THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA,

(CAWNPORE.)

Year Book

1931-35.

Under Publication:

"METHODS OF CHEMICAL CONTROL IN CANE SUGAR FACTORIES AND GUR REFINERIES."

(See advertisement on back cover).

THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)

YEAR BOOK

1931-35

Published by
THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)
NAWABGANJ, CAWNPORE

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PREFACE

The Sugar Technologists' Association (of India) was formed in the year 1925, to enable the Sugar Technologists in India to meet and exchange views on technical matters for the benefit of the Indian Sugar Industry. It made a good beginning as is shown by the activities recorded. Annual conventions were held in 1927 and 1928, and several interesting papers were read and discussed. The proceedings of the conventions and the papers read and discussed were published in the Year Books of the Association for 1927 and 1928. A book on "Methods of Chemical Control for Cane Sugar Factories and Gur Refineries" was published by the Association to meet the demand for uniformity in methods of Chemical Control.

This period of activity however had only a short life and slackened considerably as a result of the general depression in the industry and the lack of interest shown by its members. No conventions were held and no Year Book could be published by the Association after 1928.

With the recent expansion of the Indian Sugar Industry, it was felt desirable to revive the activities of the Association. An Annual General Meeting of the Association was, therefore, held at Cawnpore on October 17, 1934, at which details regarding the future working of the Association were discussed. It was decided at this meeting that monthly manufacturing reports should be obtained from sugar factories and consolidated statements should be issued every month without disclosing the names of individual factories. A sub-committee was formed to draft an application for grant to the Association from Imperial Council of Agriculture Research, India. It was also unanimously approved to adopt as the Association's official methods, the system of Chemical Control set forth in Mr. Noel Deerr's draft. The book is now ready and will be published shortly.

The scheme for collecting and compiling monthly data was joined by 64 sugar factories. The returns received were compiled into monthly consolidated statements, which were issued for the first two months to members of the Association and all the sugar factories in India and later on only to the members and those factories which joined the scheme.

The present Year Book contains proceedings of all the meetings held from 1931 to 1934, the monthly manufacturing returns of each factory in a compiled form and the Final Synopsis of Mill data of various cane

sugar factories of India for the season 1934-35. For purposes of comparison, similar data for foreign cane sugar producing countries have also been given.

I take this opportunity for thanking the owners and managers of the factories, who have co-operated with the Association by supplying their manufacturing figures and I hope that more factories will come forward to join the scheme before the next crushing season commences. I also wish to place on record my appreciation of the services rendered by Mr. S. P. Chandra, the newly appointed Assistant Secretary.

R. C. Srivastava
Secretary
The Sugar Technologists' Association
(of India)

September 13, 1935

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LIST OF OFFICE-BEARERS AND COUNCILLORS

Patron

Mr. A. B. Shakespear, C.I.E., Messrs. Begg Sutherland & Co., Ltd., Cawnpore.

President

Mr. Noel Deerr, F.C.G.I., Superintendent of Factories, Messrs. Begg Sutherland & Co., Ltd., Cawnpore.

Vice-President

Sardar Kripal Singh Majithia, Saraya Sugar Factory, Sardarnagar, Dt. Gorakhpur.

Secretary

Mr. R. C. Srivastava, B.SC., Sugar Technologist, Imperial Council of Agricultural Research, India, Cawnpore.

Assistant Secretary

Mr. S. P. Chandra, B.SC., A.H.B.T.I., Cawnpore.

Treasurer

Mr. H. N. Batham, M.A., F.I.C.S., Agricultural Chemist to Government, U. P., Agricultural College, Cawnpore.

Members of the Council

Dr. John H. Haldane, B.SC., Ph.D., A.I.C., Chief Chemist, Messrs. Begg Sutherland & Co., Ltd., Marhowrah Factory, P. O. Marhowrah, B. N. W. Railway.

Mr. J. F. Dalton, Port Engineering Works Ltd., Botanic Garden P. O. Howrah.

Lala Kesar Ram Narang, Manager, The Punjab Sugar Mills Co., Ltd., Ghughli, Dt. Gorakhpur.

Mr. R. P. Sanghi, The Upper Jumna Swadeshi Sugar Mills Co., Ltd., Mansurpur, Dt. Muzaffarnagar.

Mr. G. P. Uplap, M.S. (Lousiana), Ramkola Sugar Mills, Ramkola, Dt. Gorakhpur.

Mr. J. R. Sealy, Manager, The Padrauna Raj Krishna Sugar Works Ltd., Padrauna, Dt. Gorakhpur.

Sardar Surendra Singh Majithia, Saraya Sugar Factory, Sardarnagar, Dt. Gorakhpur.

Mr. J. H. Dale, Shree Krishna Gyanoday Sugar Mills, Mirganj, Raj Hathwa, Dt. Saran.

Hony. Auditor

Mr. Girja Dayal Nigam, The New Victoria Mills Co., Ltd., Cawnpore.

LIST OF MEMBERS

Fellows in India

1. Mr. Alexander Brooks
2. Mr. A. S. Bhullar, M.SC., (Hons. Sch.)
3. Mr. D. W. Hindry, A.R.T.C., (Glasgow)
4. Mr. Faqir Chand
5. Mr. Gobind P. Uplap, M.S., (U. S. A.)
6. Mr. G. Mirajuddin, B.SC.
7. Mr. G. H. Richardson
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11. Mr. H. M. Jacobs
12. Mr. H. Lovink
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17. Mr. J. G. Meyer
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19. Mr. J. R. Sealy
20. Mr. J. M. P. Halais
21. Mr. K. P. Banerji
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25. Mr. L. V. Gelder
26. Mr. L. A. Sharp
27. Mr. M. V. Parekh, B.SC., (Bom.), M.SC., (M.I.T., U. S. A.)
28. Mr. Noel Deerr, F.I.C., F.C.G.I.
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30. Mr. R. N. Banerji
31. Mr. R. G. Pradhan, B.SC., (Bom), M.S., (U. S. A.)
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33. Mr. R. K. Miller
34. Mr. R. C. Srivastava, B.SC.

35. Mr. R. S. Upadhya
36. Mr. S. G. Wadekar, B.SC.
37. Mr. Syed Amjad Hasan
38. Mr. S. N. Ghatak
39. Mr. Sardar Surendra Singh Majithia
40. Mr. S. N. Chatterji
41. Mr. T. C. Jacobs
42. Mr. V. R. Upalekar
43. Mr. V. P. Iyer, B.SC., (U. S. A.)
44. Mr. Vasant Rai Misra
45. Mr. V. N. Linaye, (Dip. Mech. Engineering Bombay)
46. Mr. William Johnson Alcock, M.I. Chem. E; M.I.M.E.

Companion Members

47. Mr. A. K. Sen, representing, The Behar Sugar Works.
48. Messrs. Australian Sugar Producers' Association.
49. Messrs. Belapur Co., Limited.
50. Mr. Des Raj Narang, representing, The Basti Sugar Mills.
51. Messrs. Fawcett Preston & Co., Ltd., Engineers.
52. Mr. Gopi Nath Sahu, representing, The Aska Sugar Works & Distillery.
53. Messrs. Helleche Machinen Fabrik & Eisengeserei.
54. Messrs. Hari Raj Swarup Rajendra Lal & Bros.
55. Rai Bahadur Jagdish Narain Rai, representing, The Padrauna Raj Krishna Sugar Works, Ltd.
56. Mr. J. W. Hallan, representing, The United Provinces Sugar Co., Ltd.
57. Lala Kesar Ram Narang, representing, The Punjab Sugar Mill Co., Ltd.
58. Sardar Kripal Singh Majithia, representing, The Saraya Sugar Factory.
59. Messrs. Masseys (1930) Limited.
60. Messrs. Machinen Fabrik Buckau R. Wolf A.G.
61. Messrs. N. V. Agentschap Stork.
62. Messrs. Skoda (India) Limited.
63. Messrs. The Belgian East India Trading Coy., representing, Messrs. Cie De Fives Lille, 1, Rue Montalivet, Paris.

Associates

64. Mr. Amar Singh, B.SC.
65. Mr. A. N. Kapoor, B.SC., A.H.B.T.I.

66. Mr. B. B. Bhattacharya, B.SC.
67. Mr. C. A. Hyde Barker
68. Mr. Gopal Prasad Gupta
69. Mr. G. D. Parekh, L.M. & E.E.
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71. Mr. J. P. Pandya
72. Mr. J. J. Barzilay
73. Mr. Jagdamba Prasad Pande, B.SC.
74. Mr. N. C. Verma, B.SC., A.H.B.T.I.
75. Mr. Preo Nath Pal
76. Mr. P. R. Wadhwa, B.SC. (Hons.), M.SC.
77. Mr. S. N. Banerji
78. Mr. S. P. Chandra, B.SC., A.H.B.T.I.
79. Mr. S. N. Gundu Rao, B.SC., A.H.B.T.I.
80. Mr. S. V. Rao, B.A., B.Ed.
81. Mr. Suraj Narain Deo Sinha, B.SC.
82. Mr. Yakub Khan

Student Members

83. Mr. Alakh Niranjan Prasad, M.SC., A.H.B.T.I.
84. Mr. B. K. Chatterji, B.SC.
85. Mr. Janardan Prasad Shukla, M.SC., A.H.B.T.I.
86. Mr. Kishori Lal Bhargava, B.SC., A.H.B.T.I.
87. Mr. L. P. Bhargava, B.SC., A.H.B.T.I.
88. Mr. M. A. Ekambram, B.SC.
89. Mr. Prem Prakash Joshan, B.SC., A.H.B.T.I.
90. Mr. R. Ramnathan, B.SC.
91. Mr. Rama Shanker, B.SC., A.H.B.T.I.
92. Mr. R. C. Swayambhu, B.SC.
93. Mr. R. D. Misra, B.SC.
94. Mr. S. V. Lakshmi Narayanan, B.SC.

Members and *Visitors* Present at the Annual General Meeting held at Cawnpore on the 17th October, 1934.

MEMORANDUM OF ASSOCIATION

AND

RULES AND BYE-LAWS

OF

THE SUGAR TECHNOLOGISTS' ASSOCIATION (OF INDIA)

As adopted at the Annual General Meeting at Cawnpore on October 17, 1934

Memorandum of Association

1. The name of the Association shall be "The Sugar Technologists' Association (of India)."

2. The objects of the Association shall be any or all of the following:—

(a) To promote the increase of knowledge of the Science and practice of Sugar Technology for persons following or studying for the profession and other kindred branches of Science.

(b) To grant certificates for competency in professional knowledge by issuing certificates for membership of the grade of Associates and Fellows either by election or by examination or otherwise.

(c) To provide opportunities for intercourse amongst members of the profession and their friends and to give facilities for the reading of papers, and the delivery of lectures on subjects interesting to the profession, and for the acquisition and dissemination by these and other means of information connected with and useful to the profession.

(d) To establish and maintain a library, laboratory, farm or any or all of these, and to print, publish and circulate papers, books and other literary matters connected with the profession.

(e) To do all other acts, matters and things that may assist in, conduce to, or be necessary for the fulfilment of the above mentioned objects and for the purposes of the Association.

Rules and Bye-Laws

Constitution

1. The Association shall consist of :—
   (a) Patrons
   (b) Honorary Fellows
   (c) Companion Members
   (d) Fellows
   (e) Associates
   (f) Student Members
2. The method of admission of the different types of members and their privileges shall be as hereinafter provided.

Patrons

3. Any persons who contribute not less than Rs. 500 to the funds of the Association shall be declared by the Council to be a Patron of the Association.
4. A Patron of the Association will have during his lifetime the same rights as a Fellow of the Association.
5. The contribution of a Patron shall be announced in the Association's publications.

