OECD APPROVAL # 1358/1
1358/2
(Restricted code)
Date of approval: March 20 1992

NEBRASKA TRACTOR TESTING LABORATORY
DEPARTMENT OF AGRICULTURAL 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 FOR THE OFFICIAL TESTING OF AGRICULTURAL TRACTOR PERFORMANCE

RESTRICTED TEST-CODE II

CASE INTERNATIONAL 9250 (4 WD) Articulated
STEIGER 9250 (4 WD) Articulated



MANUFACTURED BY: J.I. Case Company
3401 First Avenue
Fargo, North Dakota, 58102 USA

NEBRASKA TEST NO. 1651

Test date: September 1991

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 - Annex II, Restricted Code.

This report has been approved by the OECD Coordinating Centre in Paris (CEMAGREF) on March 20 1992

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SPECIFICATIONS OF TRACTOR.

Manufacturers name/address	:	J.I. Case Company 3401 First Avenue North Fargo, North Dakota 58102
Location of tractor assembly	:	Fargo plant
Submitted for test by	:	The manufacturer
Selected for test by	:	The manufacturer in agreement with the test station.
Place of running in	:	J.I. Case Fargo, North Dakota
Duration of running in	:	124 hours
Location of Test	:	Nebraska Tractor Test Laboratory Lincoln, Nebraska, U.S.A.

SPECIFICATIONS OF TRACTOR

TRACTOR.

Make/Model/Type	Case IH 9250/4WD/articulated
Number of driving wheels	4
Serial number	-JCB0027278-
1st Serial number	-JCB0006352-

ENGINE.

Make	Cummins
Model	LTA-10
Type	diesel, direct injection, turbocharged and intercooled
Serial Number	3468464
Cylinders	
Number/disposition	6, in-line, vertical
Bore x stroke	125.0 mm x 136.0 mm (4.921 in x 5.354 in)
Capacity	10000 ml (611 in)
Compression Ratio	16.0 - 1
Arrangement of valves	Overhead
Cylinder liners	Wet, replaceable
Super charging	
Make/Model/Type	Holset/H2C/exhaust gas driven
Pressure	149-176 kPa (21-26 psi)
Fuel System	
Feed system	Engine driven transfer pump
Make/Type/Model of filters	Case IH/spin on/28-035
Fuel tank capacity	757 liters (200 US gallons)

Make/Model/Type Injection Pump	Cummins Type G/Model PT,AFC variable speed governor,gear pump supplies pressure for PT system
Pump Serial number	3893743
Production setting of pump Flow Rate (Rated Eng.Spd & Full Load)	44.9 - 47.2 kg/h (99.0 - 104.0 lb/h) (fuel density - 0.838 kg/l)
Make/Model/Type of injectors	Cummins PTD,top stop,PN 3049149
Injection pressure	106.9 MPa (15515 psi)
Rail Pressure	958-1055 kPa (139-153 psi)
Timing	17 degrees BTDC
Governor	
Make/Model/Type	Centrifugal flyweight, integral to fuel pump
Governed engine speed range	From 850 to 2350 rev/min
Rated engine speed	2100 rev/min
High-idle speed range	2300 +/- 50 rev/min
Air Cleaner.	
Pre-cleaner Air intake location	Integral with air cleaner
Main Cleaner Make/Model/Type	Donaldson/PN 140133 dry element
Secondary element	Donaldson/pleated paper
Maintenance indicator	restriction switch in air inlet tube,light on dash
Lubrication system.	
Type of feed pump	full pressure, positive displacement.
Type of filters	full flow
Number	1
Oil cooler	Heat exchanger with engine coolant
Cooling system.	
Type of coolant	Liquid
Type of pump	Centrifugal,belt driven
Fan specification	ECS P/N 411316
Number of fan blades	8
Fan diameter	711 mm (28.0 in)
Coolant system capacity	51 liter (54 qt)
Type of temperature control	thermostat

Starting system.	
Make/Model/Type	Delco Remy/42 MT400/electro-mechanical engagement
Power Rating	7.46 kW (10 hp)
Cold starting aid	Ether spray in intake manifold and in-block coolant heater
Safety device	Electrical lockout on gearshift and PTO controls
Electrical system.	
Voltage	12 Volt
Generator	
Make/Model/Type	Delco Remy/Series 21SI/200
Power rating	125 Ampere at 2100 engine rpm.
Batteries	
Number & connection	3-12 V batteries in parallel
Rating	90 amp-hours per battery at 20 hour rating 625 Cold crank amps per battery
Exhaust system.	
Make/Model/Type	Donaldson/P/N MAM09-M090655 expansion chamber
Location	Vertical,right front side of cab outlet directed to right side

TRANSMISSION TO WHEELS

Clutch. (travel alone)	
Make/Model/Type	FTK/wet multiple plate, oil cooled
Number of plates	16
Plate diameter	229 mm (9.0 in)
Method of operation	Hydraulic, foot pedal.
Gear Box.	
Make/Model/Type	FTK model EW16/Full Powershift
Arrangement	countershaft
Number of gears	12 forward, 3 reverse controlled by a single hand lever
Oil cooler	Heat exchanger with air
Available options	None

Rear axle and final drives.

Make/model/Type	Raba 592/outboard planetary, bar type
Differential Lock	
Type	multiple disc clutch with limited slip
Method of engagement	electrically
Method of disengagement	electrically

Front Axle and final drives.

Make/Model/Type	Raba 592/outboard planetary, bar type
Differential lock	
Type	multiple disc clutch with limited slip
Method of engagement	electrically
Method of disengagement	electrically

Total ratios and travelling speeds

Gear Number	Number of engine revolutions for one revolution of the driving wheels	Nominal travelling speed at rated engine speed of 2100 rev/min [km/h]	[mph]
Forward			
1	194.283	3.74	2.32
2	160.566	4.52	2.81
3	130.466	5.56	3.45
4	107.449	6.76	4.20
5	88.807	8.17	5.08
6	72.148	10.06	6.25
7	61.110	11.88	7.38
8	50.512	14.37	8.93
9	41.027	17.69	10.99
10	33.793	21.48	13.35
11	27.925	26.00	16.16
12	22.689	32.00	19.88
Reverse			
R1	148.577	4.89	3.04
R2	82.155	8.84	5.49
R3	46.743	15.53	9.65

Calculated with a tire dynamic radius index of 917 mm (36.1 in) (ISO 4251/1-1984)
Number of revolutions of front wheels for one revolution of rear wheels 1.000

POWER - TAKE - OFF.

Main Power-Take-Off.

Type	Independent
Method of engagement	Hydraulically actuated multi-plate clutch operated by hand lever, independent of main drive clutch.
Number of shafts	One

Power take-off proportional to engine speed 1000 rev/min.

