Report Smalley Foundation Committee 1932-1933

By A. W. PUTLAND, Chairman

THE tables attached to this report summarize the results of the cooperative analytical program of the Smalley Foundation for the past year. The program was concluded, as usual, with thirty samples. There were 76 collaborators participating, as compared to 80 for the season 1931-1932, and 99 for the season 1930-1931.

50 and 45 collaborators, respectively, reported oil and ammonia on all samples.

The winning collaborators are as follows:

The Battle Cup for the highest efficiency in the determination of both oil and ammonia on all samples is awarded to Analyst No. 29, Mr. J. B. McIsaac, International Vegetable Oil Company, Savannah, Ga., whose

TABLE I

Analyst No.	Points Off	Per Cent Efficiency	Analyst No.	Points Off	Per Cent Efficiency	Analyst No.	Points Off	Per Cent Efficiency
29	8	99.961	62	49	99.765	61	102	99.511
46	21	99.899	45	51	99.755	37	104	99.501
32	26	99.875	4	57	99.726	52	116	99.443
71	29	99.860	25	57	99.726	34	117	99.439
47	30	99.856	30	57	99.726	16	123	99.423
57	32	99.846	72	59	99.716	43	124	99.406
8	32	99.846	35	60	99.712	42	128	99.385
44	36	99.827	6	64	99.693	19	133	99.377
23	38	99.817	74	65	99.688	11	137	99.342
14	39	99.813	39	76	99.636	28	153	99.182
58	40	99.809	38	79	99.621	60	173	99.169
56	41	99.803	48	86	99.587	65	222	98.935
18	44	99.788	12	96	99.539	67	239	98.853
15	45	99.784	27	96	99.539	68	274	98.686
59	45	99.784	53	96	99.539	40	446	97.859
22—	46	99.780	13	99	99.525			
33	47	99.774	21	99	99.525			

In table No. 1 we show the standing of the 49 collaborators who reported oil determinations on all samples. In the two preceding years 50 and 45, respectively, reported oil determination on all the samples.

Table No. 2 shows the standing of the 55 collaborators who reported ammonia results on all samples. This number compares with 62 and 71, respectively, for the two preceding seasons.

Table No. 3 gives the average for both oil and ammonia for the 49 collaborators who reported oil and ammonia on all samples. In the two preceding seasons

average is 99.914 per cent. The average efficiency is higher than that of last year obtained by Mr. I. N. Pless, with an average efficiency of 99.896 per cent. The certificate for second place goes to Analyst No. 8, Dr. W. F. Hand, of Mississippi State College, State College, Miss., with an efficiency of 99.889.

The certificate for the highest efficiency in determination of the oil only is awarded to Analyst No. 29, Mr. J. B. McIsaac, International Vegetable Oil Company, Savannah, Ga., whose average is 99.961 per cent. The certificate for second place goes to No. 46, The Barrow

TABLE II

Analyst No.	Points Off	Per Cent Efficiency	Analyst No.	Points Off	Per Cent Efficiency	Analyst No.	Points Off	Per Cent Efficiency
8	13	99.930	30	31	99.835	38	74	99.603
35	13	99.930	21	32	99.828	50	75	99.599
9	14	99.925	4	34	99.819	42	78	99.584
14	14	99.925	59	35	99.812	68	81	99.567
67	16	99.915	46	37	99.802	52	85	99.546
23	17	99.908	33	38	99.796	65	87	99.534
72	18	99.904	44	39	99.791	19	88	99.529
18	20	99.892	27	42	99.775	1	90	99.518
53	22	99.883	71	44	99.764	11	93	99.502
32	24	99.872	22	49	99.738	43	93	99.502
29	25	99.867	16	50	99.732	60	95	99.491
47	26	99.860	45	51	99.727	37	109	99.417
48	27	99.855	7	53	99.716	6	123	99.342
56	27	99.855	13	56	99.700	39	129	99.310
58	27	99.855	40	60	99.679	3	151	99.192
25	28	99.851	5	65	99.652	34	178	99.048
12	29	99.844	61	67	99.642	62	228	98.780
57	30	99.839	28	70	99.626			
74	30	99.839	15	73	99.610			

