.0	80.0	82.7	84.7	86.0	--
At the frame	kN	67.3	66.9	—	68.0	68.7	69.3	69.6	69.3	--	69.3	67.7	66.0
Corresponding pressure	17.8 Mpa												

8.7 POWER LIFT TEST Category III, N.A. Quick attach linkage.
Date of test: 28 February 2002.

	Hitch points	Frame
Lower hitch points above ground - down position:	231 mm	241 mm
Vertical movement - without load:	753 mm	843 mm
with load:	730 mm	803 mm
Maximum corrected force exerted through full range:	75.3 kN	73.5 kN
Corresponding pressure:	17.8 MPa	17.8 MPa
Moment about rear axle:	102.1 kNm	144.5 kNm
Maximum mast tilt angle		8.0 degrees

Lifting height relative to horizontal position of lower links.

mm		-333	-323	-302	-203	-104	- 4	98	197	296	397	481
Corrected lift forces												
At the Hitch point	kN	75.3	--	75.5	77.9	79.8	81.8	84.1	86.2	87.9	89.0	--
at the frame	kN	--	82.1	80.1	79.1	79.2	78.7	78.4	77.5	--	76.0	73.5
Corresponding pressure	17.8 Mpa											