Location	Rear of tractor, vertical center plane.
Diameter of shaft	44.4 mm (1.75 in)
Number of splines	20;conforms to ISO 500/1979.
Height above ground	861 mm (33.9 in)
Distance from median plane of tractor	0 mm
Distance behind rear axle	690 mm (27.2 in)
PTO Speed at rated engine spd	1001 rev/min
Engine speed at Std. PTO spd	2098 rev/min
Ratio of Engine rpm to PTO rpm	2.09797:1
Direction of rotation (viewed facing driving end)	Clockwise.

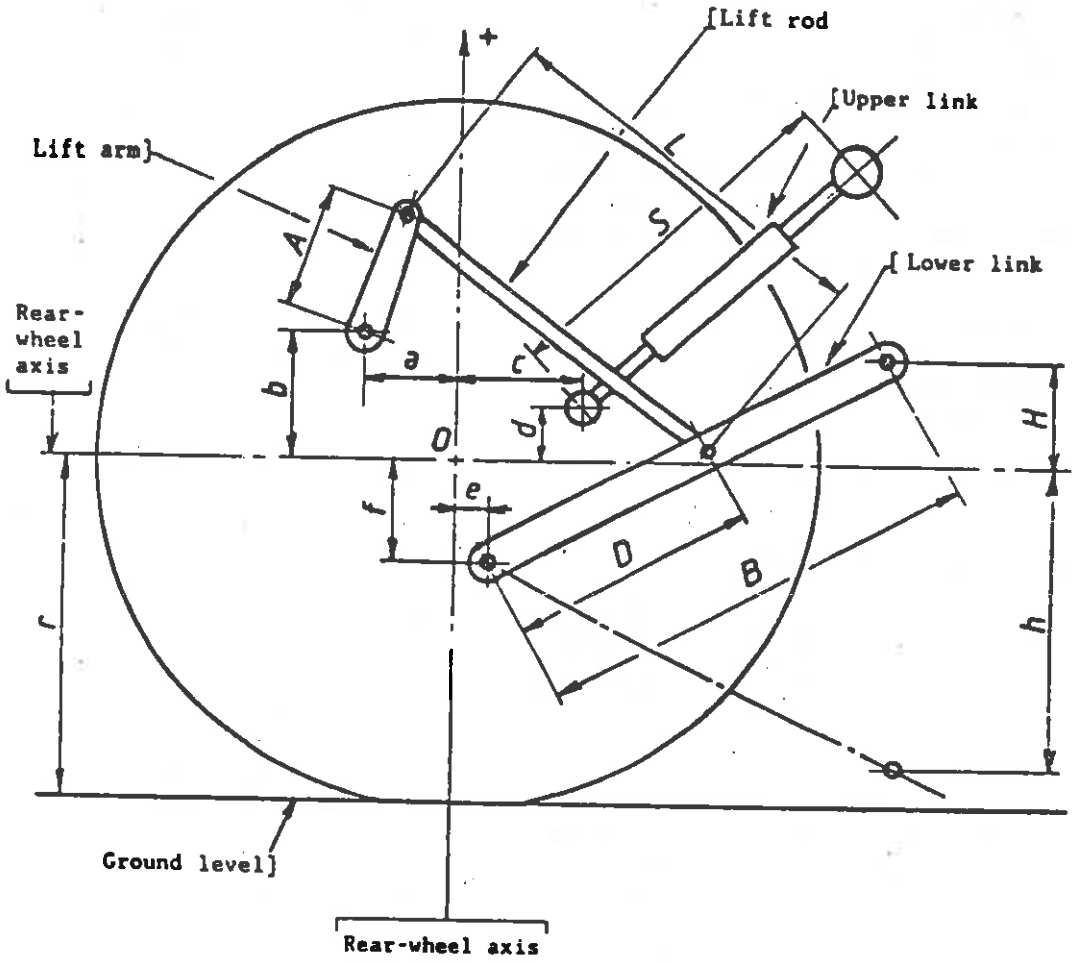
POWER LIFT.

Make/Model/Type	Cessna axial piston pump, pressure and flow compensated
Type of hydraulic system	closed center, load sensing
Number/Type of cylinders	Two external,both single acting
Type of linkage lock for transport	Hydraulic
Relief valve setting	17.237 +/-0.345 MPa (2500 +/- 50 psi)
Opening pressure of cylinder safety valve	20.684 MPa (3000 psi)
Lift pump type	axial piston, pressure and flow compensated
Power transmission to pump	direct drive
Type/Number of filters	Spin on cartridge/one
Location of oil reservoir	separate reservoir, right side,rear end of front frame
Number/Type/Location of tapping points.	4 pairs of ISO standard coup - lings at rear of tractor
Max. oil volume available for external cylinders.	22.7 l (24 qt)

THREE POINT LINKAGE.

- Category 3 in conformity with ISO 730/1-1977, except for horizontal distance from PTO to center of hitch points on the lower links while in the horizontal position - 616 mm
- Category adaptor - Quick attach

THREE POINT LINKAGE



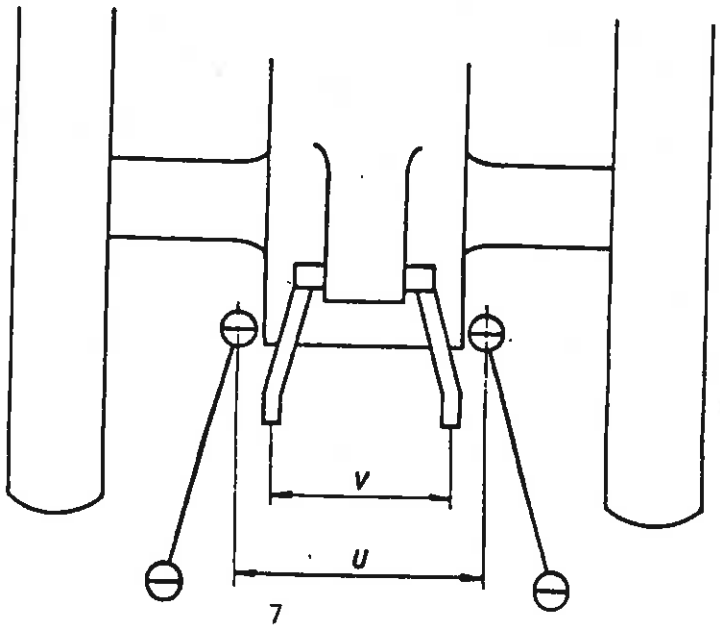


Table 1.1 - *Linkage geometry dimensions.

