REPORT OF COMMITTEE ON AMMONIA AND SMALLEY FOUNDATION

Check Meal Samples for 1925-1926

In tables Nos. I to IV following is set forth a summary of the results of the co-operative analytical work for both oil and ammonia for the past year. During this year 81 collaborators have participated, as compared with 75 last year and 78 the year before.

Table I gives the standing of the 35 collaborators who reported oil determinations on all of the samples. Only 29 collaborators reported oil on all of the samples last year, and 36 the year before.

TABLE I.

STANDING FOR OIL RESULTS.

Rank	Analyst No.	Points Off	Av. Error Per Sample	Efficiency Per Cent
1	37	23	.0077	99.871
2	80	38	.0128	99.786
3	74	41	.0137	99.771
4	20	45	.0150	99.749
5	33	51	.0170	99.715
6	68	56	.0187	99.687
7	21	58	.0193	99.677
	19	58	.0193	99.677
9	4	64	.0213	99.643
10	23	65	.0217	99.637
11	26	68	.0227	99.620
12	78	69	.0230	99.615
13	22	74	.0247	99.586
14	8	77	.0257	99.570
15	49	83	.0277	99.536
16	69	105	.0350	99.414
17	39	106	.0353	99.409
18	43	123	.0410	99.313
19	60	129	.0430	99.280
20	45	131	.0437	99.268
21	3	139	.0463	99.224
22	40	152	.0507	99.151
23	73	155	.0517	99.134
24	67	158	.0527	99.117
25	42	173	.0577	99.034
26	25	176	.0587	99.017
27	9	186	.0620	98.961
28	65	204	.0680	98.861
29	5	245	.0817	98.631
30	55	279	.0930	98.443
31	61	308	.1027	98.280
32	47	317	.1057	98.229
33	2	321	.1070	98.208
34	46	362	.1207	97.978
35	56	728	.2427	95.935

Table II gives the corresponding standing of 52 collaborators who re-

ported ammonia on all of the samples. Only 42 reported ammonia on all of the samples last year and 50 the year before.

TABLE II.

STANDING FOR AMMONIA RESULTS

Rank	Analyst No.	Points Off	Av. Error Per Sample	Efficiency Per Cent
1	40	7	.0023	99.966
	48	7	.0023	99.966
3	74	9	.0030	99.956
4	80	10	.0033	99.951
5	23	12	.0040	99.941
6	25	13	.0043	99.937
7	31	14	.0047	99.931
	37	14	.0047	99.931
9	10	19	.0063	99.907
10	12	20	.0067	99.901
11	8	22	.0073	99.892
	43	22	.0073	99.892
13	17	23	.0076	99.888
	20	23	.0076	99.888
15	4	25	.0083	99.878
	49	25	.0083	99.878
	60	25	.0083	99.878
	68	25	.0083	99.878
19	78	27	.0090	99.867
20	19	32	.0107	99.843
21	21	33	.0110	99.838
22	39	36	.0120	99.823
23	45	37	.0123	99.819
24	67	41	.0137	99.798
25	69	43	.0143	99.789
26	65	47	.0157	99.769
27	33	48	.0160	99.764
28	22	49	.0163	99.760
29	26	50	.0167	99.754
	59	50	.0167	99.754
31	44	55	.0183	99.729
32	47	56	.0187	99.725
33	2	57	.0190	99.720
	32	57	.0190	99.720
35	27	66	.0220	99.676
36	42	67	.0223	99.672
37	73	70	.0233	99.657
38	5	84	.0280	99.588
39	54	86	.0287	99.577
	55	86	.0287	99.577
41	11	92	.0307	99.548
42	3	105	.0350	99.485
43	14	109	.0363	99.465
44	77	118	.0393	99.421
45	28	125	.0417	99.386
46	46	127	.0423	99.377
47	61	135	.0450	99.337
48	13	138	.0460	99.323
49	50	162	.0540	99.189
50	29	181	.0603	99.112
51	34	262	.0873	98.714
52	56	369	.1230	98.189

Table III gives the combined average laboratory standing for both oil and ammonia for the 34 collaborators who reported oil and ammonia on all

of the samples. Last year 28 reported oil and ammonia determinations on all samples and 36 the year before.

TABLE III.

LABORATORY STANDING FOR BOTH OIL AND AMMONIA RESULTS

Rank	Analyst No.	Efficiency Per Cent	Rank	Analyst No.	Efficiency Per Cent
1	37	99.901	18	69	99.601
2	80	99.869	19	60	99.584
3	74	99.864	20	40	99.584
4	20	99.819	21	45	99.543
5	23	99.789	22	25	99.477
6	68	99.782	23	67	99.457
7	4	99.761	24	73	99.395
8	19	99.760	25	3	99.354
9	21	99.757	26	42	99.353
10	78	99.741	27	65	99.315
11	33	99.739	28	5	99.109
12	8	99.731	29	55	99.010
13	49	99.707	30	47	98.977
14	26	99.687	31	46	98.677
15	22	99.673	32	2	98.464
16	39	99.616	33	61	98.308
17	43	99.603	34	56	97.062

Table IV gives a summary of the results of other collaborators who have failed to report on all samples but whose results deserve recognition.

