THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Brake Horsepower Test

Load (rated or other) Maximum Date June 21 1928 Test No. 151 C
Name, model and rating of tractor Allis Chalmers 20-35
Serial No. Engine 36002 Serial No. Chassis 13620
Tractor equipment Eisemann "G54" Mag., Kingston "L" Carb.
Manufacturer Allis Chalmers Mfg. Co., Milwaukee, Wis.
Tractor submitted for test by " " " "
Tractor operated by Lamb Brake operated by Wallace
Brake used, Sprague. Brake arm 21 inches. Brake const. $(\frac{2nA}{33000}) = \frac{1}{3000}$
Description of belt used 8" Klingtite Rubber 7/64 Avg. Thickness
Size of engine pulley (circumference at crown) 3.494 ft.
Size of brake pulley (circumference at crown) 2.605 ft.
Kind of fuel used Gasoline Fuel test No. Wt. per gal., lbs. 6.19
Kind and grade of oil used in engine Mob. B.B.
Kind and grade of oil used in transmission " C
Humidity ____ per cent. Barometric pressure 28.64 inches mercury
Temperature of atmosphere 85 ° F.
Fuel consumption:
Total for test, gals. 5.018 Gals. per hour 5.018
Lbs. per H. P. hour 0.201 H. P. hours per gal. 2.23
Carburetor adjustments (degrees open) 36° open

Water consumption:
Total in radiator during test, gals.
Total in fuel mixture during test, gals.
Total used during test, gals.

We, the undersigned, certify that this sheet and the log sheet attached hereto give a true and correct record of official tractor test No. 151 C

F. H. Lamb Operator Lew Wallace Observer
Operator Observer
Lew Wallace
Engineer-in-charge

Log of Official Tractor Brake Horse Power Test No. 151C June 21, 1928

	Reading No.	Time	Engine Crank Shaft Speed		Engine Belt Pulley Speed			Brake Speed			Belt Slippage % of Column (7)	Net Brake Load Pounds	B. H. P.	Fuel		Water Used		Temperatures	
			Counter Reading	R. P. M.	Counter Reading	R. P. M.	Surface Speed Ft. per Min.	Counter Reading	R. P. M.	Surface Speed Pulley Ft. per Min.				Scale Reading Pounds	Amount Used Pounds	In Radiator Pounds	In Fuel Mixture Pounds	*Cooling Fluid Deg. F.	Atmosphere Deg. F.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
**Observer					8138			6060											
	1	9 20			9012	934		7261	1201			110.5		122.78				174	82
	2	30			9943 / 8928	935	3337	9441 / 9632	1205	3228	3.27	111.1	44.63	117.58	5.20			178	84
	3	40			1846	918		0834	1182			110.9		112.42	5.16			177	84
	4	50			2776	930		2031	1197			111.0		107.26	5.16			178	86
	5	10 00			3701	925		3221	1190			111.0		102.14	5.12			178	86
	6	10			4634	933		4422	1201			111.0		96.94	5.20			178	84
	7	10 20			5574	940		5632	1210			111.0		91.72	5.22			178	86
	8																		
	9																		
	10																		
	11																		
	12																		
	13																		
Total							3227				0.56				3106				
Average				931		931	3323		1198	3209	3.43	110.9	44.29					177	85

* Taken in discharge line from engine.
** Each observer will place his initials at the head of each column in which he records his observations.

Remarks

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THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Brake Horsepower Test