		Dimension or range [mm]	Dimension or range [in]	Settings used on test [mm]	Settings used on test [in]
Lift category		III			
Rear Tire - Radius Index	(r)	917	36.1		
Front Tire - Radius Index	(r′)	917	36.1		
Length of lift arms	(A)	533	21.0	same	
Length of lower links	(B)	1067	42.0	same	
Distance of lift arm pivot from: horizontal	(a)	134	5.3	same	
rear wheel axis: vertical	(b)	637	25.1	same	
Horizontal distance between the 2 lower link points	(u)	627	24.7	same	
Horizontal distance between the 2 lift arm end points	(v)	719	28.3	same	
Length of upper link	(S)	722 to 848	28.4 to 33.4	740	29.1
Distance of upper link pivot from horizontal	(c)	554 or 579	21.8 or 22.8	579	22.8
rear wheel axis: vertical	(d)	187 or 289	7.4 or 11.4	289	11.4
Distance of lower link pivot from: horizontal	(e)	259	10.2	same	
rear wheel axis: vertical	(f)	251	9.9	same	
Distance of lower link pivot points to lift rod pivot pts on lower links.	(D)	584	23.0	same	
Length of lift rods	(L)	869 to 965	34.2 to 38.0	959	37.8
Height of lower hitch points relative to rear wheel axis In low position	(h)	518 to 718	20.4 to 28.3	688	27.1
In high position	(H)	105 to 273	4.1 to 10.7	136	5.4
Height above ground of lower hitch points when locked in transport position.		1022 to 1190	40.2 to 46.8	1053	41.5

*Assuming (r) with a dynamic tire index of 917 mm (36.1 in)
ISO 4251/1-1984

SWINGING DRAWBAR.

Type	Swings for hook-up only
Height above ground:	Maximum 617 mm (24.3 in) Minimum 460 mm (18.1 in)
Adjustments	inverting drawbar
Distance of hitch point from rear wheel axis, horizontal	1230 mm (48.4 in)
Distance of hitch point from PTO shaft end	
Vertically	253 mm (10.0 in)
Horizontally	508 mm (20.0 in)
Lateral adjustment (center of clevis)	
Right hand	none
Left hand	none
Distance of pivot point from rear wheel axle;horizontally	560 mm (22.0 in)
Diameter of drawbar pin hole	46 mm (1.8 in)
Maximum vertical permissible load	56.7 kN (12750 lb)

STEERING

Make/Model/Type	Eaton hydrostatic steering control unit
Method of operation	hand wheel
Pump	Cessna axial piston,pressure and flow compensated
Rams	Two
Working pressure	15.9 MPa (2300 psi)

BRAKES

Service brake.	
Make/Model/Type	Kelsey Hayes,caliper,dry disc
Method of operation	manual/hydraulic,operated by foot pedal.
Trailer braking take-off	none
Parking brake.	
Type	caliper/dry disc
Method of operation	mechanically by hand lever

WHEELS

Number.	
Front	Four; Driving and steering
Rear	Four; Driving and steering
Wheel base	3302 mm (130.0 in)

Track width adjustment

	Minimum [mm]	Minimum [in]	Maximum [mm]	Maximum [in]	Adjustment method
Front	1524	60.0	3302	130.0	adjustable clamping wedges on bar axle
Rear	1524	60.0	3302	130.0	same as front

PROTECTIVE STRUCTURE

Make/Model/Type	Case IH,4CSF-2
Manufacturer's name/address	Case IH 3401 First Avenue North Fargo, North Dakota
Protective device	Cab,Case IH,4CSF-2,4 post with charpy v-notch certified material
Tiltable	No
OECD approval number	CSS 076/17 for Case IHC 9250 CSS 076/18 for Steiger 9250

DRIVER'S SEAT

Make/Model/Type	Sears, P108 Air Seat, 9100
Type of suspension	air suspension
Type of damping	fore/aft and lateral
Range of adjustment	
Longitudinal	152 mm (6.0 in.)
Vertical	76 mm (3.0 in.)

LIGHTING.

	Height above ground of center [mm]	Height above ground of center [in]	Size [mm]	Distance from outside edge of lights to median plane of tractor. [mm]	Distance from outside edge of lights to median plane of tractor. [in]
Headlights	1829	72.0	102 x 165	419	16.5
Cab-lights(rear)	3353	132.0	102 x 165	800	31.5
(front)	3175	125.0	102 x 165	762	30.0
Rearlights	1930	76.0	57 x 165	915	36.0
Reflectors	N/A				

TEST CONDITIONS.

Overall dimensions.

Length	Width		Height at top of	
	minimum	maximum	protective structure	exhaust silencer
6706	3035	3767	3532	3736

Ground clearance (unballasted) 377 mm (14.8 in)
Clearance-limiting part bottom of drawbar

Tractor Mass (with Cab, full fuel tank)

		Without driver [kg]	Without driver [lb]	With driver [kg]	With driver [lb]
Unballasted	Front	7460	16446	7498	16530
	Rear	6175	13614	6212	13695
	Total	13635	30060	13710	30225

Tire and track width specifications.

	Front	Rear
Make	Goodyear	Goodyear
Dimensions	20.8R42	20.8R42
Ply rating	2 star (10 ply)	2 star (10 ply)
Type	Radial	Radial
Max.load (tire manufacturer)	38.48 kN (8650 lb)	38.48 kN (8650 lb)
Max.load(tractor manufacturer)	same	same
Inflation pressure (tire mfr)	165 kPa (24 psi)	165 kPa (24 psi)
Dynamic Radius Index	917 mm (36.1 in)	917 mm (36.1 in)
Chosen track width - inner	1575 mm (62.0 in)	1575 mm (62.0 in)
- outer	2896 mm(114.0 in)	2896 mm(114.0 in)

Oils and Lubrication.

Capacity and change interval:

	Capacity liter	Capacity quart	Oil change hours	Filter change hours
Engine	34	36	250	250
Gear Box	34	36	1000	1000
Front and Rear axle	30	32	1000	---
Hydraulic system (includes steering, and hydraulic lift)	68	72	1000	1000

Specifications:

	Recommended	Used during test
Engine oil		
Type	SAE 15W40	same
Viscosity	14.8 cSt at 100'C	
Classification	API CC/CD	
Transmission oil		
Type	Case IH Hytran Plus	same
Viscosity	6.2 cSt at 100'C	
Classification	NA	
Hydraulic fluid		
Type	Case IH Hytran Plus	same
Viscosity	6.2 cSt at 100'C	
Classification	NA	
Steering oil	same as hydraulic	same
Grease	NLGI No.2 Lithium	
Number of lubrication points:	28 (includes 17 for PTO and three point hitch)	
Fuel		
Type	Grade 2-D,in conformity with the national standard	
Density (Pto test)	0.838 g/cubic-cm (6.990 lb/gallon) at 15'C (59'F)	
(Drawbar test)	Same as Pto test	
Cetane number	53.9	
Viscosity	2.40 cSt at 38'C (100'F)	

III.TEST RESULTS

COMPULSORY TESTS RESULTS

(1) MAIN POWER TAKE-OFF

Date of tests : 19 September 1991
Location of tests : Tractor Testing Laboratory
University of Nebraska, Lincoln, Nebraska.
Type of Dynamometer: Eaton Dynamatic 2025 D.G.

