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Larsen

January 1923

Test 98: Best 60, 40-60

Nebraska Tractor Test Lab

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UNIVERSITY OF NEBRASKA AGRICULTURAL ENGINEERING DEPARTMENT

AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 98

Dates of test: September 10th to September 14th, 1923

Name, model and rating of tractor: "Best 60" 40-60

Serial No. Engine: 3635

Serial No. Chassis A-1429

Manufacturer: C. L. Best Tractor Company, San Leandro, California

Tractor equipment used: Bosch ZR4 - 3449020 Magneto - Stromberg M4 - 1951417 Carb.

Style and dimensions of wheel lugs: "V" Shoes - Track Type

BRAKE HORSE POWER TESTS

H.P. Dev.	Crank Shaft Speed R.P.M.	Time of Test Min.	Fuel Consumption			Water Consump. Gals. Per Hour			Temp. Deg. F.		Average Humidity %	Height of Barometer Inches
			Kind of Fuel	Gals. @ Hour	H.P. @ Gal.	Cooling	In Fuel	Total	Cooling Fluid	Air		

RATED LOAD TEST

60.45	652	120	Gasol	8.374	7.22	0.00	0.00	0.00	189	91	40	28.89
Belt Slippage 1.65%												

VARYING LOAD TEST ***

60.42	650.5	10	Gasol									
61.13	649.5	10	Gasol									
1.04	698.5	10	Gasol									
16.36	696.0	10	Gasol	Average Belt Slippage 1.16%								
32.28	689.0	10	Gasol									
47.42	675.5	10	Gasol									
37.19	676.5	60	Gasol	6.019	6.18	0.00	0.00	0.00	157	55	66	29.00

MAXIMUM LOAD TEST

65.87	652	60	Gasol	8.926	7.37	2.00	0.00	2.00	210	92	40	28.90
Belt Slippage 1.75%												

HALF LOAD TEST

31.71	675	60	Gasol	4.613	6.87	0.00	0.00	0.00	146	65	66	29.03
Belt Slippage 0.9%												

* Taken in discharge line from engine

*** The last line is an average for the hour.

REMARKS: The gasoline used as fuel in this test weighed 6.20 pounds per gallon.

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C O R R E C T E D

Drawbar Horsepower Tests

H. P. Dev.	Draw Bar Full Lbs.	Speed Miles Per Hour	Crank Shaft Speed R. P. M.	Slip on Drive Wheels % ***	Fuel Consumption			Water Used Per Hour Gals	Temp. Deg. F.		Average Humidity %	Height of Barometer In Inches
					Kind Used	amt. Per Hour Gals	H.P. Hrs. Per Gal		Cooling Fluid	Air		

RATED LOAD, TEN HOURS

41.26	5969	2.59	668	0.70	Gasol	6.546	6.30	0.076	162	69	39	28.94
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MAXIMUM LOAD TEST

54.85	8430	2.44	650	1.50	Gasol	- -	Not Recorded	- -	170	68	44	29.05
56.78	11295	1.885	657.5	2.56	Gasol	- -	Not Recorded	- -	170	68	44	29.05
51.85	5800	3.35	603	0.87	Gasol	- -	Not Recorded	- -	170	68	44	29.05

* Taken in discharge line from engine.

*** The distance advanced by the tractor without load, on level earth, for one complete revolution of the tracks, was used as a basis for computing track slippage.

REMARKS: The rated load test and the first maximum test were made in second gear. The second maximum test was run in low gear. The third maximum test was run in high gear.

OIL CONSUMPTION:

During the complete test consisting of about 34 hours running the following oil was used. For the engine, 6 gallons of Mobiloil "A" to fill crank case. None was added during the test. For the transmission, none.

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REPAIRS AND ADJUSTMENTS

During this test there were no adjustments or repairs necessary.

At the end of the test the tractor was in good running order and there were no indications of undue wear nor of any weakness which might require early repair.

BRIEF SPECIFICATIONS

"Best 60"

Motor: Own, four cylinder, vertical, valve-in-head. Bore - 6-1/2" stroke - 8-1/2". Rated speed 650 r.p.m. Own governor,

Chassis Track type, disc clutch, Rated speeds: first - 1-7/8 miles per hour, second - 2-5/8 miles per hour, third - 3.6 miles per hour.

Total weight - 18580 pounds.

REMARKS

In the advertising literature submitted with the application for test of this tractor, we find claims and statements which cannot be directly compared with the results of this test as reported above. It is our opinion that none of these are excessive or unreasonable.

We, the undersigned, certify that above is a true and correct report of official tractor test No. 98.

E. E. Brackett
Engineer in Charge

Oscar W. Sjogren

C. W. Smith

Fred R. Nohavec

Board of Tractor Test Engineers