

BREWING LABORATORY

OLAND & SON LTD.
HALIFAX, N. S.

A. KEITH & SON LTD.
////// HALIFAX, N. S. ////



PLANT CONTROL

KEITH HALL
65 Hollis St.

REPORT OF ANALYSIS

REPORT NO.

2

DATE

April 14 /53

SAMPLE OF

Ale

MARKED

U.M. 43-1020 (Brews: 424, 426) ; Montoalm (Brews: 425 , 426)

HAS BEEN EXAMINED WITH THE FOLLOWING RESULTS:

	<u>Brew: 424</u>	<u>Brew: 425</u>	<u>Brew: 426</u>	<u>Brew: 427</u>
Color	5.2	5.1	4.4	5.1
Clarity	Brilliant	Brilliant	Brilliant	Brilliant
Specific Gravity	1.00835	1.00933	1.00866	1.00895
Apparent Extract	2.14	2.39	2.22	2.30
Alcohol by Weight	4.04	4.14	3.83	3.92
Alcohol by Volume	5.08	5.19	4.80	4.92
Real Extract	4.22	4.22	3.91	3.91
Original Extract	12.05	12.12	11.36	11.53
pH	4.0	4.1	4.1	4.1
Acidity (as Lactic Acid)	0.192	0.221	0.230	0.245
Real Degree of Fermentation	64.98	65.18	65.12	66.09
Apparent Degree of Fermentation	82.24	80.36	80.20	74.53
Reducing Sugar as Maltose	0.63	1.06	0.80	0.84
Total Protein	0.42	0.44	0.43	0.45
Carbon Dioxide	2.43	2.55	2.37	2.62

TO

SUBMITTED BY PG

BREWING LABORATORY

OLAND & SON LTD.
HALIFAX, N. S.

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PLANT CONTROL

KEITH HALL
65 Hollis St.

REPORT OF ANALYSIS

REPORT NO. 1

DATE April 14 / 53

SAMPLE OF Wort

MARKED U.M. 43-1020 (Brews: 424, 426); Montcalm (Brews: 425, 427)

HAS BEEN EXAMINED WITH THE FOLLOWING RESULTS:

	<u>Brew: 424</u> <i>43-1020</i>	<u>Brew: 425</u> <i>Mont</i>	<u>Brew: 426</u> <i>43-1020</i>	<u>Brew: 427</u> <i>MONT.</i>
Specific Gravity	1.04958	1.05113	1.04993	1.05031
Degree Plato	12.25	12.65	12.36	12.45
Wort Clarity	Cloudy	Sl. Cloudy	Cloudy	Cloudy
Wort Color	5.0	3.9	5.2	5.5
Total Wort Nitrogen	0.64	0.66	0.67	0.68
pH	5.2	5.1	5.2	5.2
Reducing Sugar	8.2	8.5	8.2	8.2

TO

SUBMITTED BY PG

EQUIPMENT LIST FOR BREWERY LABORATORY

MALT ANALYSIS EQUIPMENT, excluding glassware and miscellaneous

	Catalog No.*
Mashing apparatus and nickel beakers for 4 mashes (Weber Bros., Chicago)	
Laboratory Mill, (similar to):	21402
Malt kernel cutter, (Seed Trade Reporting Bureau Inc.)	49
100 Kernel Counter: (may be secured through Schwarz Laboratories, Inc.)	
Sieves, official, (No. 10, 14, 18, 60, 100)	30932
Soxhlets, medium (4)	22650
Spot Plates (3)	29844
Kjeldahls; 12 - 800 cc.	28890
Moisture Dishes (Aluminum A.O.C.S.) (12) (New Orleans)	
Alundum crucibles (12)	22784 D
Fat extraction flasks, medium (12)	22784 B
Richmond Grader, minus sieves, with four frames and collecting pan.	
Sieves for Malt Grader (4)	
6 place Kjeldahl digestion & distillation (Labconco)	

GENERAL EQUIPMENT for CHEMICAL and BIOLOGICAL WORK

Major Items:

Analytical Balance, chainomatic	16817
Weights, up to 100 gm.	17160
Coarse Balance	16981
Weights to 1000 gm.	17213
Incubator	25475

*Catalog numbers refer to Eimer & Amend unless otherwise specified.