Load (rated or other) Maximum Date June 20, 1920 Test No. 151 B
Name, model and rating of tractor Allis Chalmers 20-35
Serial No. Engine 36002 Serial No. Chassis 13620
Tractor equipment Eiseman "GA" Mag. Kingston "L" Carb
Manufacturer Allis Chalmers Mfg Co, Milwaukee Wis.
Tractor submitted for test by "
Tractor operated by Laub Brake operated by Wallace
Brake used, Sprague. Brake arm 21 inches. Brake const. $(\frac{2nA}{33000}) = \frac{1}{3000}$
Description of belt used 8" Klingstite Rubber 7/32" 4 x 9 Thickness
Size of engine pulley (circumference at crown) 3.494 ft.
Size of brake pulley (circumference at crown) 2.605 ft.
Kind of fuel used Gasoline Fuel test No. Wt. per gal., lbs. 6.19
Kind and grade of oil used in engine Mobiloil BB
Kind and grade of oil used in transmission " C
Humidity per cent. Barometric pressure inches mercury
Temperature of atmosphere 87 ° F.
Fuel consumption:
Total for test, gals. 10.779 ✓ Gals. per hour 5.389 ✓
Lbs. per H. P. hour 0.759 ✓ H. P. hours per gal. 8.16 ✓
Carburetor adjustments (degrees open)

Water consumption:
Total in radiator during test, gals.
Total in fuel mixture during test, gals.
Total used during test, gals.

We, the undersigned, certify that this sheet and the log sheet attached hereto give a true and correct record of official tractor test No. 151 b

F. N. Laub Operator Lew Wallace Observer
Operator Observer
Lew Wallace
Engineer-in-charge

Log of Official Tractor Brake Horse Power Test No. 151 June 20, 1928

Reading No. (1)	Time (2)	Engine Crank Shaft Speed: Counter Reading (3)	Engine Crank Shaft Speed: R. P. M. (4)	Engine Belt Pulley Speed: Counter Reading (5)	Engine Belt Pulley Speed: R. P. M. (6)	Engine Belt Pulley Speed: Surface Speed Ft. per Min. (7)	Brake Speed: Counter Reading (8)	Brake Speed: R. P. M. (9)	Brake Speed: Surface Speed Pulley Ft. per Min. (10)	Belt Slippage % of Column (7) (11)	Net Brake Load Pounds (12)	B. H. P. (13)	Fuel: Scale Reading Pounds (14)	Fuel: Amount Used Pounds (15)	Water Used: In Radiator Pounds (16)	Water Used: In Fuel Mixture Pounds (17)	Temperatures: *Cooling Fluid Deg. F. (18)	Temperatures: Atmosphere Deg. F. (19)
**Observer				2635			9223											
1	10 30			3569	934		0427	1204			109.9		141.04				174	84
2	40			4501	932		1629	1202			110.0		135.56	5.48			175	85
3	50			5435	934		2833	1204			110.2		130.00	5.56			174	85
4	11 00			6376	741		4096	1213			110.4		124.26	5.74			174	84
5	10			7304	928		5244	1198			110.2		118.68	5.58			176	85
6	20			8224	920		6430	1186			110.2		113.18	5.50			180	86
7	30			9156	932		7633	1203			109.4		107.66	5.52			180	87
8	40			0086	930		8832	1199			109.8		102.06	5.60			180	90
9	50			1020	934		0039	1207			109.5		96.56	5.50			182	91
10	12 00			1952	932		1237	1198			109.8		91.00	5.56			180	86
11	10			2883	931		2436	1199			109.4		85.42	5.58			182	88
12	20			3820 (#750)	930		3716 (2518)	1198			109.5		79.90	5.52			182	89
13	12 30			5614	934		4920	1204			109.5		74.32	5.58			183	92
Total														66.72				
Average			932		932			1201			109.8	43.96					179	87

* Taken in discharge line from engine.
** Each observer will place his initials at the head of each column in which he records his observations.

Remarks

THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Drawbar Horsepower Test

Rated or maximum load Rated ..... Date June 26, 1928 ..... Test No. 151-F .....

Name, model and rating of tractor Allis Chalmers 20-35 .....

Serial No. Engine 36002 ..... Serial No. Chassis 13620 .....

Manufacturer Allis Chalmers Mfg. Co., Milwaukee, Wis. .....

Tractor submitted for test by " " " " .....

Tractor equipment Emsemann "GSA" Mag., Kingston "L" Carb. .....

Style and dimension of lugs Spade 32 per Wheel 4¾" H. x 3½" W. x 6½" Base 8" Ext. Rims .....