TABLE IV.

RESULTS OF OTHER COLLABORATORS WHO FAILED TO REPORT ON ALL SAMPLES BUT WHOSE RESULTS DESERVE RECOGNITION.

Analyst	No. of Samples Reported	Points off Oil	Amm.
1	26	71	16
6	27	119	276 (29 s.)
9	29	*	58
15	29		121
16	29		53
18	28		58
30	29		118
35	27	270	53
38	28		49
62	21	215	31
66	28		26
70	23	161	85
71	28	108	149
72	29	108	74
75	27		57
79	29	124	114
82	24		37

*30 samples; reported in Table I.

Several have reported on all but one or two samples. There have been a few cases where a sample was not received in time to make a report, and in some cases reports were lost in the mails, and the collaborator had not requested to be notified by wire of such delay. All reports, however, received even after the scheduled time, have been accepted up to the time the chairman's report went to the printer on Wednesday morning.

The prize awards for the best work done on these samples are the same as published in 1923. The winners of these awards for this year are:

The laboratory cup for the highest average for both oil and ammonia goes to No. 37, Battle Laboratory, Montgomery, Alabama, whose average per cent efficiency is 99.901. The certificate for second place to No. 80, E. H. Tenent, International Sugar Feed Co., Memphis, Tenn., whose average per cent efficiency is 99.869. The corresponding percentages for last year were 99.895 and 99.892 respectively.

The certificates for the highest average for oil results are awarded to No. 37, Battle Laboratory, Montgomery, Alabama, whose percentage is 99.871, and (second) to No. 80, E. H. Tenent, Memphis, Tenn., whose average is 99.786. The corresponding percentages for last year were 99.880 and 99.848.

The certificates for the highest average for ammonia results goes to No. 40, Landon C. Moore, Inc., Dallas, Texas, and No. 49, F. B. Carpenter, Virginia-Carolina Chemical Co., Richmond, Virginia, whose averages are alike—99.966 per cent. The corresponding percentages for last year were 99.956 and 99.942, respectively.

In accordance with the resolution adopted by the American Oil Chemists Society, the identity of the other collaborators will not be disclosed.

The method for determining the standing of the various collaborators and their per cent efficiency is the same as used heretofore, and fully described in the *Cotton Oil Press* of January, 1923, VI, No. 9, Page 33. The chairman does not guarantee the accuracy of all the percentages given in tables I to IV. Only about half the collaborators have responded to his request to send in a check-up of their own standing. It would seem that each collaborator would be willing to co-operate to this extent. However, the average per cent efficiency for the first ten in tables I and II has been double checked to insure accuracy, in cases where the collaborator had failed to send in his record.

The chairman has received several requests from collaborators to change their results, after they had appeared on the printed report, due either to error in calculation of results, to typographical error in report, or to loss in the mails, but the chairman has taken the position that such changes are not permissible. An opportunity is afforded all to be advised by wire collect in case their reports are not received in time or in case there seems to be a typographical error in their reports. Only 29 of the collaborators availed themselves of this offer. The chairman has endeavored to be entirely fair in these cases and sincerely hopes that he has been, and at times has stretched a point where this seemed reasonable.

A notation on the report of Meal Sample 29 requested a reply to the following questions:

1. Do you consider the samples which have been sent out this past year to be as uniform as could be reasonably expected and generally satisfactory in character?
2. Would you consider it desirable to continue check samples during the summer, possibly once a month?
3. Would you consider a rough average of moisture results, indicated on each weekly report, of any particular value?

The following is a summary of the 22 replies received:

1. *This year's samples.*
   - Not very uniform 1
   - Mostly uniform 2
   - Uniform 15

   One collaborator perfers higher percentage meals, and one suggests that new meal be used.
2. *Summer samples.*
   - Not desirable 10
   - Desirable 7
   - Occasionally 4
   - Doubtful 1
3. *Value of Moisture average.*
   - No value 9
   - Advisable 9
   - Interesting but no value..... 4
   - Advisable if standard moisture method used.... 1

From the above it is quite apparent that in general the samples this year have been considered as uniform as could be reasonably expected. This has been further attested by the few complaints which have been made on the samples received. A vote of thanks is due R. F. Monsalvatge for his care in preparing and handling these samples. He wishes to be advised of any complaints on the samples, in order that the may investigate the matter. With some contemplated changes in the method of preparation, etc., he believes the samples another year will be more uniform than this year. The chairman recommends that this important work be entrusted to Mr. Monsalvatge again next year.

With reference to summer samples, it would seem from the replies received that there is not much interest in such samples. This is a matter which the Society should consider at this meeting.

As to Moisture average, it appears from the replies received that the majority do not think this would be of any value. The chairman is inclined to agree with this opinion but would like to have the Society's views:

H. C. Moore, *Chairman*
C. A. Butt
L. B. Forbes
H. B. Battle
W. J. Gascoyne, Jr.