Steam sterilizer, autoclave, 10 qts.		16600
pH Meter, Beckmann	(Will Corp.)	9680
Water Bath, steam		17362
CO ₂ and air, Amer. Can type apparatus		
Vacuum Pump; Pressovac		30210
Small Water Still, 2 liter	(Scientific Glass Apparatus Company);	J-1240
Oven and Sterilizer		29603
Stirrers (2)		31397
Stirrer (1)		31399
Constant Temp Bath	(Sargent)	10437
Termoswitch, Fenwal Hex Head Type, with calibrated dial and knob. (Fenwal Inc., Ashland, Mass.)	(2)	732RH
Heater-Aminco Lolag 500atts		
Bath, home made for rough const. temp.		
4 hot plates, without clamps	(Fisher)	11-467

SMALLER TYPE EQUIPMENT INCLUDING GLASSWARE:

█ Cork borers (15 in set)		21213
sharpener		21216
Ring supports:		
12-36 in. long		31879
6-36 in. long		31883
Rings: 6-3 in; 6-4 in.; 3-8.:		30618
Clamps:	1 dozen	20243
	1 dozen	20207
	1 dozen	20233
Mortar and pestles:		
Porcelain, 1-150 cc. capacity & 1-300 cc.		28671
Iron 1-1 pint size		28684

	Catalog No.*
Triangles; 2 dozen	32642
Wire guaze, 6 sq. ft., 80 mesh.	33082
Tripods 6 - 9 in. ht.	32660
Pycnometers, Boot type; 2-50 cc.	18914
Petri Dishes; 2 dozen (10 mm. depth)	21543
Beakers: 12-400 cc.; 6-150 cc.; 6-50 cc.; 2-800 cc. 6-250 cc.	17614
Burettes:	
regular (3)	19155
continuous (3)	19153
Burners: (12)	19266
Meeker Burner (2)	19309
Flo rence Flasks:	
12 - 1000 cc.	23356
6 - 250 cc.	23352
Condensers, Liebig (6)	21026
Gooch crucibles; 12-25 cc.	23003
Erlenmeyers: 6-1000 cc.; 12-500 cc.; 6-100 cc.	23382
Volumetrics: 1-2000 cc.; 3-1000 cc.; 3-500 cc. 6-250 cc.; 6-200 cc.; 24-100 cc. Special Gottlieb Greiner)	23453
Graduates: 2-500 cc.; 6-100 cc.; 3-25 cc.; 2-10 cc.	21649
Dessicators; 1-6 in.; 1-8 in.; and plates	21850 21870
Funnels: 6-2 in.; 6-4 in.; 6-8 in.;	23620
Evaporating Dishes, porcelain: 6-60 cc.; 6-100 cc.	21968
Thermometers:	
(2) 0-50 Degrees C. grad. in .2 degrees	32191
(3) -10 to 110 degrees C., grad. in 1 degrees	32149
(2) - 5 to 360 degrees C., grad	32149
(2) 0-300 degrees Fahrenheit	32155

	Catalog No.*
Casseroles, (3) No. 5 (600 c.c.)	19656
Separatory funnels: 4-125 cc.; 4-250 cc.	23684
Buchner funnels; 2-126 mm. inside diameter	23082
Suction flasks; 2-1000 cc.	23070
Balling saccharometers 3 (0-24 degrees Balling with temperature correction);	25362
Distilling traps; (6) Special, as for Schwarz Labs. (Gottlieb Greiner)	
Distilling side arm flasks; 4-125 cc.; 4-250 cc.	22442
Aspirators; 2 medium with coupling:	30134 30138
Pipets:	
2-100 cc.; 2-50 cc.; 2-25 cc.; 2-20 cc.; 2-10 cc. 2-5 cc.	29760
3- 3-10 cc. grad. in .1, 2-2 cc. grad. in .1 2-1 cc. grad. in .1	29764
Rubber tubing:	
50 ft.; 1/4 in. inside diam., 1/8 in. wall	30683
50 ft.; 5/32 in. inside diam., 3/64 in. wall	30691
Filter Paper:	
No. 41, 6 packages, 11cm.	23222
No. 42, 6 packages, 11cm.	23224
plaited, 6 packages	23206
(Eaton Dikeman,) 32 cm., 3 packages	609
Moisture tubes (Dean and Stark) (3)	219018 A
Triangular file, 3-6 in.	22884
Bottles, 2 doz. 500 cc.	18676
1 doz. 6 oz.	18665
Fischer burette supports (2)	31915
Wingtops (3)	19412