Circumference of drive wheels, at face 13.07' ..... Point of lugs 13.58' .....

Tractor operated by Laub ..... Dynamometer car operated by Wallace .....

Dynamometer used Gulley ..... Load used Dyn. Car .....

Kind of fuel Gasoline ..... Test No. — ..... W.t per gal. 6.19 ..... lbs.

Kind and grade of oil used in engine Mobiloil BB .....

Kind and grade of oil used in transmission " " C .....

Humidity — ..... per cent. Barometric pressure 28.75 ..... inches.

Temperature of atmosphere 84 ..... Temperature of engine 166 .....

Weather conditions Fair .....

Condition of track Good .....

Fuel Consumption:

Total for test, gal. 44.137 ✓ ..... Gals. per hour 14.714 ✓ .....

Pounds per H. P. hour 1.169 ..... H. P. hours per gal. 5.29 .....

Water Consumption:

Total used in test, gal. 0.00 ..... Gal. per hour 0.00 .....

We, the undersigned, certify that this and attached sheets hereto give a true and correct record of the official tractor test No. 151-F .....

F. N. Laub ..... Operator. Lew Wallace ..... Observer.

..... Operator. ..... Observer.

Lew Wallace .....
Engineer-in-charge

THE UNIVERSITY OF NEBRASKA
DEPARTMENT OF AGRICULTURAL ENGINEERING
Log of Official Tractor Drawbar Horse Power Test No. 151-f

Date. June 26, '28

Chart and Reading No.	Time	Stop Watch in 400 ft. minutes	*** Engine Crankshaft R. P. M.	Drive Wheel Slippage: Left Wheel Counter Reading	Left Wheel Rev. in 400 ft.	Right Wheel Counter Reading	Right Wheel Rev. in 400 ft.	Av. Rev. Columns 6 and 8	** Distance Traveled (Feet)	Distance Measured on Ground (Feet)	** Slippage % Columns 10 and 11	Speed: Feet per Minute	Speed: Miles per Hour	Average Draft Pounds	Drawbar Horsepower	Temperature Degrees F.: * Cooling Fluid	Temperature Degrees F.: Atmosphere	Fuel Used Pounds	Water Used Pounds
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
****Observer	6 52	Start engine																	
	6 58	"	Test																
				8812		8748													
1S	7 55	1.30		9087	27.5	9069	28.1	27.8				303.1	3.44	2310	21.22	176	67		
1N	8 00	1.305		9361	27.4			27.4								176	67		
2S	9 00	1.2875		9634	27.3			27.3				308.4	3.50	2238	20.92	160	72		
2N	9 05	1.2825		9907	27.3			27.3								160	72		
3S	9 55	1.2925		0178	27.1			27.1				307.9	3.50	2347	21.90	164	80		
3N	10 00	1.30		0449	27.1	9665 9937	27.2	27.15								164	80		
4S	11 00	1.2875		0720	27.1	0209	27.2	27.15				311.3	3.54	2200	20.75	162	90		
4N	11 05	1.2825		0990	27.0	0481	27.2	27.1								162	90		
5S	11 58	1.2875		1261	27.1	0753	27.2	27.15				309.4	3.52	2283	21.40	162	88		
5N	12 03	1.2750		1531	27.0	1025	27.2	27.1								162	88		
6S	1 00	1.2925		1803	27.2	1301	27.6	27.4				311.2	3.54	2241	21.13	166	94		
6N	1 05	1.2875		2073	27.0	1574	27.3	27.15								166	94		
Stop	1 08		Fuel & Oil																
Start	1 14	(6) min.																	

NOTE: Record all stops by the word "Stop" and "Start" in column 1, record time and give full data.

* Taken in discharge line from engine.