Honorary Fellows

6. Persons possessing special qualifications or who have rendered special services to the cause of the sugar industry or allied branches of Science, shall be eligible for election as Honorary Fellows.
7. Honorary Fellows shall be recommended by the Council and elected by ballot at a General Meeting of the Association.
8. The number of Honorary Fellows shall not exceed twenty.
9. Honorary Fellows shall not be required to contribute to the funds of the Association.
10. Honorary Fellows shall not be eligible for office and shall not be allowed to vote at meetings of the Association. Each Honorary Fellow shall be entitled to a copy of such publications of the Association as the Council may determine.

Companion Membership

11. Companion Members shall be persons, partnership firms or companies who are interested in or connected with Sugar industry

and whose admission the Council considers would conduce to the interests of the Association.

12. Every firm or corporate body which is a Companion Member shall have the right to nominate a representative who will attend meetings, vote on its behalf and exercise all other rights of a Fellow.

Fellows

13. Candidates for election as Fellows should be over 28 years of age.
14. Candidates for Fellowship shall be required to satisfy the Council that they are directly connected with the industry and that they possess adequate general and technical education and sufficient practical experience of the industry which, in the opinion of the Council, would enable them to hold positions of responsibility and trust. The Council shall demand a high standard of qualifications from Candidates for Fellowship.
15. Associate Members of at least four years' standing shall be eligible for election as Fellows provided their career has, in the opinion of the Council, been satisfactory.

Associates

16. Candidates for election as Associates should be over 21 years of age.
17. The qualifications which the Council shall demand from candidates for Associateship are general and technical education upto a suitable standard and such experience of the industry as in the opinion of the Council, shall enable them to hold junior technical positions.

Student Members

18. Candidates for election as Student Members should be over 18 years of age.
19. The qualifications which the Council shall demand from candidates for Student Membership are:—
    (a) General and technical education upto a suitable standard; and either
    (b) the candidate should be receiving technical training in Sugar Technology, Sugar Engineering or Sugarcane agriculture, in a recognized institution in India or abroad; or
    (c) he should be under technical training in the Works of a reputable firm manufacturing sugar or sugar machinery,

provided the system of training is approved by the Council.

Admission of Members

20. The rules hereinafter prescribed apply only to the admission of Companion Members, Fellows and Associates. The conditions for the admission of Patrons are contained in Rule 3 and those for Honorary Fellows in Rules 6 & 7.

21. Application for admission to the Association shall be made to the Council and every candidate must apply on the form provided for the purpose.

22. Every candidate shall, unless the Council dispense therewith, be nominated by two corporate members of the Association, who must be of, at least, the same grade of membership as that to which the candidate applies to be elected.

23. Voting for the election of a member shall be by ballot of the members of the Council, or by circulation of the proposal form amongst them, the election being by a simple majority of votes.

24. Every candidate for admission to the Association shall be required to give a written undertaking that, if elected, he will conform to the rules and bye-laws of the Association in force at the time, a copy of which shall be supplied to him on election.

24. (a) The Council shall have power to refuse admission to a particular member without assigning any reason for its refusal.

25. A member desiring to be transferred from one grade of membership to another shall make application on the prescribed form and shall satisfy the Council that he possesses the necessary qualifications in the usual manner as for new candidates.

26. No member shall be eligible for transfer while he owes any entrance fee or annual subscription.

27. A member upon election and payment of the entrance fee and annual subscription, shall be entitled to a certificate of membership, setting forth his name, status and the date of issue.

Admission by Examination

28. The Council may cause to be held examinations for candidates seeking to be elected as Associates or Fellows and may frame and publish such rules and syllabus consistent with the bye-laws, as the Council thinks proper, regulating such examinations and defining the courses to which such examination shall apply, the period at which they shall be held, the subjects or alternative

subjects which they shall comprise, the fees which shall be paid or deposited by candidates in respect of such examinations, and the nature of the certificate, and medals or prizes if any, to be granted to successful candidates. The Council shall have power from time to time to add to, vary or rescind any such rules and to make any such other rules consistent with bye-laws, as they may consider to be necessary or desirable in connection with any such examinations.

Fees and Subscriptions

29. A candidate who has been duly elected, shall, on being notified of his election, pay the entrance fees and annual subscription, and unless these are paid his name shall not be entered on the Register of Members, nor shall he receive his certificate or enjoy any of the privileges of membership. If the entrance fees and annual subscription, or the first instalments of these, are not paid within one month of the candidate being notified of his election, the Council may, at its discretion, cancel such election.

30. Entrance fees and annual subscription shall be charged from members at the following rates, depending on whether they are, for the time being, residing in India or abroad.

	India		Abroad	
	Entrance Fees	Annual Subscription.	Entrance Fees	Annual Subscription.
	Rs.	Rs.	Rs.	Rs.
Companion Members ...	50/-	25/-	35/-	20/-
Fellows ...	20/-	12/-	25/-	18/-
Associates ...	10/-	6/-	18/-	12/-
Student Members ...	5/-	2/-	6/-	4/-

Subscription for life membership is Rs. 200/-, to be paid on election, or in the case of members, who are already Fellows Rs. 200/- minus half of the subscription already paid. If the requisite amount in the form of subscription has already been paid by a Fellow, he is eligible for life membership without further payment.

31. Members going out of India, on leave not exceeding one year, will be deemed as members in India, during the period of their leave.

32. Instead of paying the fees and subscriptions in one lump sum, it shall be open to a member to pay the Entrance Fees in two monthly instalments and the annual subscription in monthly or quarterly instalments in advance, provided, however, that until the entrance fees is paid in full, a member's name shall not be entered on the Register of Members, nor shall he receive his certificate or enjoy any of the privileges of membership.

33. Annual subscription is due and payable on the 1st of January each year irrespective of the date of election, but members elected after the 1st of July shall be required to pay only half the current year's subscription, and those elected in the month of December shall pay the full annual subscription, but it shall cover the period of the following year. In all cases the entrance fee must be paid.

34. A candidate who passes the qualifying examination of the Association and is elected to membership shall be admitted without entrance fees, and the first annual subscription shall cover the period of the year next succeeding that in which the candidate passed the examination.

35. A member who is transferred from one grade of membership to another shall pay an increased annual subscription and also the difference between the Entrance Fees for the two grades.

Privileges of Members

36. Any Companion Member, Fellow or Associate shall have the right to attend and to vote at all meetings of the Association excepting those of the Council which shall be attended only by members for the time being, of the Council.

37. Every member (excepting the Student Members) shall be entitled to one vote. Proxies shall not be allowed.

38. Student Members shall not have the right to vote nor shall they be eligible for election to the Council, but in all other respects they shall enjoy all the rights and privileges of other members.

39. Every member shall be entitled, free of charge, to a copy of the proceedings of meetings and such other publications of the Association as the Council may deem fit.

40. Each member (excepting the Student Members) shall be allowed with the permission of the Council to introduce two visitors to the ordinary scientific meetings of the Association. The names of such visitors shall be entered in a book kept for the purpose,

together with the names of the members introducing them.

41. Members not resident in India for the time being, shall not have the right to vote, but in all other respects they shall have the same status as members in India.

Removal of Members

42. The Council shall have the power to remove from the Association any Fellow, Associate or Companion Member who has been convicted by a competent tribunal of felony or misdemeanour, or has been adjudicated a bankrupt.

43. Members whose subscription is in arrears by a year or more shall lose their membership. For re-admission they shall apply in the form prescribed for new members and pay the Entrance Fees as well as the arrears of unpaid subscription.

44. All proposals for removing a member from the Association for reasons other than those covered by Rules 42 and 43, shall be made to the Council in writing by at least fifteen members and the member in question shall be given an opportunity of placing his side of the case before the Council. Should the Council approve of the removal of the member, a resolution to that effect shall be passed by it which shall, furthermore, be confirmed at the next Annual General Meeting of the Association by a three-fourths majority of the members present and voting. The ballot shall not be valid unless at least thirty members vote.

Constitution and functions of the Council

45. The Council shall consist of the following:—

(a) The President
(b) Two Vice-Presidents
(c) Not more than six members
(d) Editor
(e) Treasurer
(f) Secretary.

46. The first President, Vice-Presidents, Members and Office-Bearers of the Council shall be elected by the promoters of the Association, and such members and office-bearers shall be considered as Fellows and they shall hold their office for three years, after which they shall be eligible for re-election.

47. The members and office-bearers thereafter shall hold their office ordinarily for one year, but, shall be eligible for re-election after

the expiry of one year, after relinquishing office.

48. If any member or office-bearer vacates his office during the period of his term, his place will be filled up by the Council in any manner they think fit.

49. The Council and office-bearers shall be elected at the General Meeting of the Association by a majority of the members present in person.

50. The affairs of the Association and the management of its funds shall be entirely under the control of the Council.

51. The Council may authorise its members to form a Committee and depute persons to canvass for and receive donations for the Association, in such a manner as not to confer any privileges to the donors, which may be inconsistent with the Rules and Bye-laws or which may affect the position of the Association.

52. The Council shall keep a record of all papers received for publication and as far as possible maintain technical and commercial statistics relating to the Sugar Industry.

53. Council meetings shall be held periodically at the discretion of the Council. Four members of the Council shall form a quorum.

54. Notice of the time of holding each meeting of the Council shall be forwarded by the Secretary to each member of the Council at least ten days before the date on which such meetings are to be held, but the non-receipt of such notice by any member of the Council shall in no way invalidate the proceedings of the meetings.

55. Extraordinary meetings of the Council shall be called by the President upon a requisition to him signed by three members of the Council, or at his own discretion, when he shall direct the Secretary to issue notices for the occasion.

56. The Council shall annually nominate an Advisory Committee on publications consisting of three members including the Secretary, and the Editor, who will be members ex-officio.

57. The Council shall elect auditors who shall hold office for one year and shall be eligible for re-election.

Office-bearers

(a) President

58. The President shall be the executive and administrative head of the Association, and the other office-bearers shall work under his instructions and guidance, subject to the present Regulations.

59. The President shall preside over meetings of the Council in which he shall have a casting vote. In his absence the Vice-President or, failing him, any other member elected to preside over the meeting, shall have the same powers for the time being.

60. The President shall control the finance of the Association and shall sanction expenditure within the limits of the budget approved by the Association at its Annual General Meeting.

(b) Vice-Presidents

61. The Vice-Presidents shall perform duties, and exercise the privileges of the President during the latter's absence or when specially required by the President to do so.

(c) Editor

62. The Editor, acting in collaboration with the Advisory Committee of publications, constituted under Rule 56, shall be responsible for the publication work of the Association.

(d) Treasurer

63. The Treasurer shall receive subscriptions, fees, donations and other moneys of the Association, and shall issue receipts in respect of these.

64. The Treasurer shall maintain, in a proper form, the account of the Association every year and for the preparation and submission to the Council and the Annual General Meeting of an annual balance sheet.

65. The Treasurer shall open and maintain a Bank Account, in the name of the Association and not in his own name or in that of any other individual member.

66. All money received by the Treasurer on behalf of the Association shall be deposited immediately in the bank account of the Association, and no direct expenditure out of this shall, as a rule, be allowed.

67. The bank account shall be operated under the joint signatures of the President and the Secretary or, in the former's absence of the Vice-President and the Secretary. Cheques, drafts, securities and other negotiable instruments belonging to or meant for the Association shall be similarly signed jointly.

68. No office-bearer of the Association shall take, retain or use for his private purpose, any portion of the Association's funds.

69. No office-bearer shall make any payment to himself without the

President's previous sanction.

70. No overdraft or loan shall be taken, or any liability incurred on behalf of the Association, unless a resolution to this effect has been previously passed at a General Meeting of the Association.

(e) Secretary

71. The Secretary shall arrange for convening meetings of the Association and the Council.

72. The Secretary shall attend all meetings of the Association and the Council, take minutes of the proceedings and conduct all correspondence of the Association.