Test tube holders; (3)		20262
Pinch-cock clamps	(6) (6)	20291 20296
Crucible tongs; 1-9 in., 1-12 in.		32553
Spatula; 1-4 in., 1-6 in.		31049
Forceps (2)		23599
Test tubes; 2 doz. (200 by 29 mm); 2 doz. (150 by 25 mm)		32124
3 doz. (6 by 3/4 in.)		32120
Culture tubes; 1 doz. (6 by 5/8 in); 2 doz. (3 by 3/8 in)		21590
Test tube basket; (2) (10 by 10 by 10)		32145
Test tube racks (2)		31975
Watch glasses: 2 doz. 2 in.; 1 doz. 6 in.; 1 doz. 10 in.		32850
Slides:	1 gross	28305
	1 dozen	28320
Glass rings; 1 doz. 18 mm		28342
Cover glasses; 2 oz. 18 mm		28293
Crucible holders (3)		23050
Weighing dish (2)		17125
Rubber policeman 1/2 doz. (3/16 in.)		30735
Glass rods; 3-4 mm. 1 lb.		
5-6 mm. 1 lb.		
9-13 mm. 1 lb.		24560
Glass tubing; 1 lb. each of 9 mm outside diam. 12 cm. outside diam., 6 mm. outside diameter		24570
Rubber stoppers;		
00-10 1/8 lb. of each size		30639
00-10 1/8 lb. of each size		30641
00-10 1/8 lb. of each size		30643
Cork stoppers: 1 gross		21192

CHEMICALS

<u>QUANTITY</u>	<u>DESCRIPTION</u>
5 pounds	Acetic acid (Glacial CP ACS 99.5%)
6 pounds	Hydrochloric acid (conc. CP SP.Gr. 1.19 As free)
7 pounds	Nitric acid (CP sp gr. 1.42)
9 pounds	Sulphuric acid (CP sp. gr 1.84)
9 pounds	Sulphuric acid (technical)
2 pounds	Alcohol (methyl CP)
1 gallon	Alcohol (ethyl 95%)
4 pounds	Ammonium hydroxide (CP sp. gr. 0.90)
1/4 pound	Ammonium molybdate (CP)
1 pound	Sodium sulphate (anhydrous CP)
5 pounds	Copper sulphate (crystals cupric sulphate ACS spec.)
5 pounds	Pumice stone (pea size)
1 pound	Barium chloride (CP ACS spec.)
1 pound	Sodium carbonate (sulphur free CP ACS)
1 pound	Magnesium oxide (light calcined USP)
1/4 pound	Silver nitrate (ACS spec.)
1 ounce	Hydroxylamine hydrochloride (CP)
1 gram	Ortho-Phenanthroline (CP)
1 pound	Ammonium oxalate (CP)
1 pound	Potassium permanganate (CP)
1 pound	Potassium chromate (CP)
1 pound	Oxalic acid (CP crystals)
1 pound	Potassium nitrate (pure recrystallized CP ACS)
1/4 pound	Potassium thiocyanate (CP)

CHEMICALS

<u>QUANTITY</u>	<u>DESCRIPTION</u>
1 pound	Ferrous ammonium sulphate ($\text{FeSO}_4(\text{NH}_4)_2\text{SO}_4 \cdot 6\text{H}_2\text{O}$) (CP)
1 pound	Sodium ammonium phosphate ($\text{NH}_4\text{NaHPO}_4 \cdot 4\text{H}_2\text{O}$) (CP)
1 ounce	Methylene Blue (USP) (medicinal)
1 pound	Soluble starch (Lintner) for diastatic power
1 pound	Castile soap (pure pwd.) (USP)
1 ounce	Silver sulphate (nitrate free) (CP)
1 pound	Sodium acetate ($\text{CH}_3\text{COONa} \cdot 3\text{H}_2\text{O}$) (CP) (ACS)
1 pound	Calcium carbonate (calcite) (CP) (ACS)
1 pound	Lactose broth (dehydrated)
5 pounds	Rochelle salts (USP pwd.)
1 gallon	Petroleum ether (Skelly-Solve F)
1 pound	Ether, ethyl (USP)
1/4 pound	Potassium Iodide (CP) cryst.
1 ounce	Iodine (crystals) (CP)
1 ounce	Iodine (crystals) (CP)
1 pound	Lead acetate (USP) (pwd.)
5 pounds	Toluene (purified toluol)
5 pounds	Sodium hydroxide (technical - flakes)
5 pounds	Sodium hydroxide (CP) (ACS) sticks
1 pound	Agar-Agar USP pwd.
1 pound	Nutrient agar (dehydrated)
1/4 pound	Phenolphthlein (CP) (indicator)
10 grams	Cochineal (CP)
10 grams	Methyl orange (CP)
250 ml.	Brom-phenol blue indicator solution
1 pound	Potassium dichromate (CP) (cryst. tech.)
1/4 pound	Potassium biphthalate (CP) primary standard

QUOTATION FROM

WILL CORPORATION



LABORATORY APPARATUS AND CHEMICALS FOR
CHEMICAL, BIOLOGICAL, METALLURGICAL AND CLINICAL LABORATORIES

594-6 BROADWAY
NEW YORK 12, N. Y.
TELEPHONE WORTH 4-5344

To Oland & Son, Ltd.
Agricola, Sullivan and Russell Sts.
Halifax, N. S., Canada

Date Nov. 20, 1946

For the attention of:
Malvin J. Mayer

In answer to your inquiry of 11/11/46, No. _____, we are glad to submit the following quotation of current prices, extensions being inclusive of boxing and packing, F.O.B., New York City

Our Terms are NET 30 DAYS
and prices are subject to change
without notice.