TABLE III

Analyst No.	Per Cent Efficiency	Analyst No.	Per Cent Efficiency	Analyst No.	Per Cent Efficiency	Analyst No.	Per Cent Efficiency
29	99.914	72	99.810	12	99.692	19	99.453
8	99.889	44	99.809	21	99.677	28	99.446
32	99.874	59	99.798	27	99.657	11	99.422
14	99.869	25	99.789	13	99.613	67	99.384
23	99.863	33	99.785	38	99.612	60	99.330
47	99.858	30	99.781	16	99.578	62	99.273
46	99.851	4	99.773	61	99.577	34	99.244
57	99.843	74	99.764	6	99.518	65	99.235
18	99.840	22	99.759	52	99.495	68	99.126
58	99.832	45	99.741	42—	99.485	40	98.769
56	99.829	48	99.721	39	99.473		
35	99.821	53	99.711	37	99.459		
71	99.812	15	99.697	43	99.454		

Agee Laboratories of Jackson, Miss., with an efficiency of 99.860. The percentage of the winner last year was 99.876 per cent and for second place 99.870 per cent.

The certificate for the highest efficiency in the determination of ammonia is awarded to Analysts No. 8 and 35, Dr. W. F. Hand, State Chemist, Mississippi State College, and Mr. Geo. K. Redding, The Larrow Milling Company, Rossford, Ohio, with an average of 99.930. The certificate for second place goes to Analysts No. 9 and 14, Mr. O. L. Nolan, Connnecticut Agricultural Experiment Station, New Haven, Conn., and the Southwestern Laboratories, Dallas, Texas, with an efficiency of 99.925 per cent. The percentage of the winner last year was 99.945 per cent, and has been awarded to Mr. Redding for the last two years also.

The foregoing comparisons show that the percentage efficiency for oil is higher than last year, while the percentage efficiency for ammonia is less. The percentage efficiency for the combined oil and ammonia work is higher than last year.

There has been only one complaint from the collaborators regarding the samples this year and this was on sample No. 12, which had a very high oil content.

No reference in this report has been made to the moisture results. We, however feel that the moisture determination still requires considerable work on the part of the Moisture Committee.

In concluding this report your committee feels that the Society owes again to Mr. Thos. C. Law a tremendous debt for his care and attention in preparing and mailing the samples.

Personnel of Committee:

Messrs. C. L. HASKELL,
T. B. CALDWELL,
L. B. FORBES,
F. PAQUIN,
G. K. WITMER,
M. E. WHITTEN,
A. W. PUTLAND, *Chairman.*

Report of the Sampling Committee—1933

By R. A. DUNCAN

The Sampling Committee reports that with the co-operation of the Refinery Supply Co. of Tulsa, Oklahoma, a sampler has been equipped with four handles along the side to facilitate lowering and raising from the tank car, a hook at the top to enable the operator to hang the sampler on the hand-rod beside the dome while he climbs on or off the car, and a ball-spring catch to prevent the valve rod slipping open after it is closed. This test sampler was tried out by each member of the committee with favorable results. The Refinery Supply Co. has agreed to equip all samplers sold by them in the future with these parts without extra charge. It is the feeling of the Sampling Committee that these additions improve the usefulness of the sampler by making it more convenient and safer to use, but since they do not directly affect the quality of the samples taken, they should be considered as optional additions.

It is recommended that the official sampler be studied further in respect to the following points:

1. Reduce the weight. Without the added parts it now weighs 16¼ lbs., and with the handles, etc., it is 17¾ lbs. It is believed this can be reduced to 11-12 lbs., without seriously affecting serviceability.
2. Develop a practical plan of making the sampler in sections so it can be easily knocked down. Some commercial laboratories and others who must sample oil at widely scattered points object strongly to the length and unwieldiness of the official sampler.

Since the above can be adequately handled by the Refinery Supply Company without any help from the committee, we believe that the matter should be turned over to them with these recommendations and the Sampling Committee discharged.

R. A. DUNCAN, *Chairman,*
Sampling Committee, American Oil Chemists' Society.

Halowax Makes Announcement

The Bakelite Corporation presents Halowax as a synthetic, wax-like substance of unusual characteristics. It has many uses and it is stated that there are several advantages not found in the commonly known mineral, vegetable, animal, or synthetic waxes.

They have incorporated a very interesting feature by using a "Problem Analyzer" asking for a detail description of your problem. The Halowax Corporation's address is 247 Park Avenue, New York City.