73. The Secretary shall maintain proper records of all property of the Association, and shall be responsible for their safe custody. This refers to all articles whether received for payment or in exchange or as gifts.

74. The Secretary shall prepare and submit to the annual convention of the Association, an annual report describing the activities of the Association during the year and reviewing the outstanding features of the sugar industry of India.

75. A budget estimate of income and expenditure shall be prepared each year by the Secretary and Treasurer and submitted by the Secretary for approval to the General Meeting of the Association before the commencement of the year to which the budget relates. No expenditure shall be incurred unless the budget has been sanctioned by the General Meeting.

Annual General Meeting

76. The holding of at least one General Meeting or convention of the Association during each calendar year shall be obligatory.

77. The time and place for holding the Annual General Meeting shall be fixed by the Council and shall be announced by the Secretary at least six weeks before the date of the meeting.

78. All notices of motions for consideration at the Annual General Meeting shall be submitted to the Secretary so as to reach him not later than three weeks before the date of the meeting.

79. The Annual General Meeting shall be presided over by the President. In his absence, the meeting may elect as Chairman one of the Vice-Presidents present, or in their absence, one of the members of the Council present, or in their absence, a Fellow of the Association.

80. Fifteen members (excluding Student Members) shall form quorum for the Annual General Meeting.

81. The following business shall be obligatory for each Annual General Meeting :—

(a) Consideration of Secretary's Annual Report (*vide* Rule 74).

(b) Passing the accounts and balance sheet for the year (*vide* Rule 64).

(c) Sanctioning of the budget estimate of income and expenditure (*vide* Rule 75).

(d) Election of office-bearers and members of Council (*vide* Rule 49).

(e) Election of Committees and other Standing Committees (*vide* Rule 87).

Scientific Contributions

82. All scientific papers and other contributions intended for reading before the annual convention or for publication by the Association, shall be addressed to the Secretary.

83. The Secretary shall consult the Advisory Committee on Publications constituted under Rule 56 regarding the suitability of a contribution for acceptance and publication by the Association. The Committee may, where necessary, recommend change in the text of the paper, which shall be communicated to the author by the Secretary.

84. The paper as finally approved by the Advisory Committee on publications, shall be allowed to be read before the Annual Convention and to be published by the Association.

85. All papers and other contributions sent to the Association shall become the property of the Association till they are published or rejected, and the Association shall have the right to retain the manuscripts, illustrative drawings and photographs etc. relating to them.

86. When papers are accepted for publication, the author shall not be at liberty, save with the permission of the Council to publish them elsewhere, until the papers or their abstracts have appeared in the official publications of the Association. After this, it shall be open to the authors to publish them elsewhere and, if desired, to obtain copyrights on them.

Committee on Research and Investigations

87. A Standing Committee on Research and Investigations shall be appointed each year at the Annual General Meeting of the Association.

88. The Committee shall consist of 5 members, the President and Secretary being ex-officio Chairman and Secretary of the Committee respectively.

89. The Committee shall invite members of the Association to send suggestions to it regarding problems on which there is need for research.

90. Factories and others interested in the industry shall also be invited to send problems.

91. The problems for investigation shall relate to the following sections :—

(a) Sugarcane agriculture
(b) Sugar engineering
(c) Manufacturing processes
(d) Chemical control
(e) Indigenous methods of gur and sugar manufacture.

92. The Committee shall select out of these such problems as are of general interest in preference to those likely to benefit particular parties.

93. The list of selected problems shall be circulated amongst members of the Association, who shall be invited to notify to the Committee within a month the particular problems, if any, on which they wish to work.

94. Where members desire to carry on research work under the auspices of the Association, the Committee shall endeavour to render assistance to the workers in any of the following ways:—

(a) By giving financial help or supporting their application for grants from Government departments, factories or other sources.

(b) By assisting them in securing facilities for plant, laboratory and library from Government departments, sugar factories and other institutions.

(c) By establishing points of contact with other workers in the same field in India or abroad.

95. Research work done under the auspices of the Association shall conform to the following rules :—

(a) That the member or members undertaking the work shall

in the opinion of the Committee, be suitably qualified for the purpose;

(b) That the laboratory and library facilities available for the work (supplemented by such facilities as the Committee may arrange for) shall in the opinion of the Committee be adequate for the proper execution of the work;

(c) That a general outline indicating the lines on which the work is to be conducted shall be submitted to the Committee for approval, before commencing work;

(d) That the Committee shall, as far as possible, fix the time-limit within which each investigation is to be finished. The Committee may require interim progress reports to be submitted in the case of prolonged researches;

(e) That the paper or report embodying the results of the investigation shall be submitted to the Committee, and, if approved by it, shall be read before the Annual Convention or ordered to be published in the name of the member concerned.

Library

96. A Library of books, journals and others publications on sugar and allied subjects shall be maintained by the Association for the benefit of the members.

97. Provision shall be made in the annual budget for necessary funds for the upkeep of the Library and for purchasing new books and journals. Where possible books and journals for the Library may be obtained in exchange for publications of the Association. Catalogues, drawings, photographs, patent specifications and other similar literature received by the Association, whether on payment or free of charge, shall be entered in the Library.

98. The Secretary shall be in charge of the Library and shall be responsible for its proper maintenance and for the issue and return of books.

99. Purchases for the Library shall be made by the Secretary with the previous sanction of the President. Suggestions from members regarding books and periodicals to be purchased shall receive due consideration.

100. The Library shall be open for consultation by members free of charge, at the headquarters of the Secretary during working hours.

101. Valuable books and books of reference shall not ordinarily be

issued on loan, except with the permission of the President.

102. Books and periodicals may be issued on loan to members on their depositing with the Secretary an amount which will cover the price of the book and postage charges for sending the book. The postage for returning the book to the Library shall be paid by the borrower.

103. In the event of a book being damaged or lost by the borrower or transit the cost of repair or replacement will be realised from him.

Employment Bureau

104. An Employment Bureau shall be maintained under the charge of the Secretary, for the members of the Association and others seeking employment in the sugar industry.

105. No fees shall be charged for registration in the Register of candidates of this bureau in the case of members of the Association (including Student Members). Non-members shall however have to pay a registration fee of Rs. 2/- per year.

106. Persons desiring their names to be registered in the Employment Bureau shall be required to fill up a form giving full particulars of their qualifications and experience.

107. No responsibility shall attach to the Association for any loss or damage suffered by any person or concern as a result of the recommendations made, or employment secured, by or through the Employment Bureau.

108. The records of the Employment Bureau shall be kept confidential.

Amendment of Rules and Bye-laws

109. Proposals for the amendment of these Rules and Bye-laws may be made either by the Council or by the members.

110. In the case of proposals for amendment made by members, the proposals shall be sent to the Secretary, signed by not less than fifteen members and shall be placed before the meeting, as hereinafter provided, together with a report thereon by the Council.

111. No alteration of the Rules and Bye-laws shall be made except at the Annual General Meeting, or at an Extraordinary General Meeting, of the Association called for the purpose, and such proposal shall require for its adoption a two-third majority of those present and voting.

112. Any such alteration of the Rules and Bye-laws shall not come into

operation for a period of one month after its adoption, during which time a poll of members usually resident in India may be demanded by a requisition signed by not less than 25 members. If less than two-thirds of the votes recorded at such poll are in favour of such alteration the proposal shall be negatived.

Noel Deerr
President
Sugar Technologists' Association
(of India)

Dated April 10, 1935

Proceedings of the Third Annual Convention

NOTICE

The Third Annual Convention of the Sugar Technologists' Association (of India) will be held at Gorakhpur on May 16 and 17, only morning sessions will be held from 9-0 A.M. to mid-day.

The Agenda of business to be transacted is attached.

67, George Town
Allahabad
April 7, 1931

(Sd.) K. C. Banerji
Secretary

AGENDA

1. General Report of the Secretary, showing effects and belongings.
2. Submission of Audited accounts for adoption.
3. Statements showing unpaid accounts of members, and consideration of measures to be taken for realizing arrears.
4. Consideration of letter dated 19-1-31 from Mr. R. C. Srivastava, re: overhauling the Association generally and placing it on a sound financial footing.
5. Election of Office-Bearers.
6. Appointment of a Sub-Committee of 2 or 3 members as suggested by Mr. R. C. Srivastava with the following terms of reference :—
   (a) Generally overhaul the Association,
   (b) Prepare a scheme for submission to Government for financial assistance and other facilities, and
   (c) Wait in a deputation on the Government, if necessary, to accomplish the above objects.
7. Any other business.

Minutes of the Third Annual Convention of the Sugar Technologists' Association of India, held at St. Andrews College, Gorakhpur on May 16, 1931 from 9-0 A.M.

Present

Mr. Noel Deerr—Chairman
Sardar Surendra Singh Majithia
Dr. J. H. Haldane

Mr. R. C. Srivastava
Mr. K. C. Banerji
Mr. J. R. Dalton
Mr. S. P. Sinha
Mr. R. P. Sanghi
L. Kesar Ram Narang
Mr. G. P. Uplap
Mr. J. H. Dale
Mr. R. G. Pradhan
Mr. B. P. Misra
Mr. Norman Ballatyne
Mr. J. R. Seely

1. According to the rules of the Association, Mr. Noel Deerr, the President, was voted to the chair.

Proposed by Mr. K. C. Banerji,
Seconded by Mr. R. C. Srivastava.

Mr. Banerji, the retiring Secretary, was called upon by the President to submit the audited accounts to the meeting.

2. As the accounts were not ready, it was proposed from the Chair that the audited accounts be submitted to the Sub-Committee (to be appointed hereafter) by June 16, 1931.

Carried unanimously

3. It was proposed by Mr. Srivastava and seconded by Mr. Sanghi that Mr. S. S. Gill of the New Victoria Mills be requested to act as Honorary Auditor.

Carried unanimously

4. Proposed by Mr. Srivastava and seconded by Mr. Sanghi that the Secretary's report, as a general survey be submitted with the accounts.

Carried unanimously

Mr. Srivastava's letter dated January 9, 1931 addressed to the Secretary and circulated to the members was read at the meeting. (See Appendix I)

5. Proposed from the chair that a Sub-Committee be appointed with the terms of reference as suggested in the letter.

Carried unanimously

6. Proposed by Mr. Banerji and seconded by Lala Kesar Ram Narang that a sub-committee be appointed consisting of Messrs. Noel Deerr, R. C. Srivastava and H. N. Batham with power to co-opt with reference to resolution No. 5 of this meeting.

Carried unanimously

7. Proposed by Mr. Banerji and seconded by Mr. Srivastava that Mr. Noel Deerr be elected President for the next term.

Carried unanimously

8. Proposed by Dr. Haldane and seconded by Mr. S. P. Sinha that (1) Sardar Kripal Singh Majithia, (2) Mr. R. C. Srivastava and (3) Mr. H. N. Batham be appointed Vice-President, Secretary and Treasurer respectively for the ensuing term.

Carried unanimously

9. Proposed by Mr. R. C. Srivastava and seconded by Mr. S. P. Sinha, that the following be appointed members of the Council for the ensuing term.

1. Mr. J. Macniven
2. Dr. J. H. Haldane
3. Mr. K. C. Banerji
4. Mr. J. R. Dalton
5. Lala Kesar Ram Narang
6. Mr. R. P. Sanghi
7. Mr. G. P. Uplap
8. Mr. J. R. Seely
9. Sardar Surendra Singh Majithia
10. Mr. J. H. Dale

Carried unanimously

10. It was proposed from the chair that the sub-committee appointed as per resolution No. 6 of this meeting should approach the Government of India for a grant to meet the travelling expenses of one of the members of the India Sub-Committee appointed by the International Society of Sugar Cane Technologists, attending the next Congress at Porto Rico, U. S. A. in March 1932.

11. Proposed by Mr. Srivastava and seconded by Mr. Sanghi that the Sub-Committee should with approval of the Council formulate proposals in connection with the Tariff Board for submission to Government.