WILL CORPORATION

When ordering please refer to
Quotation No. C-2626

Per William A. Inley
Asst. Treas.

Item No.	Will Cat. No.	Your Cat. Reference	Quantity	DESCRIPTION	Extension
1.		<u>E&A</u>		Washing apparatus and nickel beakers for 4 mashes	No Bid
2.		21402	1	laboratory Mill, (similar to) We offer Will 6302	11 00
3.		49	1	Malt Kernel cutter, (Seed trade Reporting Bureau Inc.)	No Bid
4.			100	Kernel counter; (may be secured through Schwarz laboratories, Inc.)	No Bid
5.	15222	30932	1 ea.	Sieves, official, (No. 10, 16, 18, 60, 100)	33 90
6.	7377	22650	4	Soxhlets medium 250 ml	20 00
7.	13897	29844	3	spot plates 12 depressions	92
8.	8097	28890	12	Kjeldahls; 800 cc	63
9.	6696		12	Moisture dishes (Aluminum A.O.C.S.) (New Orleans)	10 80
10.		22784	12	Alundum crucibles We offer Will 6023 25 ml 1 1/2" high @ .58 each	
11.		22784	12	Fat extraction flasks, medium	No Bid
12.				Richmond grader, minus sieves, with four frames and collecting pan	No Bid
13.			4	Sieves for Malt Grader	No Bid

WILL CORPORATION

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14.		6		place Kjeldahl digestion & distillation (Labconco) see attached literature.	362.50
15.	1754	16817	1	Analytical balance, chainomatic	264.00
16.	2092	17160	1	Weights, up to 100 gm.	38.00
17.	1942	16981	1	Coarse balance	70.00
18.	2162	17213	1	Weights to 1000 gm.	14.00
19.	9905	25475	1	incubator A-3	181.50
20.	15792	16600	10	qts. Stam sterilizer, autoclave 10"x17"	310.00
21.		9680	1	pH meter, Beckman	225.00
22.	17603	17362	1	water bath, steam 2 hole	40.00
23.				CO ₂ and air, Amer. Can type apparatus	No Bid
24.	14545	30210	1	Vacuum pump; pressovac	75.00
25.		J-1240	1	Small Water Still, 2 liter We offer Will 7147 Electric specify 110 volt or 220 volt @ 69.00	
26.	13451	29603	1	Oven and sterilizer Model B0 15/1	165.00
27.	15940	31397	2	Stirrers	17.60
28.	15953	31399	1	Stirrer	12.50
29.		S-10437	1	Constant temp. bath We offer Will 17587 @ 115.50	
30.		732RH	2	Termoswitch, Fenwal Hex head type, with calibrated dial and knob.	20.00
31.				Heater-Aminco Lolag 500atts	No Bid
32.				Bath, home made for rough const. temp.	No Bid
33.			4	hot plates, without clamps We offer Will 20002 "Kamatik" @ 10.00 each	
34.	5877	21213		cork borers (15 in set)	3.50
35.	5894	21216	1	sharpener	2.40
36.	16092	31879	12	36" long extra large	24.00
37.	16102	31883	6	36" long	19.20

WILL CORPORATION

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38.	14932	30618	6	rings 3"	2.40
	"	"	6	" 4"	2.70
	"	"	3	" 7"	2.70
39.	49670	20243	1 doz.	clamps	3.96
40.	4948	20207	1 doz.	" small	7.20
41.	5000R	20233	1 doz.	"	12.00
42.	12792	28671	1	Mortar and pestles 150 cc 135 ml	.79
43.	"	"	1	ditto 1-300 cc 225 ml	1.20
44.			1	1 pint size iron discontinued	
45.	16937	32642	2 doz.	Triangles specify size 1" ± 1/2" 2"	5.40
46.		33082		Wire gauze, 6 sq. ft. 80 mesh	23.10
47.	16967	32660	6	tripods 9" ht.	4.50
48.	3210	18914	2	pycnometers, Boot type 50 cc	12.00
49.	6329	21543	2 doz.	petri dishes; 100 x 10 mm depth	10.08
50.	2267	17614	12	Beakers 400 cc	3.12
	"	"	6	" 150 cc	1.20
	"	"	6	" 50 cc	1.26
	"	"	2	" 800 cc	.78
	"	"	6	" 250 cc	1.14
51.	19155		3	Burettes regular discontinued We offer 3517 exax 25 ml or 50 ml @1.93 each	
52.	19153		3	Burettes continuous specify size 25 ml or 50 ml @ 1.39 each 3507 100 ml @ 2.15 each	
53.	3712	19266	12	Burners	12.96
54.	3787	19309	2	Meeker Burner	4.50
55.	7897	23356	12	Florence Flasks 1000 cc	9.60
56.	7887	23352	6	" " 250 cc	1.80
57.	5763	21026	6	Condensers, Liebig 12"	21.60