** The first figure in this column is calculated at the rim of the wheel, and the second figure at point of the lugs.

*** Engine R. P. M. = $\frac{\text{Gear Ratio x Column (3)}}{\text{Column (9)}}$

**** Each Observer will write his initials at the head of each column in which he records his observations.

THE UNIVERSITY OF NEBRASKA
DEPARTMENT OF AGRICULTURAL ENGINEERING
Log of Official Tractor Drawbar Horse Power Test No. 1517

Date. June 26, 1928

Chart and Reading No.	Time	Stop Watch in 400 ft. minutes	*** Engine Crankshaft R. P. M.	Drive Wheel Slippage: Left Wheel Counter Reading	Left Wheel Rev. in 400 ft.	Right Wheel Counter Reading	Right Wheel Rev. in 400 ft.	Av. Rev. Columns 6 and 8	** Distance Traveled (Feet)	Distance Measured on Ground (Feet)	** Slippage % Columns 10 and 11	Speed: Feet per Minute	Speed: Miles per Hour	Average Draft Pounds	Drawbar Horsepower	Temperature Degrees F. * Cooling Fluid	Temperature Degrees F. Atmosphere	Fuel Used Pounds	Water Used Pounds
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
****Observer				2073															
7S	2.00	1.295		2345	27.2	1776	—	27.2				308.1	3.50	2310	21.57	168	98		
7N	2.05	1.295		2616	27.1	2048	27.2	27.15								168	98		
8S	3.03	1.305		2887	27.1	2327	27.9	27.5				307.8	3.50	2262	22.03				
8B	3.45	1.29		3158	27.1	2598	27.1	27.1								166	86		
8N	3.50	1.295		3429	27.1	28.72	27.4	27.25								166	86		
9N	4.10	1.295		3700	27.1	3143	27.1	27.1				309.3	3.51	2299	21.55	166	84		
9S	4.15	1.295		3972	27.2	?	—	27.2								166	84		
10N	4.45	1.29		4247	27.5	?	—	27.5				304.9	3.52	2128	19.98	166	85		
10S	4.50	1.29		4518	27.1	?	—	27.1								166	85		
	5.04	End of test																	
	5.03	Stop engine																	
Total																		248.45	0.00
Avg		1.292	925		27.2		27.4	27.3	414.7	400	3.57	308.6	3.51	2272	21.25	166	84		

NOTE: Record all stops by the word "Stop" and "Start" in column 1, record time and give full data.

* Taken in discharge line from engine.

** The first figure in this column is calculated at the rim of the wheel, and the second figure at point of the lugs.

*** Engine R. P. M. = $\frac{\text{Gear Ratio x Column (8)}}{\text{Column (9)}}$

**** Each Observer will write his initials at the head of each column in which he records his observations.

THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Drawbar Horsepower Test

Rated or maximum load. Maximum Date June 25, 1928 Test No. 1519

Name, model and rating of tractor. Allis Chalmers 20-35

Serial No. Engine 36002 Serial No. Chassis 13620

Manufacturer Allis Chalmers Mfg Co Milwaukee, Wis.

Tractor submitted for test by " " " "

Tractor equipment. Firemans "G.A." Mag, Kingston "L" Carb

Style and dimension of lugs. Spade 32 per wheel 9" x 3½" x 10½" Base 8" Ext Rims

Circumference of drive wheels, at face 13.09' Point of lugs 15.68'

Tractor operated by Lauta Dynamometer car operated by Wallace

Dynamometer used Gulley Load used Dyn Car & Sweep

Kind of fuel Gasoline Test No. W.t per gal. 6.17 lbs.

Kind and grade of oil used in engine Mob. B.B.

Kind and grade of oil used in transmission " C

Humidity ——— per cent. Barometric pressure 28.70 inches.

Temperature of atmosphere. High 81 Low 78 Temperature of engine. High 174 Low 177

Weather conditions. Fair

Condition of track. Very good

Fuel Consumption:

Total for test, gal. ——— Gals. per hour ———

Pounds per H. P. hour ——— H. P. hours per gal. ———

Water Consumption:

Total used in test, gal. ——— Gal. per hour ———

We, the undersigned, certify that this and attached sheets hereto give a true and correct record of the official tractor test No. 1516

F.N. Lauta Operator. Lew Wallace Observer.