Carried unanimously

Sd. Noel Deerr
Chairman

Proceedings of the Reorganization Sub-Committee

AGENDA

For the Re-organization Sub-Committee

1. To report position regarding taking charge and checking accounts.
2. To consider the list of members and decide the measures to be adopted for realizing arrears of subscription and increasing membership.
3. To prepare the Budget for 1932.
4. To consider arrangements in connection with holding the next Annual Convention. Amongst the items of business for the Convention may be mentioned :—
   (a) Reading of papers
   (b) Passing Budget for 1932
   (c) Taking action on the re-organization proposals of this Sub-Committee,
   (d) Approving steps to be taken for securing financial assistance and recognition from Government.
5. To amend and re-draft present rules and regulations.
6. To arrange for obtaining manufacturing reports from factories. Draft of a letter proposed to be issued is attached.
7. To consider system for conducting research work.
8. Any other business that may be brought forward.

Sd. R. C. Srivastava
Secretary,
The Sugar Technologists' Association
(of India)

CAWNPORE
September 7, 1931

Minutes of the first meeting of the Re-organization Sub-Committee of the Sugar Technologists' Association of India held in Mr. Noel Deerr's office on September 8, 1931.

Present

Mr. Noel Deerr—Chairman
Mr. H. N. Batham
Mr. R. C. Srivastava—Secretary

AGENDA

A copy of the Agenda as issued by the Secretary is attached.

Item 1 : The Secretary reported that he had still not received complete charge of the records, publications and property of the Association from the late Secretary. He also read out communications received from the Auditor regarding irregularities found in the Accounts, the checking of which was still proceeding.

It was unanimously resolved that the Secretary should send a letter under Registered A. D. cover to the late Secretary (and a copy to the late Treasurer) asking him to supply the information called for by the Auditor and to hand over complete charge within a specified period. If this is not complied with, the Sub-Committee will decide at its next meeting as to what line of action should be adopted.

Item 2 : It was unanimously resolved to approve the three drafts submitted by the Secretary and to authorize him to adopt necessary measures for realizing arrears of subscription and increasing the membership. (See Appendices II a, b and c.)

Item 3 : The general outline of the Budget was discussed. It was suggested that amongst the items to be included should be printing charges for Year Book and for the consolidated statement of working figures for factories, postage and stationery charges and Convention expenses. As regards the last item (Convention expenses) it was mentioned that the amount allotted should be small. The Chairman pointed out that the large amounts spent on the first two Conventions were not intelligible as members had paid for lunches and teas, no credit for which payments appeared to have been shown in the accounts. The Secretary was instructed to make further enquiries in this connection.

It was also agreed that in view of the present unsatisfactory financial condition of the Association the question of payments for clerical assistance could not be considered.

It was resolved that the Secretary should prepare a Budget for 1932 in the light of the above suggestions and place it before the next meeting of the Sub-Committee.

Item 4 : Regarding arrangements to be made in connection with the holding of the next Annual Convention, it was felt that time was too short now to hold this before the commencement of the cane season. It was therefore agreed that a date about the middle of May 1932 may be provisionally fixed and the views of the members be asked for as soon as a sufficient number of members have joined. Gorakhpore, Cawnpore

and Muzafferpore may be suggested as suitable centres and the members be asked to indicate their preference for one of these.

(a) Contributing of papers. The Secretary was asked to write to members for these. The Chairman promised to contribute two papers.

(b) and (c) – Approved.

(d) The Secretary was asked to draft a letter to be addressed to the Imperial Council of Agricultural Research for a grant, and place it before the next meeting of the Sub-Committee for approval.

Item 5 : The suggestions made in the Secretary's note for amending the rules were approved. (See Appendix II d). The Chairman and Mr. Batham promised to send to the Secretary their suggestions within a few days. The Secretary will re-draft the rules and place them before the next meeting of the Sub-Committee.

Item 6 : The draft letter put up by the Secretary was approved (See Appendix II e). The Chairman promised to revise the form in which manufacturing reports should be obtained. The Secretary was asked to send him copies of the present form and one of the old consolidated statements for this purpose.

It was agreed that for the present only annual reports should be published. It was decided to drop the idea of weekly or fortnightly reports as this will involve more work than the Association can take up in its present state.

Item 7 : This was postponed for consideration at the next meeting. (See Appendix II f).

Item 8 : No other business was brought forward.

Sd. R. C. Srivastava
Secretary

Sd. Noel Deerr
Chairman,
Re-organization Sub-Committee

Proceedings of a meeting of a Special Committee held in Cawnpore on October 15, 1934

1. In order to frame proposals in respect of the business to be placed before the General Meeting of the Association on October 17, 1934, a Special Committee meeting was convened on October 15, 1934, at 10-0 A.M. The Office-Bearers and members of Council of Association together with a few other gentlemen were invited to this meeting. The following gentlemen attended the meeting :—

1.	Mr. Noel Deerr,	President
2.	,, R. C. Srivastava,	Secretary
3.	Dr. J. H. Haldane,	(Member of Council)
4.	Mr. R. P. Sanghi,	(,, ,,)
5.	,, G. P. Uplap,	(,, ,,)
6.	,, Thomas Jacob	
7.	,, R. G. Pradhan	
8.	,, S. G. Wadekar	

The recommendations of the Committee in connection with each item on the agenda are given below :—

2. **Item 1 :** The Secretary's report was recommended for adoption.

In regard to the suggestions received from members and others, the Committee accepted in principle that special Standing Committees of the Association may be formed, but it was felt that some of the proposals for forming a large number of Committees were too ambitious in the present condition of the Association. It was recommended that the number of Committees to be formed should be left to be decided by the Council of the Association.

As regards the suggestion that the Association should form a federation to safeguard interests of employees in sugar factories, the opinion was definitely expressed that the Association should confine itself strictly to scientific and technical work and should not concern itself with administrative matters and the relations between employers and employees.

3. **Item 2 :** The Committee recommended that the Accounts as submitted be passed.

It also recommended that a lump sum payment of Rs. 200 be made to the part time clerk, whose services were utilized for the work of the Association from July 1931 up-to-date. The Committee also recommended

that the thanks of the Association be conveyed to the Honorary Auditor.

4. **Item 3 :** The Committee recommended that the action of the Secretary and the Treasurer in connection with the case of the Continental Commercial Co., Calcutta, be approved. As regards the payment of Rs. 350 made through Mr. K. C. Banerji, the Committee desired that Mr. Banerji may be asked to come and explain his position at the next General Meeting, failing which the Association will consider whether he should continue as a member.

5. **Item 4 :** The Committee unanimously agreed that the present Association should be re-organized and a new Association should not be formed. The headquarters of the Association should be at Cawnpore.

6. **Item 5 :** The revised Rules and Bye-laws prepared by the Special Sub-Committee were examined in detail and their adoption was agreed to subject to the following modifications :—

Rule 24 (a)—A new rule should be inserted after rule 24, giving the Council of the Association power to refuse to admit a particular member without assigning any reason for its refusal.

Rule 30 —The scale of fees should be replaced by the following scale :—

	India		Abroad	
	Entrance fees	Annual Subscription	Entrance fees	Annual Subscription
	Rs.	Rs.	Rs.	Rs.
Companion Members	50	25	35	20
Fellows	20	12	25	18
Associates	10	6	18	12
Student Members	5	2	6	4

Provision should be made for life subscriptions for Fellows only on payment of Rs. 200 on election or in the case of old members Rs. 200 minus half of the subscriptions already paid. If a Fellow has already paid the requisite amount in the form of subscription, he should be eligible for life membership without further payment.

Rule 42—Add at the end of this rule "or adjudicated a bankrupt."

Rule 81 (e)—Add at the end "and other Standing Committees."

7. **Item 6 :** The proposals contained in the Secretary's note were recommended for adoption.

8. **Item 7 :** The Budget Estimate for 1935 was approved. The proposal for engaging some wholetime staff for the Association was ap-

proved, as it was felt that the Association cannot function properly unless it has a suitable staff.

9. **Item 8 :** The Committee appreciated the importance of the fullest cooperation with sugar factory owners and other associations and recommended that everything possible should be done to secure their close collaboration. This should be done on a basis of reciprocity and in such a manner that the Association does not lose its identity.

10. **Item 9 :** The Committee accepted the suggestion that periodical manufacturing reports should be obtained from factories, but it was felt that for the present monthly instead of fortnightly returns will be sufficient. The forms for returns have been amended accordingly. Printed forms for the returns should be supplied by the Association to the factories.

The Committee was of the opinion that consolidated statements prepared from the returns received from factories should be supplied only to members of the Association and to such factories (not being members) as send returns. A final consolidated statement prepared for the entire season should be published in the Year Book of the Association which would be available to the public as a priced publication of the Association.

11. **Item 10 :** In regard to the proposal for starting a quarterly journal the Committee felt that for the present only a Year Book should be published by the Association.

12. **Item 11 :** The proposals in connection with the Association's Library were approved. The Committee recommended that members should make efforts on behalf of the Association for obtaining donations for the Library.

13. **Item 12 :** The Committee approved of the proposal and recommended the formation of a Sub-Committee consisting of Messrs. Noel Deerr, R. C. Srivastava and J. H. Haldane for drafting a scheme for a grant from the Imperial Council of Agricultural Research. The scheme should be forwarded to the Imperial Council after it has been approved.

14. **Item 13 :** The Committee approved of the adoption as the Association's official Methods, the system of Chemical Control set forth in Mr. Noel Deerr's draft. A proposal for referring the Manuscript to a special Sub-Committee did not find favour.

The Committee's proposals in this respect are subject to the confirmation of the General Meeting.

Sd. R. C. Srivastava
Secretary

Proceedings of the Annual General Meetings

AGENDA

October 17, 1934—10-0 a.m.

1. To consider Secretary's report and suggestions received from members and others.

2. To pass the Accounts.

3. To consider whether payment of Rs. 350 to Continental Commercial Co., Calcutta, through Mr. K. C. Banerji should be approved.

4. To consider whether the present Association should be re-organized or a new Association should be started and to fix its head-quarters.

5. To consider the Rules and Bye-laws prepared by the Special Sub-Committee.

6. To consider the case of members of the present Association who have not paid their dues up-to-date or who are not suitably qualified.

7. To pass the Budget Estimate for the year 1935.

8. To consider the desirability and method of securing the co-operation of—

   (a) Other Associations, and

   (b) Sugar factory owners.

9. To consider proposal for obtaining fortnightly figures from factories and supplying statements compiled from these to factory members.

10. To consider the proposal for starting a quarterly Sugar Journal and forming an Editorial Committee.

11. To consider proposals for maintaining an up-to-date Library and arranging for circulation of books and journals amongst members.

12. To consider if an application for grant may be made to the Imperial Council of Agricultural Research, India, and if so, to prepare a draft of the same.

13. To consider the manuscript of "Methods of Chemical Control" prepared by Mr. Noel Deerr for adoption as the Association's official Methods.

14. Any other business that may be brought up with the President's permission.

Sd. R. C. Srivastava
Secretary

Proceedings of an Annual General Meeting of the Sugar Technologists' Association (of India) held in Cawnpore on October 17, 1934.