WILL CORPORATION

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58.	5992	23003	12	Gooch crucibles	25 cc	6.36
59.	7927	23382	6	Erlenmeyers	1000 cc	3.30
60.	"	"	12	"	500 cc	4.10
61.	"	"	6	"	100 cc	1.44
62.	8142	23453	1	Volumetrics	2000 cc	1.65
	"	"	3	"	1000 cc	3.30
	"	"	3	"	500 cc	2.64
	"	"	6	"	250 cc	3.96
	"	"	6	"	200 cc	3.96
	"	"	24	"	100 cc	13.20
63.	6467	21649	2	Graduates	500 cc	2.80
	"	"	6	"	100 cc	4.20
	"	"	3	"	25 cc	1.65
	"	"	2	"	10 cc	.90
64.	6527	21850	1	Desicators	6"	4.75
	"	"	1	"	8"	8.50
65.	6577	21870	1	Plate	142 mm	1.80
	"	"	1	plate	190 mm	2.82
66.	8462	23620	6	Funnels	2"	.74
	"	"	6	"	4"	2.40
	"	"	6	"	8"	9.60
67.	6647	21966	6	evaporating dishes, porcelain	60 cc #00	1.44
	"	"	6	"	" 120 cc #2	2.82
68.		32191	2	Thermometers 0-50 degrees C. Grad. in 2 degrees with Bureau of standards delivery 6-8 months We offer Will 1647 2 to 80° C in 1/5 ⁵ w/o Bureau of standards certificate @ 6.00		
69.	16627sp	32149	3	-10 to 110 degrees C., grad. in 1 degrees		3.30
70.	"	"	2	-5 to 360 degrees C., grad. in 1 degrees		3.40

WILL CORPORATION

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71.	16632SP	32155	2	thermometers 0-300 degrees Fahrenheit	2.40
72.	4377	19656	3	Casseroles No. 5 600 cc	6.30
73.	8582	23684	4	Separatory funnels 125 cc	7.20
	"	"	4	" " 250 cc	8.00
74.	8497	23082	2	Buchner funnels 126 mm inside diam. #4	9.60
75.	8077	23070	2	Suction flasks 1000 cc	2.00
76.		25362	3	Balling saccharometers 0-24 degrees balling with temperature correction	No Bid
77.	7972	22442	6	distilling traps; special, as for Schwarz Lab.	No Bid
78.	7972	22442	4	distilling side arm flasks 125 cc	2.20
	"	"	4	" " " " 250 cc	2.72
79.		30134	2	Aspirators medium	3.00
80.	7852	30138	2	with coupling 1/4"	.50
81.	13740	29760	2	pipettes 100 cc	2.20
	"	"	2	" 50 cc	1.44
	"	"	2	" 25 cc	1.10
	"	"	2	" 20 cc	1.10
	"	"	2	" 10 cc	.88
	"	"	2	" 5 cc	.78
82.	13762	29764	3	pipettes 10 cc grad. in 1	1.35
	"	"	2	" 2 cc grad. in .1	.80
	"	"	2	" 1 cc grad. in .1	.70
83.	15037	30683		50 ft. rubber tubing 1/4 in. inside diam 1/8 in. wall	7.50
84.	15032	30691		50 ft. " " 5/32 in. " " 3/64 " "	7.00
85.	7767	23222	6	pkgs. filter paper No. 41 11 cm	10.50
86.	7772	23224	6	pkgs. filter paper No. 42 11 cm	13.50
87.	7807	23206	6	pkgs. plaited filter paper	11.70
88.		609	3	pkgs. Eaton Dikeman 32 cm	7.20