Power kW (hp)	Speeds engine rev/min	Speeds PTO rev/min	Fuel Consumption hourly l/h (gal/h)	Fuel Consumption hourly kg/h (lb/h)	Fuel Consumption specific kg/kW.h (lb/hp.h)	Specific energy kW.h/l (hp.h/gal)
1.1 Maximum Power- 2 hour test.						
202.09 (271.01)	1948	928	54.16 (14.31)	45.37 (100.01)	0.224 (0.369)	3.73 (18.94)
1.2 Power at rated engine speed. (1 hour)						
198.37 (266.01)	2100	1000	55.38 (14.63)	46.38 (102.26)	0.234 (0.384)	3.58 (18.18)
1.3 Maximum power at standard PTO speed.(1000 rev/min)						
198.37 (266.01)	2100	1000	55.38 (14.63)	46.38 (102.26)	0.234 (0.384)	3.58 (18.18)

1.4 Part Loads - governor hand lever set for maximum power at rated engine speed

Power kW (hp)	Speeds engine rev/min	Speeds PTO rev/min	Fuel Consumption hourly l/h (gal/h)	Fuel Consumption hourly kg/h (lb/h)	Fuel Consumption specific kg/kW.h (lb/hp.h)	Specific energy kW.h/l (hp.h/gal)
(i) Torque obtained at maximum power at rated engine speed.						
198.37 (266.01)	2100	1000	55.38 (14.63)	46.38 (102.26)	0.234 (0.384)	3.58 (18.18)
(ii) 85% of the torque obtained in (i)						
177.22 (237.66)	2202	1049	52.31 (13.82)	43.82 (96.60)	0.247 (0.406)	3.39 (17.20)
(iii) 75% of the torque defined in (ii)						
134.26 (180.05)	2230	1063	43.22 (11.42)	36.20 (79.80)	0.270 (0.443)	3.11 (15.77)
(iv) 50% of the torque defined in (ii)						
90.24 (121.01)	2251	1073	34.77 (9.18)	29.12 (64.20)	0.323 (0.531)	2.60 (13.18)
(v) 25% of the torque defined in (ii)						
45.65 (61.22)	2278	1085	24.69 (6.52)	20.68 (45.60)	0.453 (0.745)	1.85 (9.38)
(vi) Unloaded						
0.78 (1.05)	2320	1105	15.43 (4.08)	12.93 (28.50)	16.477 (27.087)	0.05 (0.26)

1.5 Part Loads - governor hand lever set for maximum power at standard pto speed.

Power kW (hp)	Speeds engine rev/min	Speeds PTO rev/min	Fuel Consumption hourly l/h (gal/h)	Fuel Consumption hourly kg/h (lb/h)	Fuel Consumption specific kg/kW.h (lb/hp.h)	Specific energy kW.h/l (hp.h/gal)
(i) Torque obtained at standard pto speed.						
198.37 (266.01)	2100	1000	55.38 (14.63)	46.38 (102.26)	0.234 (0.384)	3.58 (18.18)
(ii) 85% of the torque obtained in (i)						
177.22 (237.66)	2202	1049	52.31 (13.82)	43.82 (96.60)	0.247 (0.406)	3.39 (17.20)
(iii) 75% of the torque defined in (ii)						
134.26 (180.05)	2230	1063	43.22 (11.42)	36.20 (79.80)	0.270 (0.443)	3.11 (15.77)
(iv) 50% of the torque defined in (ii)						
90.24 (121.01)	2251	1073	34.77 (9.18)	29.12 (64.20)	0.323 (0.531)	2.60 (13.18)
(v) 25% of the torque defined in (ii)						
45.65 (61.22)	2278	1085	24.69 (6.52)	20.68 (45.60)	0.453 (0.745)	1.85 (9.38)
(vi) Unloaded						
0.78 (1.05)	2320	1105	15.43 (4.08)	12.93 (28.50)	16.477 (27.087)	0.05 (0.26)

No-load maximum engine speed 2320 rev/min

Equivalent engine torque:

at rated engine speed	902 Nm(2100 rev/min)
at maximum power	991 Nm(1948 rev/min)
at maximum torque	1324 Nm(1290 rev/min)

Mean atmospheric conditions:

Temperature-dry bulb	24'C (74'F)
Relative Humidity	26 %
Barometer -	99.40 kPa(29.35 in Hg)

Maximum temperatures:		
	Thermostat housing	89'C (193'F)
	Engine oil pan	112'C (234'F)
	Fuel to injection pump	57'C (134'F)
	Engine air intake	26'C (79'F)
	Hydraulic oil	58'C (137'F)
Turbocharger boost pressure		
	at rated engine speed	134 kPa (19.4 psi)
	at maximum power	131 kPa (19.0 psi)

2. HYDRAULIC POWER AND LIFTING FORCE

Date of test: 23 September 1991
Location: TTL/UNL, Lincoln, Nebr.

2.1 HYDRAULIC POWER TEST - Hydraulic pump performance

i. Sustained pressure with pump stalled	17.24 MPa (2500 psi)
ii. Pump delivery rate at minimum pressure and rated engine speed	105.2 l/m (27.8 gpm)

iii.

	Flow Rate l/min (gal/min)	Pressure MPa (psi)	Power kW (hp)
At 90% of relief valve setting.	92.4 (24.4)	15.58 (2260)	24.0 (32.2)
At maximum hydraulic power.	91.2 (24.1)	15.86 (2300)	24.1 (32.3)

Tapping points	Two hydraulic outlets combined
Hydraulic fluid temperature at flow meter	64'C (146'F)

2.2 POWER LIFT TEST.

		Hitch Points	Frame
Lower hitch points above ground - down position.	[mm/in]	229/9.0	262/10.3
Vertical movement without load	[mm/in]	824/32.5	840/33.1
Vertical movement with load	[mm/in]	724/28.5	691/27.2
Maximum corrected force through full range	[kN/lbf]	57.1/12830	57.6/12942
Corresponding pressure	[kPa/psi]	15823/2295	
Moment about rear axle	[kN.m/ft.lb]	82.9/61154	118.7/87574
Maximum mast tilt angle	[degrees]	--	5.0

Lifting height relative to the horizontal position of lower links

	[mm]	-436	-378	-350	-251	-149
	[in]	-17.2	-14.9	-13.8	-9.9	-5.9
Corrected lifting forces.						
hitch points	[kN]	57.2	--	57.1	59.9	62.6
hitch points	[lb]	12852	--	12830	13455	14081
at frame	[kN]	--	66.4	62.6	62.0	62.3
at frame	[lb]	--	14922	14076	13941	14004

Lifting height relative to the horizontal position of lower links

	[mm]	-50	49	150	250	288	313
	[in]	-2.0	1.9	5.9	9.8	11.3	12.3
Corrected lift forces.							
hitch points	[kN]	64.7	66.8	68.6	69.8	70.2	--
hitch points	[lb]	14553	15017	15426	15701	15773	--
at frame	[kN]	62.1	62.0	60.6	59.5	58.1	57.6
at frame	[lb]	13968	13941	13631	13374	13068	12942