The following members were present :—

1.	Mr. Noel Deerr,	President
2.	Mr. G. P. Uplap,	Member
3.	Mr. R. P. Sanghi	,,
4.	Mr. H. N. Batham	,,
5.	Mr. R. G. Pradhan	,,
6.	Mr. S. G. Wadekar	,,
7.	Mr. S. J. Sabnis	,,
8.	Dr. J. H. Haldane	,,
9.	Mr. V. P. Iyer	,,
10.	Mr. K. K. Bhargava	,,
11.	Mr. R. C. Srivastava,	Secretary

The following new members were enrolled at the meeting :—

1. Mr. L. V. Gelder
2. Mr. J. J. Barzilay
3. Mr. A. R. Khan
4. Mr. R. S. Upadhya
5. Mr. N. C. Raswant
6. Mr. S. N. Chatterjee
7. Mr. A. S. Bhullar
8. Mr. K. K. Agarwala
9. Mr. Amar Singh
10. Mr. B. S. Dugal
11. Mr. J. N. Dhawan
12. Mr. H. M. Jacobs
13. Mr. L. A. Sharp
14. Mr. R. A. William
15. Mr. T. C. Jacobs
16. Mr. C. H. Barker
17. Mr. J. P. Pande
18. Mr. A. F. Haworth
19. Mr. K. V. Vir Singh

The following gentlemen attended the meeting as visitors :—

1. Mr. T. Halais
2. Mr. K. F. Gelder
3. Mr. H. Lovink
4. Mr. J. S. Shukla

The Chairman in his opening remarks welcomed the members, particularly the new members who had just joined the Association. He also stated that it was gratifying to have a number of visitors which showed the interest which was taken in the activities of the Association. Proceeding he explained that the Association was started 8 or 9 years ago, although during the last 2 or 3 years it was mostly inactive. With the recent development in the sugar industry there was need for reviving the association and for bringing it into line with the present requirements of the industry. With this object in view the Association had been reorganized and it was hoped that it will in future function as a live body.

Item I of Agenda : Secretary's Report—(See Appendix III a). The Secretary's report together with a note containing suggestions received from members, copies of which were previously circulated were then taken into consideration. Mr. H. N. Batham proposed (which was seconded by Mr. R. P. Sanghi) that the Secretary's report be adopted. This was agreed to unanimously.

In regard to the suggestions made by members, Mr. Jacobs proposed (seconded by Mr. R. P. Sanghi) that the recommendations made by the Special Committee which met on October 15, 1934 be accepted. This was passed unanimously.

Proceedings of the meeting of the Special Committee on October 15, 1934 were circulated before-hand amongst those attending the annual general meeting. These are appended to the present proceedings.

Item II of Agenda : Accounts—(Appendix III b). The Secretary's note in connection with the Accounts of the Association was then taken into consideration. Mr. G. P. Uplap proposed (seconded by Mr. Barzilay) that the Accounts be passed and that the thanks of the Association may be communicated to Mr. G. D. Nigam, the Honorary Auditor. The payment of a lump sum of Rs. 200 to the part time clerk was also approved.

Item III of Agenda : Mr. G. P. Uplap and Mr. Barzilay seconded that the action of the Secretary and the Treasurer in connection with the case of the Continental Commercial Co., Calcutta, be approved. (Appendix III c). As regards the payment of Rs. 350/- made through Mr. K. C. Banerji, he may be asked to come and explain his position at the next

meeting, failing which the Association will consider whether he should continue as a member. This was unanimously agreed to.

Item IV of Agenda : After the Chairman had explained the arguments for and against the question whether the present Association should be re-organized, or a new Association should be started, Mr. Iyer moved and Mr. R. P. Sanghi seconded that the recommendations of the Special Committee should be accepted. This was unanimously agreed to. It was also agreed to keep the headquarters of the Association at Cawnpore.

Item V of Agenda : The revised rules and Bye-laws prepared by the Special Sub-Committee, copies of which were previously circulated were taken into consideration. It was unanimously resolved to adopt this subject to the modifications made by the Special Committee which met on October 15, 1934.

Special attention was drawn to the fact that under the new rules no titles would be conferred on members of any class. This was also unanimously accepted.

Under the revised Bye-laws no change is made in the aims and objects of the Association and hence it was not necessary to have the revised Bye-laws confirmed at another meeting after an interval of one month. The Secretary was authorised to forward a copy of the revised rules and Bye-laws to the Registrar, Joint Stock Companies, United Provinces, for information.

Item VI of Agenda : The proposals contained in the Secretary's note (Appendix III d) were unanimously agreed to.

Item VII of Agenda : The budget estimate for 1935 with the Secretary's explanatory note (Appendix III e) was taken into consideration and the budget was unanimously sanctioned. The proposal for engaging some whole time staff for the Association as recommended by the Secretary was approved.

The Chairman explained that the term of office of all the office-bearers had already expired. He suggested that now the Association had been reorganized the membership would rapidly increase and that new office-bearers may be elected at the next General Meeting which would be held sometime next year. Meantime the existing office-bearers may continue to function. This was unanimously agreed to.

Item VIII of Agenda : The recommendation of the Special Committee in connection with securing the co-operation of Sugar Factory owners and other Associations was unanimously accepted. Members were requested to do everything possible to secure such co-operation and financial assistance for the Association.

Item IX of Agenda : The meeting unanimously accepted the recommendation of the Special Committee that monthly manufacturing reports should be obtained from factories and consolidated statement should be issued without disclosing the names of individual factories.

The form for returns proposed by the Secretary (Appendix III f) was approved subject to the following modifications :—

(i) Primary juice purity should also be included,

(ii) For production of sugar and molasses, give separate figures for quantities in process and total production,

(iii) Factories should be asked to state if they have taken gravity purities or polarisation gravity purities; also whether juice has been weighed, measured or calculated.

Item X of Agenda : The Special Committee's recommendation in regard to the publication of an Year Book was unanimously accepted.

Item XI of Agenda : The Secretary's note (Appendix III g) in regard to the Association's Library was approved. The meeting recommended that members should make efforts on behalf of the Association for obtaining donations for the Library.

Replying to a question by Mr. R. G. Pradhan regarding the Sugar Technologist's Library, the Secretary explained that as there was heavy demand for books it was in practice not possible to issue books to persons outside Cawnpore.

Item XII of Agenda : The meeting unanimously approved of the Secretary's proposal (Appendix III h) for the formation of a Sub-Committee for drafting a scheme for grant to the Association from the Imperial Council of Agricultural Research, India. The Sub-Committee consisting of Messrs. Noel Deerr, R. C. Srivastava and J. H. Haldane was formed for drafting the scheme which was then to be submitted to the Council.

Item XIII of Agenda : The meeting unanimously approved of the adoption as the Association's official methods the system of chemical control set forth in Mr. Noel Deerr's draft. The meeting also thanked Mr. Noel Deerr for the trouble he had taken in preparing the draft and recommended that the book should be printed as early as possible.

Mr. H. N. Batham proposed a vote of thanks to the Chairman and the Secretary and also to the newly elected members which was carried by acclamation.

R. C. Srivastava
Secretary
Dated October 17, 1934

Noel Deerr
Chairman

THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)

STATEMENT OF ACCOUNTS

GIRJA DAYAL NIGAM ESQ.
Hony. Auditor
(The New Victoria Mills Co., Ltd., Cawnpore)

THE SUGAR TECHNOLOGISTS'

RECEIPTS AND PAYMENTS ACCOUNTS FOR

CR.

	Rs. as. p.	Rs. as. p.
Subscription Account	506 8 0	
Library and Publication Account ...	6 0 0	
		512 8 0
Opening balance in bank on November 30, 1933		1503 1 2
Cash in hand on 30-11-1933		213 11 6
Total		2229 4 8

R. C. Srivastava
Secretary

ASSOCIATION (OF INDIA)

THE PERIOD ENDED DECEMBER 31, 1934.

DR.

	Rs. as. p.	Rs. as. p.
Postage account	67 2 0	
Stationery account	25 3 6	
Establishment account	200 0 0	
Bank Commission etc. account ...	4 0 0	296 5 6
Balance in bank on December 31, 1934		1776 9 2
Cash in hand on 31-12-1934		156 6 0
Total		2229 4 8

H. N. Batham
Treasurer

Checked and found Correct

Girja Dayal Nigam
Hony. Auditor
(Accountant, The New Victoria Mills Co., Ltd.)
Cawnpore

THE SUGAR TECHNOLOGISTS'

STATEMENT OF AFFAIRS AS

LIABILITIES

	Rs. as. p.	Rs. as. p.
Association's funds accounts on November 30, 1933.		
(a) Dues from Mr. R. C. Srivastava ...	42 15 6	
(b) Balance in Bank ...	... 1503 1 2	
(c) Balance in hand ...	... 213 11 6	
		1759 12 2
Library & Publication account		... 6 0 0
Subscription account		... 506 8 0
Total		2272 4 2

R. C. Srivastava
Secretary

AUDITOR'S REPORT

" I have checked the account of the Association for the period ending 31-12-34 and have signed the statement of affairs.

The books and the account papers have been properly kept and arranged in an appreciable manner and I have no item to report. "

Girja Dayal Nigam
Hony. Auditor
(Accountant, The New Victoria Mills Co., Ltd.)
Cawnpore

ASSOCIATION (OF INDIA)

ON DECEMBER 31, 1934.

ASSETS

	Rs. as. p.	Rs. as. p.
Postage	67 2 0	
Stationery	25 3 6	
Establishment	200 0 0	
Bank Commission	4 0 0	296 5 6
Outstandings :		
Dues from Mr. R. C. Srivastava		42 15 6
Balance in Bank on December 31, 1934		1776 9 2
Cash on December 31, 1934		156 6 0
Total		2272 4 2

H. N. Batham
Treasurer

THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)

Monthly manufacturing returns from Cane Sugar Factories and Gur Refineries in India

and

Annual Synopsis of Mill Data for the season 1934-35

Published by
THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)
NAWABGANJ, CAWNPORE

Table 1

Factories grouped into territorial groups

Group Symbol	No. of Factories in group operating in 1934-35	No. of Factories in group which have joined present scheme	Territories covered by groups
A	17	9	**West U. P.** Saharanpore, Muzaffarnagar, Meerut, Dehradun, Bijnor, Moradabad districts and Rampur State.
B	18	9	**Central U. P.** Kheri, Shahjanpur, Lucknow, Etah, Hardoi, Cawnpore, Barabanki, Pilibhit and Bareilly districts.
C	31	16	**East U. P.** Jaunpur, Gonda, Gorakhpur, Basti and Baharaich districts.
D	19	13	Saran and Champaran districts of North Behar.
E	16	9	Darbhanga, Muzaffarpur, Purnea, Shahabad, Patna, Bhagalpur and Gaya districts.
F	31	8	Bombay, Madras, Burma, Sind, Bengal and Punjab.
	132	64	

Review of the monthly manufacturing returns from Cane Sugar Factories and Gur Refineries. (Season 1934-35)

At the Annual General Meeting of the Association held on 17th October, 1934, it was decided that arrangements should be made with sugar factories for obtaining simple manufacturing data every month, which should be utilised for preparing monthly consolidated statements, copies of which should be supplied to members, as well to those factories, which supply monthly returns. All sugar factories in India, numbering 142 were accordingly requested to join the scheme. The printed forms approved by the Association were supplied to the factories. The factories were grouped into territorial groups, each factory was allotted a symbol indicating the group to which it belonged and its serial number. Thus the symbol D10 denotes the 10th factory in the territorial group D. The territorial grouping of factories was intended to facilitate comparison of data relating to factories located in the same area. The grouping of factories was done according to the scheme given in Table 1.

Out of the 64 factories which joined the scheme, only 58 factories actually supplied monthly returns. Some of the remaining factories did not work in the season due to delay in erection of machinery. Some of the gur refineries also did not work as the price of gur was high.

Many factories did not supply the returns regularly and delay in submission of returns were also common. The consolidated statements had therefore to be compiled very late every month.

The manufacturing returns from each factory throughout the season have been compiled in one consolidated form, which will enable members to study the progressive working of each factory from month to month during the full season.

The manufacturing monthly returns were received in the present season filled up in different ways. For the sake of uniformity it is particularly requested that in future figures should be given in the returns on the basis of the following explanatory notes :—

Clarification process :— Single Sulphitation, Double Sulphitation, Single Carbonation or Double Carbonation etc.