WILL CORPORATION

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89.	7270	29018-B	3	Moisture tubes (Dean and Stark)	7.05
90.	7562	22884	3	Triangular file 6"	.60
91.	2992	18676	2 doz.	bottles 500 cc	15.30
92.	10273	18665	1 doz.	" 6 oz. 8 oz. We offer	
93.		31915	2	Fischer burette supports We offer 16140 iron base @ 2.40 each	
94.	3877	19412	3	Wingtops 7/16	.36
95.	5022	20262	3	Test tube holders	.36
96.	5072	20291	6	Pinch-cock clamps small 1.50 large 1.80	
97.	5067	20296	6	ditto discontinued	
98.	16842	32553	1	Crucible tongs 9"	3.00
	"	"	1	" " 12"	3.00
99.	15387	31049	1	Spatula 4"	.80
	"	"	1	" 6"	1.00
100.	8403	23599	2	forceps	1.50
101.	16527	32124	2 doz.	test tubes 200 by 29 mm	6.50
	"	"	2 doz.	" " 150 by 25 mm	2.40
102.	16522	32120	3 doz.	" " 6 by 3/4 in.	1.20
103.	16532	21590	1 doz.	culture tubes 150 x 12 mm	.42
	"	"	2 doz.	" " 75 x 10 mm	.60
104.	16602	32145	2	test tube basket 10 by 10 by 10 We offer 6 x 6 x 6 @ 2.40 each	
105.	16277	31975	2	test tube racks	1.40
106.	17372	32850	2 doz.	wtach glasses 2"	.90
	"	"	1 doz.	" " 6"	1.60
	"	"	1 doz.	" " 10"	5.40
107.	11762	28305	1 gross	slides	1.50
108.	11793	28320	1 doz.	"	.96
109.	11827	28342	1 doz.	glass rings 18 mm	2.40

WILL CORPORATION

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110.	11737	28293	2 oz.	cover glasses 18 mm	7.00
111.	6107	23050	3	crucible holders	1.50
112.		17125	2	weighing dish 3" diam 1 1/2" deep	10.50
113.	14993	30735	1/2 doz.	rubber policeman 1/2 doz. 3/16 in.	.60
114.	9397		1 lb.	glass rods 3-4 mm	1.40
	"		1 lb.	" " 506 mm	1.20
	"	24560.	1 lb.	" " 9-10-12 mm	1.80
115.	9372	24570	1 lb.	glass tubing 9 mm outside diam.	.45
	"	"	1 lb.	ditto 12 cm " "	.45
	"	"	1 lb.	ditto 6 mm " "	.60
116.	15012	30639	1/8 lb.	rubber stoppers 00-10 of each size	lot .15
117.	15013	30641	1/8 lb.	" " " " "	lot .15
118.	15014	30643	1/8 lb.	ditto	lot .15
119.	5827	21192	1 gross	cork stoppers 1 bag of 100	2.25

Sorry we do not quote chemicals for export.

Majority of the above items are from stock.
 Balance from 30 to 60 days.
 Except Kjeldahl unit. - 90 to 120 days.

Prices quoted are current to date but are necessarily subject to any manufacturers' price changes occurring before shipment is made.

EQUIPMENT LIST FOR BREWERY LABORATORY

MALT ANALYSIS EQUIPMENT, excluding glassware and miscellaneous

Catalog No. +

— Mashing apparatus and nickel beakers for 4 mashes (Weber Bros., Chicago)	
Laboratory Mill, (similar to):	21402
Malt kernel cutter, (Seed Trade Reporting Bureau Inc.)	49
— 100 Kernel Counter: (may be secured through Schwarz Laboratories, Inc.)	
Sieves, official, (No. 10, 14, 18, 60, 100)	30932
Soxhlets, medium (4)	22650
Spot Plates (3)	29844
Kjeldahls; 12 - 800 cc.	28890
— Moisture Dishes (Aluminum A.O.C.S.) (12) (New Orleans)	
Alundum crucibles (12)	22784 D
Fat extraction flasks, medium (12)	22784 B
Richmond Grader, minus sieves, with four frames and collecting pan	
Sieves for Malt Grader (4)	
6 place Kjeldahl digestion & distillation (Labconco)	

GENERAL EQUIPMENT for CHEMICAL and BIOLOGICAL WORK

Major Items:

Analytical Balance, chainomatic	16817
Weights, up to 100 gm.	17160
Coarse Balance	16981
Weights to 1000 gm.	17213
Incubator	25475

* Catalog numbers refer to Eimer & Amend unless otherwise specified.

	Catalog No.
Steam sterilizer, autoclave, 10 qts.	16600
— pH Meter, Beckmann (Will Corp.)	9680
Water Bath, steam	17362
— CO ₂ and air, Amer. Can type apparatus	
Vacuum Pump; Pressovac	30210
Small Water Still, 2 liter (Scientific Glass Apparatus Company);	J-1240
Oven and Sterilizer	29603
Stirrers (2)	31397
Stirrer (1)	31399
Constant Temp Bath (Sargent)	10437
— Termoswitch, Fenwal Hex Head Type, with calibrated dial and knob. (Fenwal Inc., Ashland, Mass.) (2)	732RH
Heater-Aminco Lolag 500atts	
Bath, home made for rough const. temp.	
4 hot plates, without clamps (Fisher)	11-467
<u>SMALLER TYPE EQUIPMENT INCLUDING GLASSWARE:</u>	
Cork borers (15 in set)	21213
sharpener	21216
Ring supports:	
12-36 in. long	31879
6-36 in. long	31883
Rings: 6-3 in; 6-4 in.; 3-8.:	30618
Clamps:	
1 dozen	20243
1 dozen	20207
1 dozen	20233
Mortar and pestles:	
Porcelain, 1-150 cc. capacity & 1-300 cc.	28671
Iron 1-1 pint size	28684