" Operator. " Observer.

Lew Wallace
Engineer-in-charge

THE UNIVERSITY OF NEBRASKA
DEPARTMENT OF AGRICULTURAL ENGINEERING
Log of Official Tractor Drawbar Horse Power Test No. 151g

Date: June 25, 1928

Chart and Reading No.	Time	Stop Watch in 400 ft. minutes	*** Engine Crankshaft R. P. M.	Drive Wheel Slippage								Speed		Average Draft Pounds	Drawbar Horsepower	Temperature Degrees F.		Fuel Used Pounds	Water Used Pounds
				Left Wheel		Right Wheel		Av. Rev. Columns 6 and 8	** Distance Traveled (Feet)	Distance Measured on Ground (Feet)	** Slippage % Columns 10 and 11	Feet per Minute	Miles per Hour			* Cooling Fluid	Atmosphere		
				Counter Reading	Rev. in 400 ft.	Counter Reading	Rev. in 400 ft.												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
****Observer				3852		3793	High		Gear										
7S	4 10	1.30		4130	27.8	4074	28.1					307.1	3.49	3515	32.71	176	84		
8N	4 16	1.32		4407	27.7	4354	28.0					305.3	3.47	3462	32.03	172	78		
Avg.		1.31	933		27.75		28.05	27.9	423.8	400	5.62	306.2	3.48	3488	32.37	174	81		
							Low		Gear										
2S	4 38	1.65		4982 5273	29.1	4931 5222	29.1					250.0	2.84	4906	33.38	174	78		
3N	5 00	1.65		5852 6139	28.7	5810 6102	29.2					247.9	2.82	4395	3300	180	78		
Avg.		1.65	938		28.9		29.15	29.0	440.5	400	9.19	249.0	2.83	4400	33.20	177	78		
																~~177~~	~~78~~		

NOTE: Record all stops by the word "Stop" and "Start" in column 1, record time and give full data.
* Taken in discharge line from engine.
** The first figure in this column is calculated at the rim of the wheel, and the second figure at point of the lugs.
*** Engine R. P. M. = $\frac{\text{Gear Ratio x Column (3)}}{\text{Column (9)}}$
**** Each Observer will write his initials at the head of each column in which he records his observations.

THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Brake Horsepower Test

Load (rated or other) Rated Date June 21 1928 Test No. 151d
Name, model and rating of tractor Allis Chalmers 20-35
Serial No. Engine 36002 Serial No. Chassis 13620
Tractor equipment Eiseman "GS4" Mag., Kingston "L" Carb.
Manufacturer Allis Chalmers Mfg. Co. Milwaukee, Wis.
Tractor submitted for test by "
Tractor operated by Laub Brake operated by Wallace
Brake used, Sprague. Brake arm 21 inches. Brake const. $(\frac{2nA}{33000}) = \frac{1}{3000}$
Description of belt used 8" Klingtite Rubber 13/64 Avg. thickness
Size of engine pulley (circumference at crown) 3.494 ft.
Size of brake pulley (circumference at crown) 2.605 ft.
Kind of fuel used Gasoline Fuel test No. Wt. per gal., lbs. 6.12
Kind and grade of oil used in engine Mob. BB
Kind and grade of oil used in transmission " C
Humidity ——— per cent. Barometric pressure 28.65 inches mercury
Temperature of atmosphere 86 ° F.
Fuel consumption:
Total for test, gals. 4.226 ✓ Gals. per hour 4.226 ✓
Lbs. per H. P. hour 0.741 ✓ H. P. hours per gal. 8.35
Carburetor adjustments (degrees open) 36½° open

Water consumption:
Total in radiator during test, gals. 0.00
Total in fuel mixture during test, gals. 0.00
Total used during test, gals. 0.00

We, the undersigned, certify that this sheet and the log sheet attached hereto give a true and correct record of official tractor test No. 151d