Maunds cane crushed per 24 hours Operation :— Maunds cane crushed in 24 hours excluding stoppages.

Maunds sugar produced for the month :— Maunds sugar actually bagged from the cane crushed during the month.

Maunds sugar in process for the month :— Available maunds sugar in process from the cane crushed during the month.

Todate maunds sugar produced :— Maunds sugar actually bagged upto the end of the period when the stock is taken.

Todate maunds sugar in process :— Available maunds sugar in process at the end of the period when the stock is taken from the cane crushed during that period, which is equal to maunds sugar in process for the month.

Similar definitions will apply to maunds molasses produced and in process etc.

Maunds sugar produced and in process for the month :—

Sugar bagged during the month	=	A
Sugar in process at the end of the month	=	B
Total	=	A+B
Deduct sugar in process at the beginning of the month	=	C
Balance	=	A+B−C

∴ (A+B−C) = Sugar made from the cane crushed during the month

∴ Maunds sugar produced for the month = (A−C)

Maunds sugar in process for the month = B

Todate sugar produced and in process:—

Todate sugar produced upto the end of the previous month = D

Todate sugar produced upto this month = D+A

Todate sugar in process upto the end of this month = B

Total todate sugar made from the total cane crushed upto the end of this month = D + A + B

Similarly the columns for molasses can be filled up.

$$\text{Yield sugar \%cane for the month} = \frac{A+B-C}{\text{Cane crushed for the month}}$$

Similarly yield molasses %cane can be calculated.

SUGAR %CANE :—Sucrose in 100 cane.

$$\text{Mill Extraction} = \frac{\text{Sucrose in mixed juice \%cane}}{\text{Sugar \%cane}} \times 100$$

$$\text{Boiling House Extraction} = \frac{\text{Sucrose in yield sugar\% cane}}{\text{Sucrose in mixed juice\% cane}} \times 100$$

$$\text{Overall Recovery} = \frac{\text{Sucrose in yield sugar\% cane}}{\text{sugar\% cane}} \times 100$$

$$= \frac{\text{Mill Extraction} \times \text{Boiling House Extraction}}{100}$$

In order to assist in the study of the consolidated monthly manufacturing returns, a brief review has been made below of the figures for each group separately. For this purpose the important manufacturing data for each group have been divided into four tables showing (1) Quantities of cane crushed, Cane crushed per 24 hours operation, and sugar and Final Molasses produced, (2) Composition of cane, Yield of sugar and Molasses % Cane, (3) Milling results and fuel consumption, (4) Boiling House Extraction, Final Molasses Purity and Overall Recovery. To show at a glance the performance of each individual factory in comparison with that of other neighbouring factories, monthly manufacturing returns have been compiled which give in detail the working data for each individual factory from the beginning to the close of the season.

GROUP A

In this group 17 factories operated in the season 1934-35, of which 9 joined the present scheme. Factories A3, A5 and A7 did not supply returns regularly. Factory A4 supplied its final return very late in the month of September, 1935. Of these 9 factories, 2 are double carbonation and the rest are double sulphitation factories. All the factories started crushing in the month of November except factory A4, which started in December. The 1934-35 season was a very abnormal one in this area due to adverse climatic condition, prolonged drought and attacks of pyrilla and other pests, which greatly affected the quality of cane as well as its available supply. Sugar cane in the area adjoining factories A1, A3 and A8 was not so badly affected by frost, pyrilla and pests as the other areas. The marked effect of pyrilla throughout this group in the month of November is obvious from the very low figures for sugar % cane and primary juice purity which remained between 65.0 and 70.0 in spite of the fact that factories started crushing late in the third week of November. However, in the months of December and January the cane improved in its sugar content and purity which went upto 82.0 in certain areas. This improvement was however stopped by a severe frost in the third week of January. The brix ceased to rise and the purity went down especially in the areas covered by the factories A2, A4, A5, A6, A7 and A9. The frost

effect in the areas covered by the factories A1, A3, A8 was not quite so marked. Due to the low sugar content and purity of cane juice, both the quality and yield of sugar % cane went down and factories suffered heavy loss. Prolonged drought and the ravages of pyrilla were responsible for the very low tonnage of cane per acre. Due to this there was shortage of cane and most of the factories stopped operating in the second or last week of March. Whereas factory A1 used to work upto the end of May, this season, it stopped working early in April. Cane round about factory A8 was not much affected, the sugar % cane and primary juice purity were quite good, whereas the supply of cane was regular except in April. Factory A4 closed down in the beginning of the first week of March, as the cane which was already of a very poor quality due to the locality being water-logged, was badly damaged by frost.

GROUP A

Table 2

Quantities of cane crushed, cane crushed per 24 hours operation, and sugar and final Molasses produced

All weights are in standard maunds (of 82 2/7 lbs.)

Factory Symbol	Clarification process	Cane crushed	Cane crushed per 24 hours operation	Sugar produced	Molasses produced
A1	DC	11,19,577.00	7,721.00	89,772.00	42,756.00
A2	DS	12,12,454.00	14,700.00	76,844.00	37,700.00
A6	DS	29,46,296.50	25,443.00	1,86,072.00	1,23,931.00
A7	DS	14,54,749.50	11,455.00	95,177.00	61,695.70
A8	DS	21,39,907.50	20,555.00	1,78,960.00	...
A9	DC	15,31,417.00	12,350.00	1,13,361.50	...

Figures of cane crushed, cane crushed per 24 hours operation, sugar and final molasses produced by this group of factories are given in Table 2. Quantity of cane crushed by all the factories is low figure, except for factories A6 and A8. Cane crushed per 24 hours operation

by factory A8 is more than its normal capacity, while for A1, it is below its normal capacity. Factory A8 with the low amount of cane crushed produced 1,78,960 maunds of sugar as against 1,86,072 maunds by the factory A6. Factory A1 produced more molasses than A2, which crushed a larger quantity of cane. Factories A8 and A9 did not report their molasses figures.

GROUP A

Table 3

Composition of cane, and Yields of sugar and molasses % cane

Factory Symbol	Sugar %	Fibre %	Primary Juice Purity	Yield Sugar % Cane	Molasses % Cane
A1	10.80	12.97	77.50*	7.96	3.82
A2	...	14.35	...	6.338	3.11
A6	9.23	...	76.02*	6.31	4.26
A7	9.25	13.22	74.84*	6.55	4.25
A8	11.12	15.30	79.50*	8.36	...
A9	9.61	13.10	75.00*	7.38	...

*Polarisation Gravity Purity.

Factory A8 crushed a better quality of cane in all respects as shown by Table 3, giving the composition of cane and yields of sugar and molasses % cane. The sugar % in cane crushed by all the factories except A1, A3 and A8 for the entire season was between 8.5 and 9.61, whereas for the other factories it was between 10.77 and 11.12. The low fibre content in cane shows that the growth of the cane was not complete. Even allowing for the low sugar content and purity of juice, the yield of sugar % cane by all factories is low, the highest being 8.36 for factory A8 while the lowest is 6.31 for factory A6. Molasses % cane turned out by factories A1, A6 and A7 is abnormally high being 3.82, 4.26 and 4.25 respectively.

GROUP A

Table 4

Milling results and Fuel consumption

Factory Symbol	Added water % Cane	Mill Extraction	Coal % Cane	Wood % Cane
A1	12.95	92.90	—	8.47
A2	9.43	82.40	3.03	0.19
A6	7.11	89.96	0.42	—
A7	10.46	88.39	—	—
A8	11.70	90.00	0.00	4.76
A9	14.10	91.60	3.38	0.38

Table 4 gives the milling results and fuel consumption figures. All factories in this group have used too little water for imbibition, due presumably to the low brix of juice. The lowest figure, 7.11 is reported by factory A6. Though factory A9 added 14.1 % water its mill extraction of 91.60 is lower than that of A1, which used less water. The mill extraction of factory A2 is very poor, the loss of sucrose in bagasse being high. Even making allowance for a somewhat low fibre content and irregular crushing due to cane shortage, coal and wood consumption figures, with a low figure for added water % cane, are high. Factories A2 and A9 consumed coal as high as 3.03 and 3.38 respectively. Wood % cane used by factories A1 and A8 is also high. There is considerable scope for improvement in regard to fuel consumption. The use of suitable instruments for furnace control and adoption of methods for economy in steam-consumption deserve serious consideration. In the usual course an efficient factory crushing to its normal capacity cane having on an average 15.0 % fibre should not require extra fuel but should be able to save some bagasse.

GROUP A

Table 5

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
A1	79.40	33.93*	73.70
A2	86.83	..	71.60
A6	76.02	31.78*	68.39
A7	..	30.26*	..
A8	..	32.50*	..
A9	83.90	32.00*	76.90

*Polarisation Gravity Purity.

Table 5 gives figures for Boiling House Extraction, Final Molasses Purity and Overall Recovery of factories in group A. Boiling House Extraction gained by most factories is low owing to low juice purities. Factory A2 gained the highest boiling house extraction, 86.83. Factories A7 and A8 did not report this figure. The final molasses turned out by factories of this group are of normal purities. Overall recovery figures for all the factories are low. The highest figure of 76.90 is for factory A9. Factories A7 and A8 did not report these figures.

The performance recorded by factory A9 is an average one excepting that the crushing is low and the coal consumption high.

GROUP B

In this group 18 factories operated in the season 1934-35 of which 9 joined the scheme. Factory B7 did not supply returns at all. B5 sent only one return giving todate figures for the month of December, 1934. B2 supplied incomplete returns. All the cane factories in this group are sulphitation plants, of which B3 and B6 are single sulphitation plants and the rest are double sulphitation plants. B8 is a gur refinery and started working in February. As this was the only refinery out of all the groups which sent returns its figures could not be published in the monthly consolidated statements. Factories B1, B2, B3 and B4 started crushing in the month

of November, while B6 and B9 started in December. The date on which B5 started is not known. All factories excepting B4 and B5 closed down in the month of April. B4 stopped crushing in March, whereas no information is available regarding B5. Gur refinery B8 stopped melting gur in the month of July, 1935. The general climatic conditions in the area covered by factories of this group were favourable for the cane crop.

GROUP B

Table 6

Quantities of cane crushed, cane crushed per 24 hours operation, and sugar and final molasses produced

All weights are in standard maunds (82 2/7l bs.)

Factory Symbol	Clarification process	Cane crushed	Cane crushed 24 hours operation	Sugar produced	Molasses produced
B1	DS	3,89,023.00	2,446.00	31,401.00	...
B2	DS	35,00,520.00	21,727.00	3,20,956.10	1,21,078.00
B3	S	21,28,345.00	...	1,86,282.10	91,412.00
B4	...	16,25,901.75	17,376.00	1,23,850.00	74,592.00
B6	S	8,40,746.00	7,065.09	82,552.50	26,420.00
B9	DS	33,24,532.50	30,203.70	2,99,600.00	1,16,000.00

Table 6 gives figures for cane crushed, cane crushed per 24 hours operation, sugar and molasses made by individual factories of this group. Factory B2 crushed the highest amount of cane, 35,00,520 maunds, whereas B9 in spite of being a bigger factory crushed less due to the fact it started late. B9 has got the highest daily crushing capacity, crushing 30,203.7 maunds of cane per 24 hours operation. B1 is a small unit but its cane crushing average is very poor being below its normal capacity. Figure of cane crushed per 24 hours operation by B2 is not very satisfactory. B2 produced the highest amount of sugar in the group but proportionately to the cane crushed B6 made more sugar. Factories B3 and B4 turned out a higher amount of final molasses in proportion to the cane they crushed, the highest amount having been turned out by B2.