	Catalog No.
Triangles; 2 dozen	32642
Wire guaze, 6 sq. ft., 80 mesh.	33082
Tripods 6 - 9 in. ht.	32660
Pycnometers, Boot type; 2-50 cc.	18914
Petri Dishes; 2 dozen (10 mm. depth)	21543
Beakers: 12-400 cc.; 6-150 cc.; 6-50 cc.; 2-800 cc. 6-250 cc.	17614
Burettes:	
regular (3)	19155
continuous (3)	19153
Burners: (12/	19266
Meeker Burner (2)	19309
Florence Flasks:	
12 - 1000 cc.	23356
6 - 250 cc.	23352
Condensers, Liebig (6)	21026
Gooch crucibles; 12-25 cc.	23003
Erlenmeyers: 6-1000 cc.; 12-500 cc.; 6-100 cc.	23382
Volumetrics: 1-2000 cc.; 3-1000 cc.; 3-500 cc. 6-250 cc.; 6-200 cc.; 24-100 cc. Special Gottlieb Greiner)	23453
Graduates: 2-500 cc.; 6-100 cc.; 3-25 cc.; 2-10cc.	21649
Dessicators; 1-6 in.; 1-8 in.; and plates	21850 21870
Funnels: 6-2 in; 6-4 in.; 6-8 in.;	23620
Evaporating Dishes, porcelain: 6-60 cc.; 6-100 cc.	21968
Thermometers:	
(2) 0-50 Degrees C. grad. in .2 degrees	32191
(3) -10 to 110 degrees C., grad. in 1 degrees	32149
(2) - 5 to 360 degrees C., grad	32149
(2) 0-300 degrees Fahrenheit	32155

	Catalog No.
Casseroles, (3) No. 5 (600 c.c.)	19656
Separatory funnels: 4-125 cc.; 4-250 cc.	23684
Buchner funnels; 2-126 mm. inside diameter	23082
Suction flasks; 2-1000 cc.	23070
Balling Saccharometers 3 (0-24 degrees Balling with temperature correction);	25362
— Distilling traps; (6) Special, as for Schwarz Labs. (Gottlieb Greiner)	
Distilling side arm flasks; 4-125 cc.; 4-250 cc.	22442
Aspirators; 2 medium with coupling:	30134 30138
Pipets:	
2-100 cc.; 2-50 cc.; 2-25 cc.; 2-20 cc.; 2-10 cc. 2-5 cc.	29760
3- 3-10 cc. grad. in .1, 2-2 cc. grad. in .1 2-1 cc. grad. in .1	29764
Rubber tubing:	
50 ft.; 1/4 in. inside diam., 1/8 in. wall	30683
50 ft.; 5/32 in. inside diam., 3/64 in. wall	30691
Filter Paper:	
No. 41, 6 packages, 11 cm.	23222
No. 42, 6 packages, 11 cm.	23224
Plaited, 6 packages	23206
(Eaton Dikeman,) 32 cm., 3 packages	609
Moisture tubes (Dean and Stark) (3)	219018 A
Triangular file, 3-6 in.	22884
Bottles, 2 doz. 500 cc.	18676
1 doz. 6 oz.	18665
Fischer burette supports (2)	31915
Wingtops (3)	19412

	Catalog No.
Test tube holders; (3)	20262
Pinch-cock clamps (6)	20291
(6)	20296
Crucible tongs; 1-9 in., 1-12 in.	32553
Spatula; 1-4 in., 1-6 in.	31049
Forceps (2)	23599
Test tubes; 2-doz. (200 by 29 mm.); 2 doz. (150 by 25 mm)	32124
3 doz. (6 by 3/4 in.)	32120
Culture tubes; 1 doz. (6 by 5/8 in); 2 doz (3 by 3/8 in)	21590
Test tube basket; (2) (10 by 10 by 10)	32145
Test tube racks (2)	31975
Watch glasses: 2 doz. 2 in.; 1 doz. 6 in.; 1 doz. 10 in.	32850
Slides; 1 gross	28305
1 dozen	28320
Glass rings; 1 doz. 18 mm.	28342
Cover glasses; 2 oz. 18 mm.	28293
Crucible holders (3)	23050
Weighing dish (2)	17125
Rubber policeman 1/2 doz. (3/16 in.)	30735
Glass rods: 3-4 mm. 1 lb.	
5-6 mm. 1 lb.	
9-13 mm. 1 lb.	24560
Glass tubing; 1 lb. each of 9 mm. outside diam.	
12 cm. outside diam., 6 mm. outside diameter	24570
Rubber stoppers:	
00-10 1/8 lb. of each size	30639
00-10 1/8 lb. of each size	30641
00-10 1/8 lb. of each size	30643
Cork stoppers: 1 gross	21192

November 11, 1946.

