

TRIAL of LOCOMOTIVES between Invercargill and Gore with NIGHTCAPS COAL.

Particulars.	TYPE OF ENGINE.						
	Baldwin. Class Q.	Glasgow. Class U.C.	Glasgow. Class U.A.	Baldwin. Class U.B. First importation.	Baldwin. Class U.B. Second importation.	N.Z.R. Class W.A.	Baldwin. Class W.D.
Size of cylinders	16 by 22 in.	16 by 22 in.	16 by 20 in.	16 by 20 in.	16 by 20 in.	14 by 20 in.	14 by 20 in.
Clearance of cylinders	1,689 sq. ft.	972	972	1,320	1,320	740	845
Area of heating-surface	188	187	187	177	177	142	177
Area of grate-surface	2	1½	1½	2	2	1½	1½
Number of tubes	4	4	4	4	4	3½	3½
Outside diameter of tubes	68-875	61-25	61-25	57-25	60-4	37-25	43-75
Size of exhaust nozzle	31	31	28	28	28	26	26
Weight of engine in working-order	80	80	80	80	80	80	80
Number of vehicles	24,880	24,880	22,472	22,472	22,472	20,564	20,564
Length of route	30,390	29,780	27,372	27,052	27,304	23,544	24,064
Number of ton miles of train-load	850,920	833,840	766,416	757,456	764,512	659,232	673,792
Weight of train in working-order, including engine, tender, and freight	696,640	696,640	629,216	629,216	629,216	575,792	575,792
Weight of train in working-order, excluding engine and tender							
<i>Locomotive Tests: General Results—</i>							
<i>Running of Train—</i>							
Invercargill	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.	a.m.
Woodlands	8.40	8.41	8.35	8.40	8.40	8.40	8.40
Morton Mains	9.17	9.17	9.13	9.17	9.18	9.18	9.18
Morton Mains	9.33	9.35	9.29	9.33	9.34	9.34	9.33
Edendale	9.43	9.45	9.38	9.46	9.47	9.46	9.43
Edendale	10.3	10.7	9.59	10.6	10.9	10.6	10.4
Edendale	10.9	10.12	10.5	10.11	10.14	10.12	10.9
Mataura	10.36	10.37	10.31	10.38	10.39	10.38	10.35
Gore	10.55	10.56	10.52	10.58	10.58	10.55	10.55
Gore	11.50	11.50	11.50	11.50	11.51	11.50	11.50
Mataura	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.
Mataura	12.14	12.13	12.13	12.14	12.14	12.13	12.13
Mataura	12.26	12.26	12.27	12.26	12.27	12.25	12.25
Edendale	12.55	12.55	12.55	12.56	12.56	12.55	12.55
Edendale	1.0	1.0	1.0	1.1	1.0	1.0	1.0
Woodlands	1.42	1.41	1.40	1.41	1.44	1.42	1.40
Invercargill	2.15	2.15	2.15	2.15	2.17	2.15	2.15
Total quantity of water used	2,300	2,323-3	2,397-3	2,317-3	2,170	1,903-1	2,090
Waste of water at injectors	6-1	8-9	7-1	7-8	6-75	8	4-5
Water used, less waste at injectors	2,293-9	2,314-4	2,390-2	2,309-5	2,163-25	1,895-1	2,085-5
Water evaporated per pound of coal	4-97	4-91	4-82	4-71	4-95	5-18	4-73
Water used per ton of train per 100 miles	92-20	93-02	106-36	102-77	96-26	92-16	101-41
Water used per square foot of heating-surface per hour running-time	3-38	5-76	5-93	4-23	3-96	6-19	5-97