GROUP B

Table 7

Composition of cane, Yield of sugar and molasses % cane

Factory Symbol	Sugar %	Fibre %	Primary Juice Purity	Yield sugar % Cane	Molasses % Cane
B1	11.59	—	82.15*	8.07	—
B2	11.60	14.20	82.46†	9.18	3.45
B3	11.33	16.16	78.85*	8.75	4.29
B4	9.98	18.65	76.24*	7.63	4.59
B6	12.58	16.72	78.61*	9.82	3.14
B9	11.67	—	83.94*	9.01	3.49

* Polarisation Gravity Purity. †Gravity Purity.

Composition of cane, yield of sugar and molasses % cane are shown in Table 7. Cane crushed by this group of factories was of average quality except for factory B4 which had very poor cane having the lowest sugar % cane, primary juice purity and the highest fibre content, being 9.98, 76.24 and 18.65 respectively. Figures regarding cane quality throughout the season show that the cane was not affected by pests, diseases or frost but on the whole it was of poor quality. Factory B6 crushed cane having highest sucrose %, the average figure being 12.58. B9 got cane of high primary juice purity, average for the season being 83.94. The lowest average fibre % cane is of B2. In this group, figures indicate that cane fully matured in the month of February and became over-ripe and deterioration due to excessive heat began in the month of March. B6 recorded the highest yield sugar % cane, the lowest being for factory B4. Factories B2, B6 and B9 reported a yield higher than 9.0 (which is the average yield for India) and others below 9.0. In comparison with the quality of cane, the yield sugar % cane of B1 is very poor. B5 reported an up-to-date yield of sugar 9.05 % in the month of December, which is a very promising figure. On the average the molasses % cane turned out by the factories of this group is high especially by factories B3 and B4, being 4.29 and 4.59 respectively.

GROUP B

Table 8

Milling results and Fuel consumption

Factory Symbol	Added water % cane	Mill Extraction	Coal % cane	Wood % cane
B1	9.42	82.31	..	..
B2	23.03	92.30	0.995	0.549
B3	23.76	91.26	0.772	1.624
B4	18.48	90.25	0.620	1.470
B6	13.46	85.90	0.00	7.40
B9	11.91	90.31	..	4.87

Milling results and fuel consumption figures are given in Table 8. Water added % cane by the factories in this group is higher than for factories in Group A. Mill extraction of factory B3 is moderately good in spite of the large amount of added water % cane. The poorest mill extraction is of factory B1. Mill extraction of B2 is the highest due to the fact the cane is of lower fibre content than of B3. Fuel consumption of this group of factories is lower than in group A, except for factory B1, which reports a high figure near about 2.8, due presumably to its being a small plant. Factories B6 and B9 did not use any coal but, on the other hand, the wood consumption is very high.

GROUP B

Table 9

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
B1	84.15	37.31*	69.26
B2	84.97	32.44†	78.41
B3	84.25	33.91†	76.96
B4	84.29	33.30*	76.05
B6	90.01	33.16*	78.06
B9	85.01	34.19†	77.21

* Polarisation Gravity Purity.

† Gravity Purity.

Table 9 gives the boiling house extraction, final molasses purity and overall recovery figures for individual factories. The boiling house extraction gained by all factories of this group is good and higher than that of factories in Group A, except A2. B6 gained the highest extraction and B1 the lowest. In the month of November B1 reported a boiling house extraction 72.02 and improved considerably afterwards, giving an up-to-date figure 84.15. The average final molasses purity of this group of factories is higher than that of factories in A group. The polarisation gravity purity of molasses turned out by factory B1 is 37.31. B2 reported a comparatively low gravity purity of final molasses. The overall recovery of all factories in this group is better than that of group A factories, except B1. 78.41 is the highest figure recorded by B2 but other factories also reported a high average figure. Factory B1 reported an overall recovery of only 57.61 in the month of November.

Performance of factory B2 is better except that its fuel consumption is high.

The quality of gur melted by the refinery B8 is of good quality, particularly in view of the fact that the gur throughout was of a low quality, purity and nett-rendement being 76.54 and 53.18 respectively. Invert sugar % 10.33 and ash % 2.75 in gur are somewhat high. Gur melted per 24 hours operation is more than its normal melting capacity and sugar produced % gur is quite a good figure, being higher by 6.63 than the nett-rendement. The average polarisation of all the sugar produced is 98.60 which is a good figure for a refinery. The coal consumption is high. The polarisation gravity purity of final molasses turned out by it is of high purity being 40.30. For a refinery melting an average quality gur, the gravity purity of the molasses turned out should not be higher than 35.0. The recovery % sugar in gur is a good figure, 80.63.

GROUP C

In this crop 31 factories worked in the season 1934-35 of which 16 joined the scheme, all being cane factories adopting sulphitation process. This group includes the biggest factory in India having a crushing capacity of 2000 tons per day. Factory C7 did not send the monthly manufacturing returns at all during the season. Factories C3 and C4 were most irregular in supplying returns. The former supplied only one return for February and the latter for January and March. Factories C1, C5, C6, C10 and C16 did not send their returns for the month of November. Factory C10 did not supply monthly figures after December till the end of the season and C11 did not supply monthly figures at all throughout the season.

Of the fifteen reporting factories, nine started crushing in November, 4 in the month of December and for the remaining 2 factories no information was supplied as to when they started and stopped crushing. Factories C1, C2, C4 and C15 finished their crushing season in March while C5, C6, C8, C9, C10, C12, C13, C14 and C16 stopped crushing in the month of April. The rainfall and climatic conditions in the area covered by group C were favourable for the growth of cane. Though there was general cane shortage throughout the northern India, it was not so severe in this group as in groups A, D and E.

GROUP C

Table 10

Quantities of cane crushed, cane crushed per 24 hours operation and sugar and final molasses produced

All weights are in standard maunds (82 2/7 lbs.)

Factory Symbol	Clarification process	Cane crushed	Cane crushed per 24 hours operation	Sugar produced	Molasses produced
C1	—	19,46,988.00	18,800.00	2,00,542.00	60,470.00
C2	D.S.	16,16,516.75	18,529.40	1,51,980.00	56,255.00
C4	D.S.	16,76,000.00	14,324.50	1,51,428.00	56,648.80
C5	—	10,52,620.00	9,380.00	1,01,773.00	30,492.00
C6	—	19,71,830.50	18,006.20	1,78,812.50	67,954.00
C8	—	20,54,000.00	17,352.00	1,84,778.00	67,690.00
C9	D.S.	16,47,083.80	16,095.00	1,43,772.00	—
C10	S.	30,36,375.75	26,904.00	2,70,270.00	1,09,309.00
C12	D.S.	49,29,765.00	55,808.00	4,46,628.00	1,58,873.00
C13	D.S.	14,62,201.00	—	1,24,094.00	65,969.00
C14	—	15,70,743.50	11,465.28	1,43,298.50	51,028.43
C15	D.S.	12,77,798.00	10,696.25	1,15,352.50	41,915.00
C16	D.S.	19,50,815.25	17,520.00	2,03,723.75	63,511.50

This table gives the quantities of cane crushed, cane crushed per 24 hours operation, sugar and molasses produced by individual factories of this group. Factory C12 crushed the largest amount of cane among factories of all the groups. The amount of cane crushed by factories C8 and C16 is quite good in spite of the fact that their normal crushing capacity per day is lower. Cane crushed per 24 hours operation by factory C15 is a poor figure in comparison with its crushing capacity per day whereas factories C8 and C16 reported quite high figures for cane crushed per 24 hours operation. Factory C5 reported the lowest average figure of cane crushed per 24 hours operation. Factory C1 produced a larger amount of sugar whereas factories C6 and C8 crushed more cane than C1, but produced less sugar. Factory C16 also produced a comparatively high amount of sugar compared to its cane crushed figure. Factory C13 produced abnormally large quantity of molasses though it crushed much less cane than factories C1, C16, C2 and C4.

GROUP C

Table 11

Composition of cane, Yield of sugar and molasses % cane

Factory Symbol	Sugar % cane	Fibre % cane	Primary juice purity	Yield sugar % cane	Molasses % cane
C1	12.01	17.03	83.27	10.30	3.11
C2	11.86	16.33	83.77	9.40	3.48
C4	11.62	—	83.71	9.015	3.38
C5	11.50	16.68	82.76	9.67	2.90
C6	11.79	17.30	84.00	9.06	3.44
C8	11.51	16.15	84.42	9.00	3.00
C9	11.47	17.72	85.46	8.72	—
C10	11.67	15.21	84.28	8.90	3.60
C12	11.64	13.78	83.83	9.06	3.22
C13	11.51	15.09	80.10	8.48	4.51
C14	12.19	15.84	85.41	9.123	3.25
C15	12.03	14.57	85.10	9.02	3.28
C16	—	—	—	10.44	3.26

(All purities are Polarisation Gravity Purities)

Table 11 gives the composition of cane, yield of sugar and molasses % cane. The cane crushed by this group of factories was of high sucrose content and juice purity and was generally of a superior quality to that crushed by factories covered by groups A, D and E. Factory C16 did not

report up-to-date figures of sugar % cane and primary juice purity, etc., but it crushed cane of the best quality in this group throughout the season. In the month of March the sugar % and Primary Juice Purity of cane reported were as high as 13.51 and 86.59 respectively. Factory C13 crushed cane of average quality having 11.51 % sugar and a primary juice purity of 80.10. Factory C5 also reported a figure of sugar % cane 11.50 but its primary juice purity was higher than that of C13, being 82.76. Factory C3 had a very high purity cane in the month of February, primary juice purity being 88.42 but the sucrose content was not very high. The lowest fibre % 13.78, is reported by factory C12 and the highest, 17.72, by factory C9. In this group also the cane fully ripened in the month of February, when the cane juice reached its maximum purity, excepting some areas in which it fully matured in March. Deterioration of cane took place more gradually and in some areas the quality of cane in March and April was more or less the same. Factory C16 reported the highest yield sugar % cane, 10.44, for the season and the lowest yield 8.48 was reported by factory C13. Factories C9, C10 and C13 had yields below 9.0 while factories C4, C6, C12, C14 and C15 had yields between 9.0 and 9.20, the others namely C1, C2 and C5 having 10.30, 9.40 and 9.67 respectively. Factory C1 reported the highest yield sugar % cane 11.35 for the month of March and factory C16 also recovered more or less the same percentage in one month. Factory C13 reported a very high, abnormal figure of molasses % cane, 4.51 thereby losing as much as 1.79 sugar % cane alone in the boiling house. Factories C2, C4, C6 and C10 also reported a high yield of molasses % cane, the lowest reported being by factory C5.

GROUP C

Table 12

Milling results and Fuel consumption

Factory Symbol	Added water % cane	Mill Extraction	Coal % cane	Wood % cane
C1	25.60	94.42	0.00	1.75
C2	15.26	89.80	1.49	0.71
C4	18.56	—	—	—
C5	21.83	93.79	1.90	0.195

Factory Symbol	Added water %cane	Mill Extraction	Coal %cane	Wood %cane
C6	18.15	88.50	0.60	0.221
C8	19.60	87.92	0.21	1.0200
C9	16.53	88.47	2.15	2.074
C10	8.14	87.17	0.21	0.36
C12	16.53	90.46	0.00	1.86
C13	11.41	89.20	0.98	4.90
C14	14.27	87.85	1.05	6.06
C15	18.50	84.80	0.00	11.50
C16	—	—	0.047	0.41

The above table gives the milling results and fuel consumption of factories in C group. The added water % cane 25.60 for factory C1 is the highest figure in this group, the lowest figure being 8.14 for factory C10. The average added water % cane for this group of factories is much higher than for A and B groups, many of them adding more than 15 % water. Factory C1 gained the highest mill extraction of 94.42 while C5 also reported a good mill extraction of 93.79, with less added water % cane. 84.80 is the lowest figure of mill extraction for the group, and was gained by factory C15. Factory C12 also reported mill extraction above 90.0 but the remaining factories reported lower figures than 90.0. It is disappointing to find that factories used extra fuel in spite of the high fibre content of the cane crushed by them. Factory C9 reported the highest coal consumption figure of 2.15. Factories C1, C12 and C15 did not use extra coal but the latter factory consumed a very large quantity of wood. Factories C14, C13 and C9 also consumed fairly large quantities of wood. Factory C16 used the lowest quantities of coal and wood.

