

TABLE 16.—LABORATORY SEMI-CHEMICAL PULPING TESTS: YIELDS AND COOKING DATA.

Species.	Shipment No.	Cook No.	Date.	Cooking Data.														Strength Data (Tested at 65 per Cent. Relative Humidity and 72° F.).													
				Wood used.		Impregnating-liquor.				Penetration.		Cooking-liquor per 100 lb. Bone-dry Chips.		Steam.			Rod-mill Data.		Thickmess.	Mullen Test.	Strength Factor.	Average Stretch.	Average Breaking-length.	Average Double Folds.	Average Rime-dort						
						Before Penetration.		After Penetration.		Duration.	Pressure.															Temperature.					
				Moist Weight.	Oven-dry Weight.	Gal.	Grm./litre.	*NaHCO ₃ .	*Na ₂ SO ₃ .			Concentration.	Volume.	*NaHCO ₃ .	*Na ₂ SO ₃ .	Deg. C.	lb./sq. in.	lb.	lb.	Deg. C.	lb./sq. in.	Per Cent.	Min.	Max.	Per Cent.		H.p./ton, 24 hrs.	lb.	0.001 in.	lb./sq. in.	Pts./ream.
Tawa	1,210	2,218	Aug. 9	129.4	100.0	62.4	91.0	16.5	66.0	71.6	8.9	120	100	100-133	7.9	3.7	160	92	30	150	83.20	10.3	90	53.3	76.0	15.5	13	0.18	..	0.47	
Tawa	2,219	Aug. 11	120.0	99.5	60.6	118.5	13.3	54.4	108.5	10.7	90	100	100	11.4	2.0	170	125	30	120	81.40	6.7	210	145.6	115.0	8.8	92	0.80	4.30	6.705	36	0.89
Tawa	2,220	Aug. 17	125.5	104.2	57.8	123.0	14.4	54.1	104.2	11.9	120	100	86-103	17.3	2.2	170	138	30	240	70.00	6.3	180	..	54.7	3.9	44	0.81	4.936	197	331	1.21
Tawa	2,247	Oct. 25	158.4	127.7	51.5	106.8	36.5	42.8	94.8	29.7	60	100	102	12.3	5.2	170	115	15	120	81.60	6.0	8.0 lb./hr.†	32.0	2.5	10	0.31	1.262	955	7	0.82	
Tawa	2,248	Oct. 27	167.8	135.7	48.5	117.8	39.2	42.4	102.7	31.7	75	85	86-124	9.8	3.1	170	135	30	165	72.70	10.0	180	121.4	69.0	5.7	56	0.80	2.82	6.105	90	0.80

* Expressed as Na₂CO₃. † Continuous rod-mill run; once through the mill. ‡ Continuous rod-mill run; twice through the mill. § Complete test not made because of evident weakness of sheet. Brushed out in beater, and small amounts of size, alum, and clay added. || Alum added; no size. ** Used for newsprint run No. 41. No strength tests made on pulp.

TABLE 17.—LABORATORY SULPHATE, SODA, AND SEMI-CHEMICAL PULPING TESTS: PULP-STRENGTH DATA.

By the Ball-mill Method.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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