F. N. Laub Operator Lew Wallace Observer
Operator Observer
Lew Wallace
Engineer-in-charge

Log of Official Tractor Brake Horse Power Test No. 151d June 21, 1928

Reading No.	Time	Engine Crank Shaft Speed: Counter Reading	Engine Crank Shaft Speed: R. P. M.	Engine Belt Pulley Speed: Counter Reading	Engine Belt Pulley Speed: R. P. M.	Engine Belt Pulley Speed: Surface Speed Ft. per Min.	Brake Speed: Counter Reading	Brake Speed: R. P. M.	Brake Speed: Surface Speed Pulley Ft. per Min.	Belt Slippage % of Column (7)	Net Brake Load Pounds	B. H. P.	Fuel: Scale Reading Pounds	Fuel: Amount Used Pounds	Water Used: In Radiator Pounds	Water Used: In Fuel Mixture Pounds	Temperatures: *Cooling Fluid Deg. F.	Temperatures: Atmosphere Deg. F.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
**Observer				9237			0356											
1	10 45			0165	928		1554	1198			88.0		110.56				186	82
2	55			1098	933		2757	1203			"		106.24	4.32			178	86
3	11 05			2031	933		3959	1202			"		101.82	4.42			175	86
4	15			2965	934		5164	1205			"		97.48	4.34			182	86
5	25			3895	930		6364	1200			"		93.10	4.38			178	86
6	35			4833	938		7573	1209			"		88.76	4.34			178	86
7	11 45			5767	934		8776	1203			"		84.40	4.36			178	86
8																		
9																		
10																		
11																		
12																		
13																		
Total	1 Hr					✓			✓	✓				26.16	0.00	0.00		
Average			933		933	3234		1203	3234	0.34	88.0	35.29					179	86

* Taken in discharge line from engine.
** Each observer will place his initials at the head of each column in which he records his observations.

Remarks

THE UNIVERSITY OF NEBRASKA
AGRICULTURAL ENGINEERING DEPARTMENT
COLLEGE OF AGRICULTURE, LINCOLN

Record of Official Tractor Brake Horsepower Test

Load (rated or other) Varying Date June 21, 1923 Test No. 151C
Name, model and rating of tractor Allis Chalmers 20-35
Serial No. Engine 366021 Serial No. Chassis 13620
Tractor equipment Fairbanks "6 SH" Mag, Kingston "L" Carb
Manufacturer Allis Chalmers Mfg Co, Milwaukee, Wis.
Tractor submitted for test by "
Tractor operated by Lamb Brake operated by Wallace
Brake used, Sprague. Brake arm 21 inches. Brake const. $(\frac{2nA}{33000}) = \frac{1}{3000}$
Description of belt used 8" Klingstite Rubber 4½" Hvy Thickness
Size of engine pulley (circumference at crown) 3.494 ft.
Size of brake pulley (circumference at crown) 2.605 ft.
Kind of fuel used Gasoline Fuel test No. Wt. per gal., lbs. 6.19
Kind and grade of oil used in engine Mob BB
Kind and grade of oil used in transmission " C
Humidity — per cent. Barometric pressure 28.65 inches mercury
Temperature of atmosphere 88 ° F.
Fuel consumption:
Total for test, gals. 6.359 Gals. per hour 3.179
Lbs. per H. P. hour 0.593 H. P. hours per gal. 6.94
Carburetor adjustments (degrees open)

Water consumption:
Total in radiator during test, gals.
Total in fuel mixture during test, gals.
Total used during test, gals.