Date of tests: 24–Sep–91 Fuel density: 0.838 kg/l

Test # 1651

Type of track: Gear	Power kW	Concrete Pull kN	Speed km/h	Engine Speed rev/min	Slip	SFC kg/kW.h	SFE kW.h/l	Temperature, deg C Fuel	Coolant	Oil	Dry	Wet	Relative humidity	Barometric Pressure kPa
I. Maximum Power (unballasted, 4 wheel drive at 1950 rev/min) Tire pressure: 97 kPa, rear (inner) 83 kPa, rear (outer) 97 kPa, front (inner) 83 kPa, front (outer) Drawbar height: 419 mm														
1	144.37	143.96	3.61	2209	8.87%	0.297	2.82	61	76	102	11	8	67%	98.61
2	165.06	138.10	4.30	2136	7.18%	0.275	3.05	62	77	104	11	8	67%	98.65
3	173.81	123.81	5.05	1993	5.09%	0.264	3.18	61	78	101	11	8	67%	98.68
4	175.10	103.16	6.11	1953	3.52%	0.259	3.23	62	77	102	11	8	67%	98.58
5	179.47	86.82	7.44	1950	2.63%	0.252	3.33	62	78	104	11	8	67%	98.44
6	178.53	69.85	9.20	1950	2.36%	0.253	3.31	61	78	102	12	8	58%	98.71
7	178.62	58.89	10.92	1954	2.17%	0.253	3.31	60	78	100	12	9	68%	98.71
8	176.88	48.08	13.24	1952	1.62%	0.256	3.27	61	78	101	12	9	68%	98.71
Ia. Maximum Power (unballasted, 4 wheel drive at 2100 rev/min) Tire pressure: 97 kPa, rear (inner) 83 kPa, rear (outer) 97 kPa, front (inner) 83 kPa, front (outer) Drawbar height: 419 mm														
5	176.95	79.18	8.05	2102	2.54%	0.260	3.22	62	77	104	11	8	67%	98.51
II. Part Loads (unballasted, 4 wheel drive at 1950 rev/min) Tire pressure: 97 kPa, rear (inner) 83 kPa, rear (outer) 97 kPa, front (inner) 83 kPa, front (outer) Drawbar height: 419 mm														
II.1 in selected gear at maximum power														
5	179.47	86.82	7.44	1950	2.63%	0.252	3.33	62	78	104	11	8	67%	98.44
II.1.1 75% of pull at maximum power at rated speed														
5	141.24	59.55	8.54	2220	1.99%	0.288	2.91	62	78	104	17	12	55%	98.51
II.1.2 50% of pull at maximum power at rated speed														
5	95.91	39.66	8.70	2249	1.44%	0.343	2.44	62	77	100	17	12	55%	98.51
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
6	140.79	59.50	8.52	1799	1.99%	0.255	3.29	62	78	101	17	12	55%	98.51
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
6	95.78	39.63	8.70	1827	1.35%	0.276	3.04	62	77	100	17	12	55%	98.51
II.2 in selected gear nearest to 7.5 km/h														
5	179.47	86.82	7.44	1950	2.63%	0.252	3.33	62	78	104	11	8	67%	98.44
II.2.1 75% of pull at maximum power at rated speed														
5	141.24	59.55	8.54	2220	1.99%	0.288	2.91	62	78	104	17	12	67%	98.51
II.2.2 50% of pull at maximum power at rated speed														
5	95.91	39.66	8.70	2249	1.44%	0.343	2.44	62	77	100	17	12	67%	98.51
II.2.3 next higher gear at reduced engine speed, same pull and travel speed as II.2.1														
6	140.79	59.50	8.52	1799	1.99%	0.255	3.29	62	78	101	17	12	67%	98.51
II.2.4 next higher gear at reduced engine speed, same pull and travel speed as II.2.2														
6	95.78	39.63	8.70	1827	1.35%	0.276	3.04	62	77	100	17	12	67%	98.51

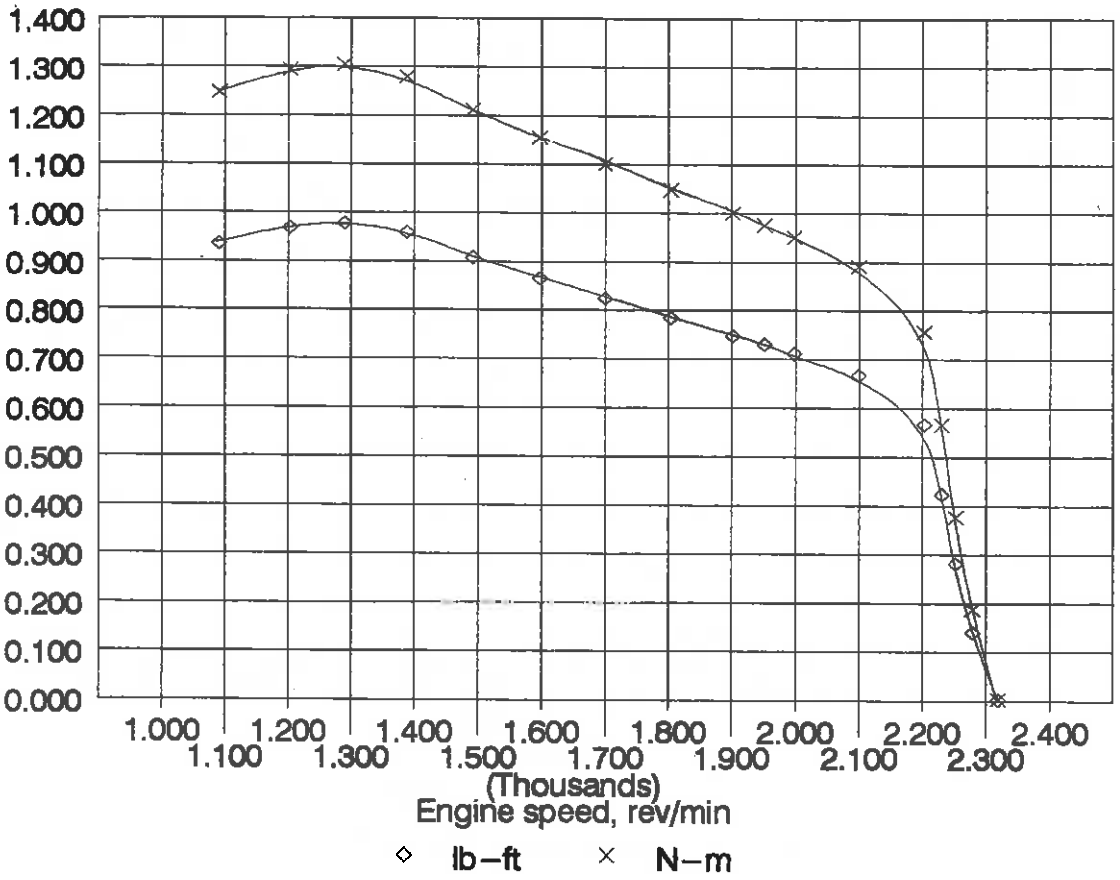
Date of tests: 24–Sep–91 Fuel density: 6.990 lb/gal