Scientific Glass & Apparatus Co.
49 Ackerman Street
Bloomfield, N. J.

Attention of Mr. Robb.

Gentlemen:

Enclosed herewith is a list of items required by Oland & Son, Ltd., Agricola, Sullivan and Russell Sts., Halifax, N.S., Canada. Oland and Son desire to establish a brewing laboratory and to this end will require initially those items contained in the lists attached.

Will you kindly send them a quotation indicating price and time of delivery. We would appreciate your sending a copy of this quotation to us.

Thank you for your prompt attention to this matter.

Very truly yours,
SCHWARZ LABORATORIES, INC.

Malvin J. Mayer

MJM:VM
Enc.
c.c. Oland & Son Ltd. ✓

November 11, 1946.

Amend Drug & Chemical Co.
117 East 24th Street
New York, N. Y.

Attention of Mr. Grill.

Gentlemen:

Enclosed herewith is a list of items required by Oland & Son, Ltd., Agricola, Sullivan and Russell Sts., Halifax, N. S., Canada. Oland and Son desire to establish a brewing laboratory and to this end will require initially those items contained in the list attached.

Will you kindly send them a quotation indicating price and time of delivery. We would appreciate your sending a copy of this quotation to us.

Thank you for your prompt attention to this matter.

Very truly yours,

SCHWARZ LABORATORIES, INC.

Malvin J. Mayer

MJM:VM
Enc.
c.c. Oland & Son Ltd. ✓

November 11, 1946.

Eimer & Amend
633 Greenwich Street
New York, N. Y.

Attention of Miss Olney.

Gentlemen:

Enclosed herewith is a list of items required by Oland & Son, Ltd., Agricola, Sullivan and Russell Sts., Halifax, N.S., Canada. Oland and Son desire to establish a brewing laboratory and to this end will require initially those items contained in the lists attached.

Will you kindly send them a quotation indicating price and time of delivery. We would appreciate your sending a copy of this quotation to us.

Thank you for your prompt attention to this matter.

Very truly yours,
SCHWARZ LABORATORIES, INC.

MJM
Malvin J. Mayer

MJM:VM
Enc.
c.c. Oland & Son Ltd. ✓

November 11, 1946.

Will Corporation
596 Broadway
New York, N. Y.

Attention of Miss Dienstag.

Gentlemen:

Enclosed herewith is a list of items required by Oland & Son, Ltd., Agricola, Sullivan and Russell Sts., Halifax, N.S., Canada. Oland and Son desire to establish a brewing laboratory and to this end will require initially those items contained in the lists attached.

Will you kindly send them a quotation indicating price and time of delivery. We would appreciate your sending a copy of this quotation to us.

Thank you for your prompt attention to this matter.

Very truly yours,

SCHWARZ LABORATORIES, INC.



Malvin J. Mayer

MJM:VM

Enc.

c.c. Oland & Son, Ltd. ✓

SCHWARZ LABORATORIES, INC.

BREWERY CONSULTANTS AND ENGINEERS

202 EAST 44TH STREET

NEW YORK

LABORATORY SERVICE

PLANT CONTROL

COMPLETE PLANS
AND SPECIFICATIONS
FOR BREWERIES

April 26, 1946.

Mr. Victor Oland
Oland & Son, Ltd.
297 Agricola Street
Halifax, N.S., Canada

Dear Mr. Oland:

Please forgive our delay in forwarding this list to you. Unfortunately it was not compiled in the form that I had thought and it was necessary to make up the list practically from scratch.

Possibly we may be of help to you in securing some of this equipment, or in laying out the laboratory. This we can discuss further at the time of our visit.

With kind regards,

Very truly yours,



Malvin J. Mayer
SCHWARZ LABORATORIES, INC.

MJM:VM

November 5th, 1946.

Messrs. Schwarz Laboratories Inc.,
202 East 44th Street,
New York 17, N. Y.

Dear Sirs:

We are enclosing lists of laboratory equipment and chemicals, as supplied by you sometime ago. We are wondering if you would forward these lists to a chemical and laboratory supply house, asking them to send us quotations on this equipment.

Yours very truly,

OLAND & SON LIMITED

Per:

David F. Oland.

DFO/df
Encls.