We, the undersigned, certify that this sheet and the log sheet attached hereto give a true and correct record of official tractor test No. 151C

F. N. Lamb Operator Lew Wallace Observer
Operator Observer
Lew Wallace
Engineer-in-charge

Log of Official Tractor Brake Horse Power Test No. 151e

JUNE 21, 1928

	Reading No.	Time	Engine Crank Shaft Speed: Counter Reading	Engine Crank Shaft Speed: R. P. M.	Engine Belt Pulley Speed: Counter Reading	Engine Belt Pulley Speed: R. P. M.	Engine Belt Pulley Speed: Surface Speed Ft. per Min.	Brake Speed: Counter Reading	Brake Speed: R. P. M.	Brake Speed: Surface Speed Pulley Ft. per Min.	Belt Slippage % of Column (7)	Net Brake Load Pounds	B. H. P.	Fuel: Scale Reading Pounds	Fuel: Amount Used Pounds	Water Used: In Radiator Pounds	Water Used: In Fuel Mixture Pounds	Temperatures: *Cooling Fluid Deg. F.	Temperatures: Atmosphere Deg. F.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
**Observer					5767			8776								Lbs. per H.P. hr.	Gals. per H.P. hr.		
	1	1 40			6703	936		9983	1207			82.0		132.14			4.303	183	88
	2	50			7636	933		1186	1203					127.74	4.40		4.255	176	86
	3	2 00												123.26	4.48				
	4	Avg		934.5		934.5	3239		1205	3228	0.34	88.0	35.35			0.745	8.31	179.5	87
	5	2 00			8633	991		2479	1293			2.7		123.26				174	87
	6	10			9624	991		3764	1285					121.58	1.68		1.628	164	87
	7	20												119.90	1.68				
	8	Avg		994		994	3445		1289	3453	- ?	2.7	1.16		3.36	8.690	0.71	162	87
	9	2 20			0603	994		5028	1264			44.0		119.90					
	10	30			1586	983		6300	1272					116.92	2.98		2.889	174	86
	11	2 40												113.94	2.98			171	87
	12	Avg		981		981	3400		1264	3397	0.10	44.0	18.60		5.96	0.961	6.44		
	13																		
Total																			
Average																			

* Taken in discharge line from engine.
** Each observer will place his initials at the head of each column in which he records his observations.

Remarks

Log of Official Tractor Brake Horse Power Test No. 151e June 21, 1928.

	Reading No.	Time	Engine Crank Shaft Speed: Counter Reading	Engine Crank Shaft Speed: R. P. M.	Engine Belt Pulley Speed: Counter Reading	Engine Belt Pulley Speed: R. P. M.	Engine Belt Pulley Speed: Surface Speed Ft. per Min.	Brake Speed: Counter Reading	Brake Speed: R. P. M.	Brake Speed: Surface Speed Pulley Ft. per Min.	Belt Slippage % of Column (7)	Net Brake Load Pounds	B. H. P.	Fuel: Scale Reading Pounds	Fuel: Amount Used Pounds	Water Used: In Radiator Pounds	Water Used: In Fuel Mixture Pounds	Temperatures: *Cooling Fluid Deg. F.	Temperatures: Atmosphere Deg. F.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
**Observer					1586			6300								Lbs. H.P. per hr.	Gals. per H.P. hrs. per gal.		
1		2 40			2510	924		7491	1191			95.6		113.94					
2		50			3432	922		8679	1188			95.0		109.36	4.58		4.439	184	89
3		3 00											32.29	104.78	4.58		-	190	88
4		Avg.		923		923	3199		1189.5	3187	0.38	95.3	34.84		9.16	0.727	3.51	187	88.5
5		3 00			4993	1011		9987	1308			22.0		104.78					
6		10			5434	991		1271	1284					102.50	2.28		2.210	160	87
7		3 20												100.22	2.28			170	88
8		Avg.		1001		1001	3469		1296	3472	-?	22.0	9.50		4.56	1.440	4.30	165	87.5
9		3 26			6395	961		2511	1240			66.0		100.22					
10		30			7357	962		3753	1242					96.46	3.76		3.606	182	90
11		3 40												92.76	3.68			178	90
12		Avg		961.5		961.5	3333		1241	3325	0.24	66.0	27.20		7.44	0.818	7.57		
13																			
Total															39.36				
Average				966		966	3348		1248	3343	0.15	53.0	22.05					174	88

* Taken in discharge line from engine.
** Each observer will place his initials at the head of each column in which he records his observations.

Remarks

No water added.