Test # 1651

Type of track: Gear	Power hp	Concrete Pull lb	Speed mph	Engine Speed rpm	Slip	SFC lb/hp.h	SFE hp.h/gal	Temperature, deg F Fuel	Coolant	Oil	Dry	Wet	Relative humidity	Barometric Pressure in Hg
I. Maximum Power (unballasted, 4 wheel drive at 1950 rev/min) Tire pressure: 14 psi, rear (inner) 12 psi, rear (outer) 14 psi, front (inner) 12 psi, front (outer) Drawbar height: 16.5 in														
1	193.60	32363	2.24	2209	8.87%	0.488	14.32	142	169	216	52	47	67%	29.12
2	221.35	31046	2.67	2136	7.18%	0.452	15.48	143	171	219	52	47	67%	29.13
3	233.08	27833	3.14	1993	5.09%	0.433	16.13	142	172	214	52	47	67%	29.14
4	234.81	23191	3.80	1953	3.52%	0.426	16.41	143	171	216	51	47	67%	29.11
5	240.68	19519	4.62	1950	2.63%	0.414	16.89	143	172	220	51	47	67%	29.07
6	239.41	15703	5.72	1950	2.36%	0.416	16.80	141	172	216	53	47	58%	29.15
7	239.53	13239	6.79	1954	2.17%	0.416	16.81	141	173	213	53	48	68%	29.15
8	237.20	10809	8.23	1952	1.62%	0.421	16.59	142	172	213	53	48	68%	29.15
Ia. Maximum Power (unballasted, 4 wheel drive at 2100 rev/min) Tire pressure: 14 psi, rear (inner) 12 psi, rear (outer) 14 psi, front (inner) 12 psi, front (outer) Drawbar height: 16.5 in														
5	237.29	17800	5.00	2102	2.54%	0.428	16.32	143	171	219	51	47	67%	29.09
II. Part Loads (unballasted, 4 wheel drive at 1950 rev/min) Tire pressure: 14 psi, rear (inner) 12 psi, rear (outer) 14 psi, front (inner) 12 psi, front (outer) Drawbar height: 16.5 in														in Hg
II.1 in selected gear at maximum power														
5	240.68	19519	4.62	1950	2.63%	0.414	16.90	143	172	220	51	47	67%	29.07
II.1.1 75% of pull at maximum power at rated speed														
5	189.40	13388	5.31	2220	1.99%	0.473	14.77	144	173	219	63	53	55%	29.09
II.1.2 50% of pull at maximum power at rated speed														
5	128.62	8917	5.41	2249	1.44%	0.564	12.39	144	171	213	63	53	55%	29.09
II.1.3 next higher gear at reduced engine speed, same pull and travel speed as II.1.1														
6	188.81	13376	5.29	1799	1.99%	0.419	16.69	143	173	214	63	53	55%	29.09
II.1.4 next higher gear at reduced engine speed, same pull and travel speed as II.1.2														
6	126.45	8909	5.41	1827	1.35%	0.453	15.42	144	171	212	63	53	55%	29.09
II.2 in selected gear nearest to 4.6 mph														
5	240.68	19519	4.62	1950	2.63%	0.414	16.90	143	172	220	51	47	67%	29.07
II.2.1 75% of pull at maximum power at rated speed														
5	189.40	13388	5.31	2220	1.99%	0.473	14.77	144	173	219	63	53	55%	29.09
II.2.2 50% of pull at maximum power at rated speed														
5	128.61	8917	5.41	2249	1.44%	0.564	12.39	144	171	213	63	53	55%	29.09
II.2.3 next higher gear at reduced engine speed, same pull and travel speed as II.2.1														
6	188.80	13376	5.29	1799	1.99%	0.419	16.69	143	173	214	63	53	55%	29.09
II.2.4 next higher gear at reduced engine speed, same pull and travel speed as II.2.2														
6	128.44	8909	5.41	1827	1.35%	0.453	15.42	144	171	212	63	53	55%	29.09

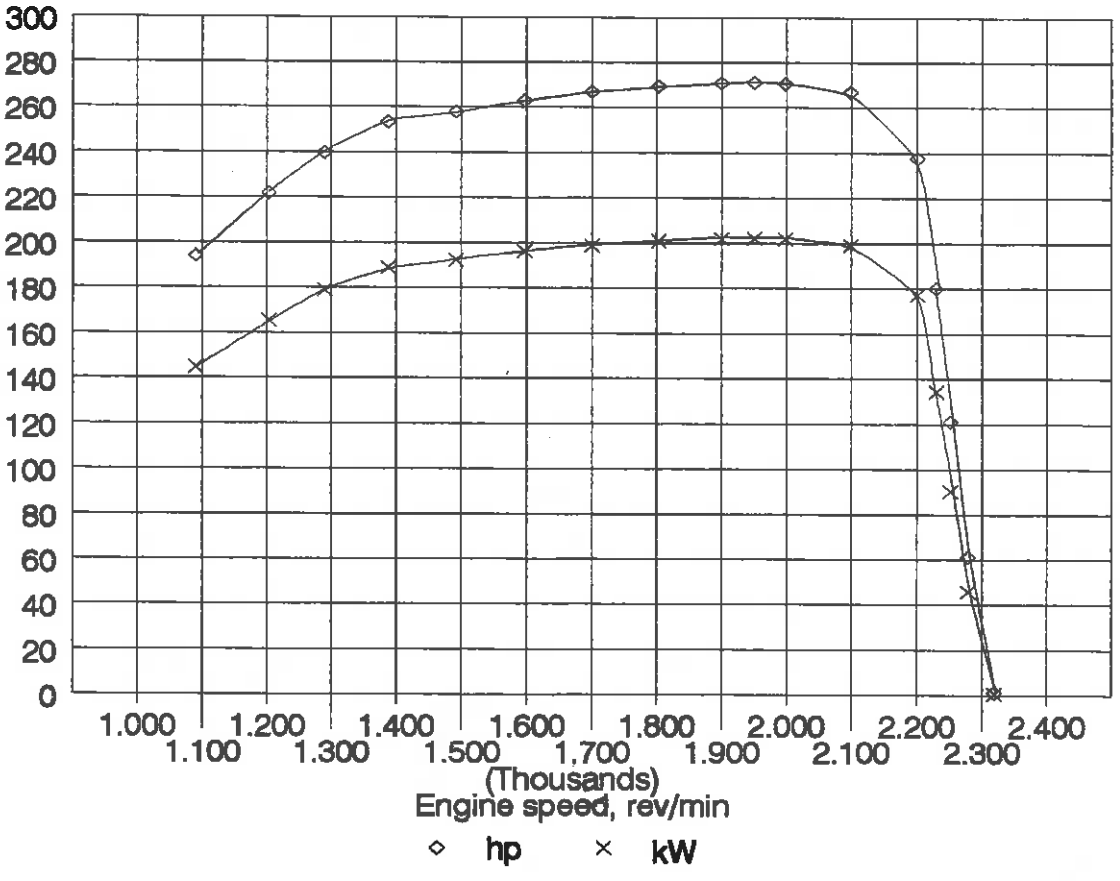
Equivalent Crankshaft Torque

Test 1651 – Case IH 9250 4WD



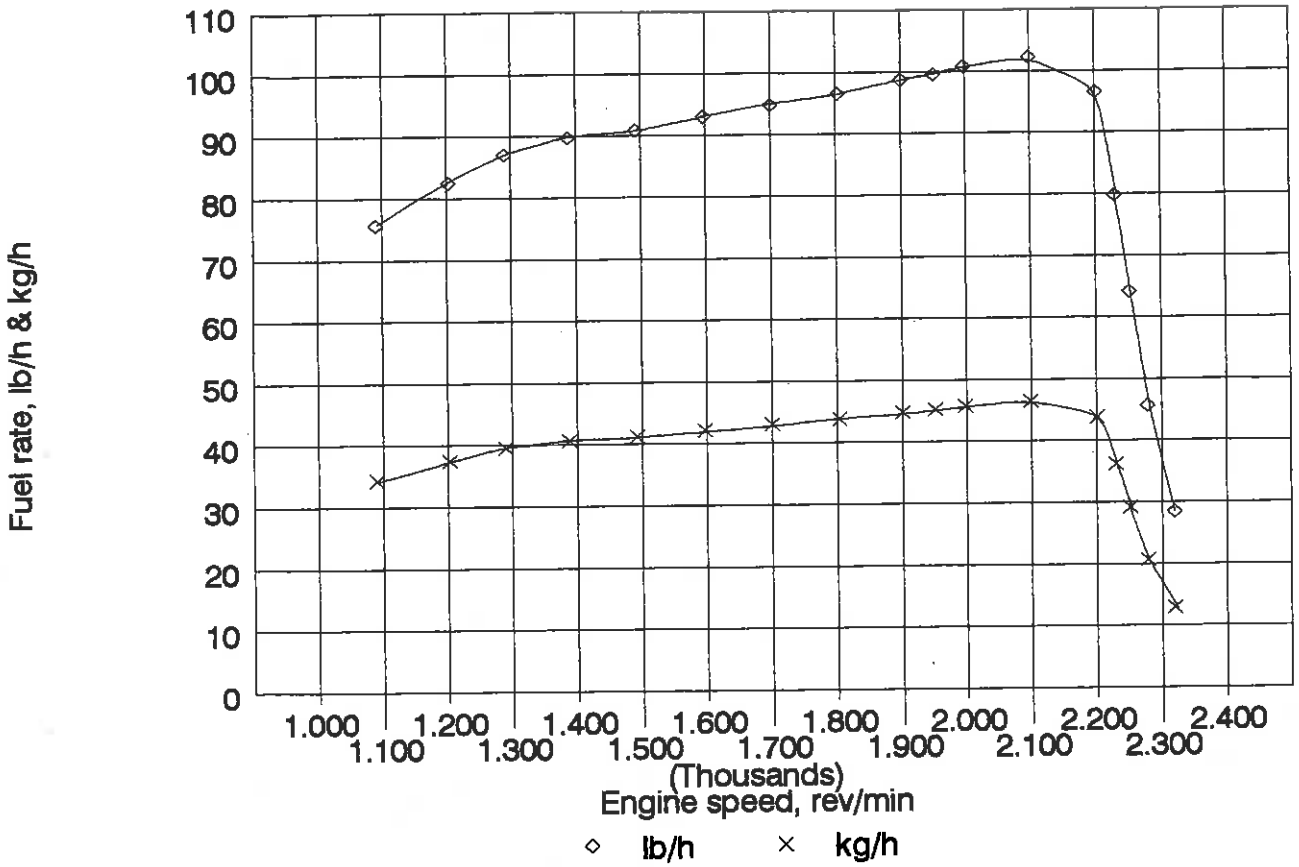
PTO Power

Test 1651 – Case IH 9250 4WD



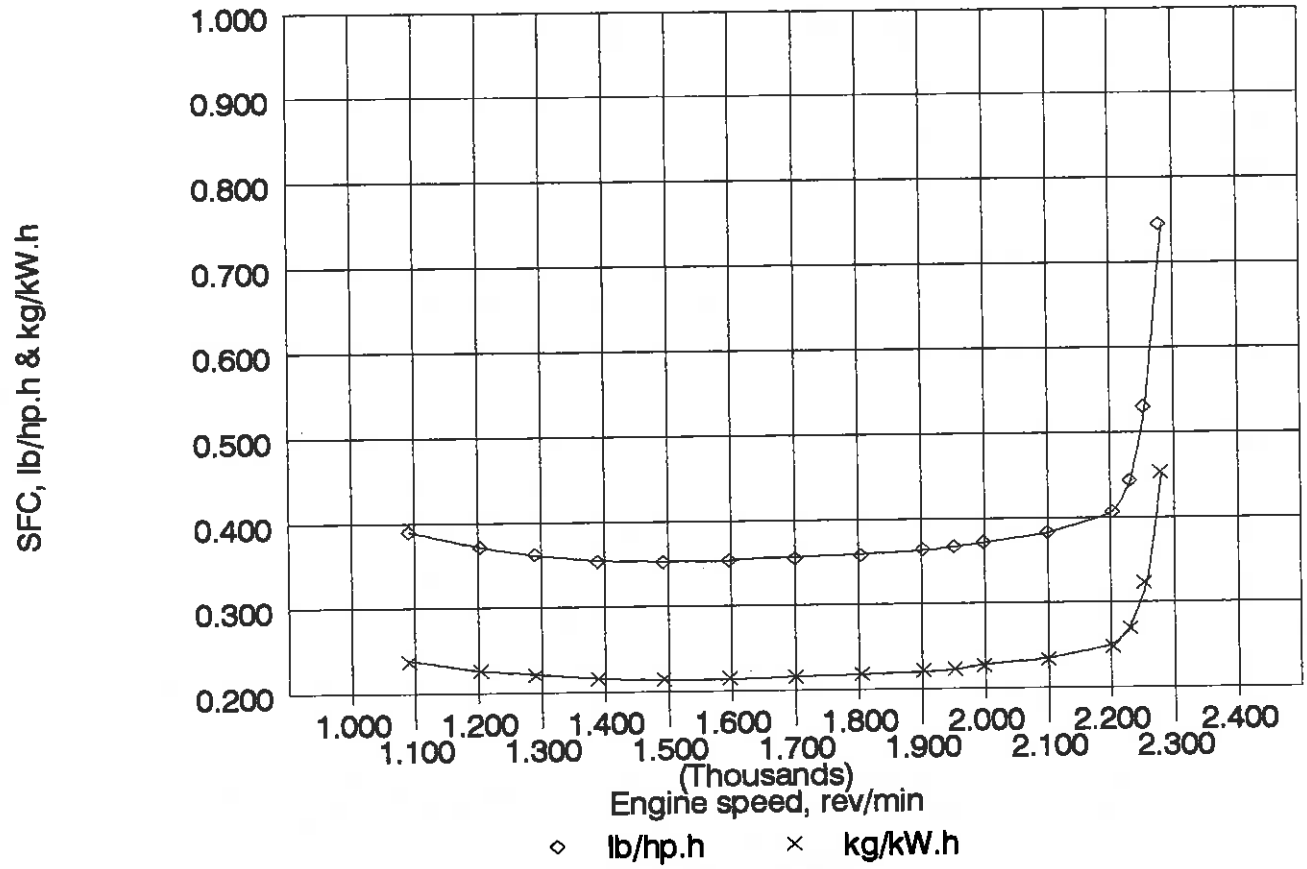
PTO Fuel Consumption

Test 1651 – Case IH 9250 4WD



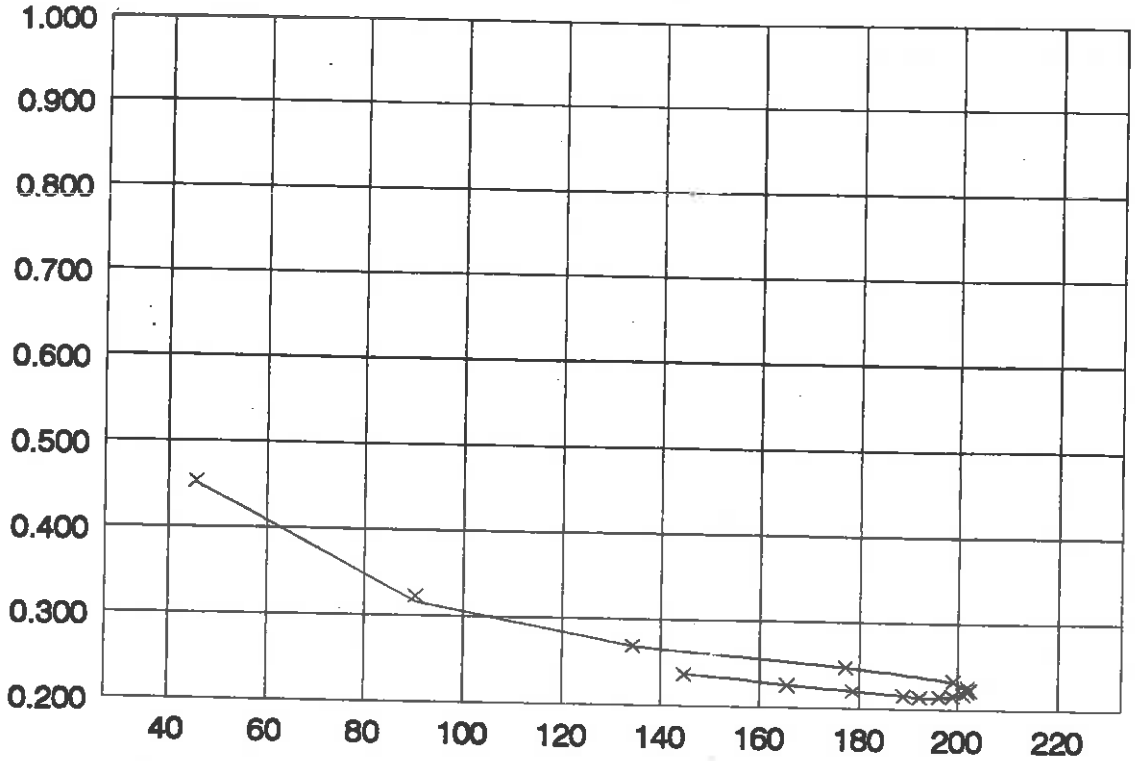
PTO Specific Fuel Consumption

Test 1651 – Case IH 9250 4WD



SFC and PTO Power

Test 1651 – Case IH 9250 4WD



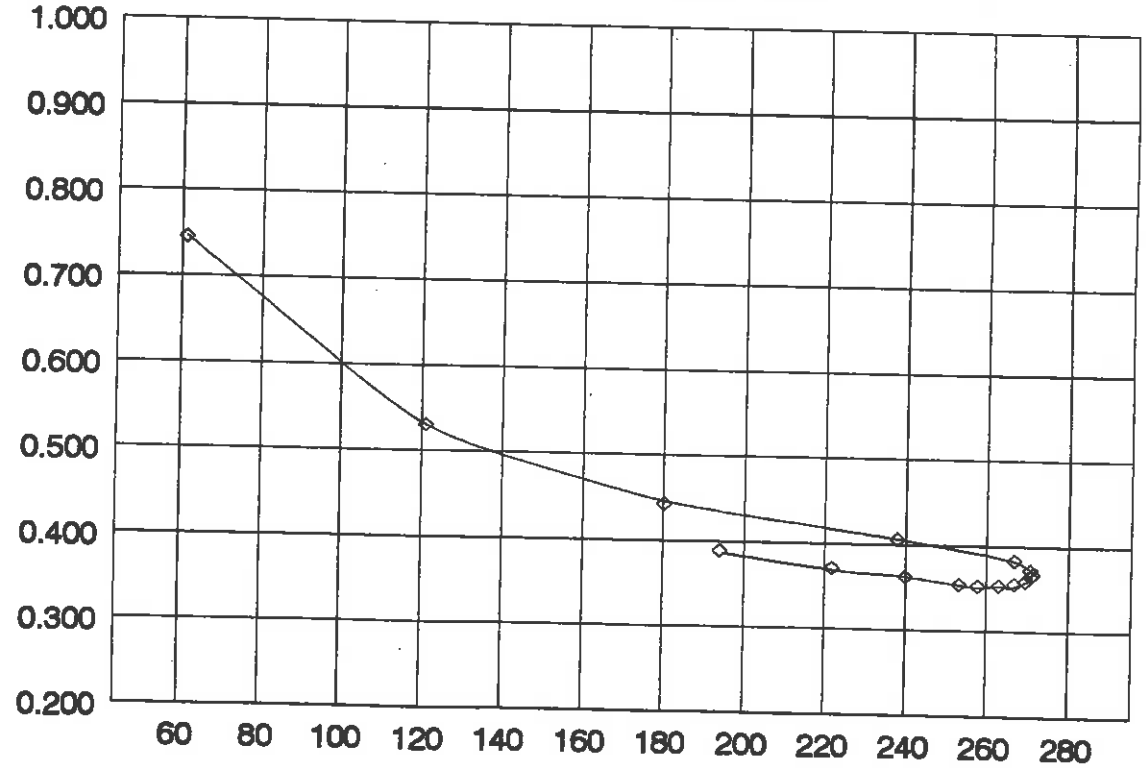
SFC, kg/kW.h

PTO power, kW

× kg/kW.h

SFC and PTO Power

Test 1651 – Case IH 9250 4WD



SFC, lb/hp.h

PTO power, hp

◇ lb/hp.h

Repairs: None
Remarks: None