GROUP C

Table 13

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
C1	90.17	33.01†	85.14
C2	87.00	32.09*	79.02
C4	89.70	32.50*	
C5	89.30	34.68†	83.75
C6	86.65	35.58	76.63
C8	87.95	36.04*	77.32
C9	—	35.83*	—
C10	86.65	35.36*	75.54
C12	86.03	34.39*	77.83
C13	82.60	36.90*	73.70
C14	85.18	35.71*	74.83
C15	88.00	31.60*	74.60
C16	—	31.55*	—

* Polarisation Gravity Purity.

† Gravity Purity.

Boiling house extraction, final molasses purity and overall recovery obtained by factories of this group are given in the above table. The best recovery on mixed juice, that is, boiling house extraction, of 90.17 was obtained by factory C1. All the factories reported boiling house extraction figures higher than 85.0 with the exception of factory C13 which reported a very low figure of 82.60, owing to relatively high losses of sucrose in final molasses which had polarisation gravity purity 36.90. Factories C15 and C16 exhausted the final molasses to low polarisation gravity purities of 31.60 and 31.55 respectively. Factory C5 reported a final molasses gravity

purity as high as 34.68. Factories C1 and C5 are the only factories in this group which gained an overall recovery of more than 80.0, reporting 85.14 and 83.75 respectively. Factory C13 reported the lowest overall recovery of 73.70. Other factories showed low recoveries owing to relatively high losses of sucrose in bagasse and final molasses.

In conclusion, on the average this group of factories showed better factory performance than factories of A and B groups which had, however, to face adverse conditions, the cane being diseased and affected by frost. Factories C1 and C5 recorded specially good performance.

GROUP D

This group covers 19 factories which worked in the season 1934-35 but out of these only 13 joined the scheme, and all of them reported their figures. Factory D1 sent returns for December, January and March. D2 sent only monthly figures for all the months but many of the figures were doubtful and some of them seemed incorrect. Out of these 13 factories, 9 are sulphitation and 4 are carbonation factories. Factories D1, D6, D11 and D13 have reported that they work by sulphitation process but factories D2, D3, D4, D8 and D12 have simply stated "Sulphitation" under the heading of Clarification process. Similarly factories D5, D7, and D10 mentioned carbonation and only D9 mentioned double carbonation.

Factories D4, D6, D7, D9, D10, D11 and D13 started crushing in the month of November and D2, D3, D5 and D8 started in December. For factories D1 and D12 the date of starting crushing is not known as they did not supply returns in the beginning. Factories D1, D2, D11, D12 and D13 were very irregular in sending monthly returns. Factories D1, D4, D5, D6, D10, D12 and D13 finished their season in March whereas D2, D3, D7, D8 and D9 stopped crushing in April. Group C factories had a longer crushing season than D group factories, as 70 % of the factories of group C worked in April, whereas more than 58 % factories of D group stopped crushing in March.

The climatic conditions in the area covered by this group were not favourable for cane. There was shortage of cane and the quality of cane was also poorer than in the C group and more or less similar to group B but superior to group A. This was due to three main reasons. Firstly, the earthquake of January, 1934, delayed planting of the next year's cane crop, and some of the land which was covered by sand could not be cleared in time for planting at all. Secondly, there were floods in various parts of this province, as a result of which cane could not ripen in time and develop a satisfactory sucrose content. Thirdly, crop in several areas

was attacked by shoot, stem and root borers, and by some fungoid diseases which seriously affected its quality.

GROUP D

Table 14

Comparison of cane crushed, cane crushed per 24 hours operation, and sugar and final molasses produced

All weights are in standard maunds (82 2/7 lbs).

Factory Symbol	Clarification process	Cane crushed	Cane crushed per 24 hours operation	Sugar produced	Molasses produced
D1	D.S.	22,20,900.00	18,883.0	2,12,432.0	83,692.0
D3	—	25,40,697.00	23,100.0	2,43,133.0	83,955.0
D4	—	13,27,849.00	—	1,10,536.0	57,183.0
D5	C	22,68,572.00	25,500.0	2,06,892.0	69,900.0
D6	DS	15,05,238.00	13,690.0	1,26,685.0	56,470.0
D7	C	19,92,714.00	17,720.0	1,69,836.0	61,354.0
D8	—	18,40,308.25	18,235.1	1,65,968.4	68,512.0
D9	DC	26,13,513.55	19,300.0	2,26,141.1	79,754.5
D10	C	26,40,616.00	25,100.0	2,54,185.0	75,862.0
D12	—	15,17,530.00	17,443.0	1,33,075.0	—
D13	DS	15,86,350.00	14,123.2	1,32,808.7	53,522.0

Table 14 gives figures for cane crushed, cane crushed per 24 hours operation, sugar and molasses produced. Highest cane crushing capacity per day is recorded by factories D10 and D12 but factory D5 also reported a very good average figure of 25,500 maunds cane crushed per 24 hours operation for the whole season. Factory D12 crushed cane much below its normal daily capacity. Factory D10 crushed the highest total quantity of cane for the season, namely, 26,40,616.0 maunds. Factories D3, D5 and D9 have also done comparatively well in respect of total quantity of cane

crushed. Factory D4 reported the lowest cane crushed figure, 13,27,849.0 maunds in the whole group. Each of the factories D1, D3, D5 and D9 crushed more than 20 lacs maunds of cane. Sugar production by factory D10 is the highest, amounting to 2,54,185.0 maunds. Each of the factories D1, D3, D5 and D9 made more than 2 lacs maunds of sugar. Factory D10 turned out less molasses than factory D9, though it crushed more cane than D9. D3 turned out the largest quantity of molasses, 83,955.0 maunds and factory D13 the smallest quantity, 53.522 maunds.

GROUP D

Table 15

Composition of cane, Yield of sugar and molasses % cane

Factory Symbol	Sugar %	Fibre %	Primary Juice Purity	Yield Sugar % cane	Molasses % Cane
D1	12.00	13.19	84.18†	9.565	3.77
D3	11.63	17.38	83.08*	9.57	3.30
D4	10.98	17.73	80.69*	8.324	4.30
D5	11.08	17.16	80.40*	9.12	3.08
D6	11.31	12.04	79.70*	8.416	3.75
D7	11.04	18.08	81.41*	8.52	3.08
D8	11.81	14.65	83.41*	9.02	3.72
D9	11.12	—	—	8.64	3.03
D10	11.26	15.58	80.73*	9.63	2.87
D12	12.08	14.88	83.80*	8.77	—
D13	11.00	16.22	81.38*	8.37	3.37

*Polarisation Gravity Purity. †Gravity Purity.

Table 15 gives the quality of cane crushed, yield sugar % cane and molasses % cane by this group of factories. Factory D1 got the best cane in all respects in this season, the average sugar % cane being 12.0, fibre content, 13.19 and primary juice purity, 84.18. Factory D4 crushed a poor quality cane having the lowest sugar % 10.98, high fibre % 17.73, and low primary juice purity, 80.69. The highest average sugar % cane is of the factory D12. The lowest fibre % cane, 12.04 and primary juice purity, 79.70, are reported by D6. The highest fibre content 18.08 is of factory D7. The best yield of sugar % cane 9.63 is for factory D10. Factories D1 and D3 also reported a high yield of sugar but the yield of sugar of the former is not so good in view of the fact it crushed a better quality cane than D3 and D10. Factories D1, D3, D5, D8 and D10 had recoveries of sugar % cane higher than 9.0 and others below 9.0, the lowest yield 8.324 being for factory D4. Factory D4 reported the highest molasses % cane 4.30, the lowest 2.87 being for D10.

GROUP D

Table 16

Milling results and Fuel consumption.

Factory Symbol	Added water % cane	Mill Extraction	Coal %cane	Wood % cane
D1	19.08	94.00	0.319	0.935
D3	26.74	93.37	0.00	0.00
D4	17.00	91.94	0.91	7.02
D5	19.83	93.05	0.51	0.13
D6	12.37	92.74	0.0988	5.132
D7	26.47	89.86	1.630	0.150
D8	15.91	91.22	1.250	0.210
D9	14.25	90.10	1.350	0.315
D10	23.32	95.72	1.410	0.110
D12	15.35	90.28	1.170	4.480
D13	14.56	89.92	1.460	1.950

The milling results and fuel consumption of the factories in this group are given in Table 16. Factory D10 with an extraction of 95.72 shows the best result amongst all the factories in the six groups, which compares favourably with the results of efficient factories in other countries. Even allowing for high fibre content of cane, factories D3 and D7 used more added water than D10, specially in the case of factory D7, which had the lowest figure of 89.86. The lowest amount of added water 12.37 is reported by factory D6. The average amount of added water % cane for this group is satisfactory. Mill extraction of all the factories is above 90.0 except for factories D7 and D13 reporting near about 90.0. Among the sulphitation factories D3 did not use extra fuel at all, while others used coal and wood % cane as high as 1.46 and 7.02 respectively. The coal and wood consumption of the carbonation factory D5 is the lowest, being 0.51 and 0.13 respectively. The highest coal consumption is of factory D7.

GROUP D

Table 17

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
D1	84.35	33.43†	79.71
D3	87.53	37.07†	81.72
D4	82.82		75.32
D5	88.07	36.39†	81.96
D6	80.24	33.57*	74.42
D7	85.47	39.86†	76.81
D8	83.37	36.43*	76.05
D9	86.10		77.60
D10	89.14	35.77†	85.32
D12	79.96	40.02*	72.19
D13	83.62	34.28*	75.18

*Polarisation Gravity Purity.

†Gravity Purity.

It will be observed from Table 17, that factory D12 reported the lowest boiling house extraction of 79.96, the highest 89.14 being for factory D10. Boiling house extraction for all factories in this group is lower than for factories in group C. The final molasses turned out by this group of factories are of higher purities, reaching as high as 40.02. Factory D1 sent out molasses of the lowest gravity purity, 33.43. Factories D3, D5, D7, D8 and D10 could have easily increased their boiling house extraction by exhausting the molasses more and consequently increasing their overall recovery. 85.32 is an excellent overall recovery as reported by D10 and is the highest figure for all factories amongst all the six groups. Factories D3, D5 and D10 obtained overall recoveries higher than 80.0 while all others reported below 80.0, the lowest figure 72.19 is for factory D12.

Performance of factory D10 is the best in the group in all respects and is well above the average for Indian factories.

GROUP E

Sixteen factories worked in the area covered by this group, of which 9 joined the scheme. Factories E1, E5, E6 and E7 supplied returns regularly whilst the others were irregular. E2 did not supply monthly figures for March, and E3 did not supply for November. E9 did not supply monthly figures after November up to the end of the season. Of these 9, 3 are carbonation plants and the rest sulphitation plants. The factories E1 and E2 started in December and the rest in November. The factories E1, E2, E5, E6 and E7 closed in March and E3, E4, E8 and E9 in April. The quality of cane in this group was generally poor. The cane crop in certain areas of the group suffered badly from fungoid diseases, stem and top shoot borers, etc., as a result of which the recovery is lower than what it might have been. The supply of cane was also inadequate, due partly to increased capacities of factories and partly to damage done by earthquake to the sugarcane areas. Most of the factories, therefore, began crushing late and closed early.

GROUP E

Table 18

Quantities of cane crushed, cane crushed per 24 hours operation and sugar and final molasses produced

All weights are in standard maunds (82 2/7 lbs.)

Factory Symbol	Clarification process	Cane crushed	Cane crushed per 24 hours operation	Sugar produced	Molasses produced
E1	DS	10,52,309.25	—	86,889.63	37,955.0
E2	—	9,46,686.00	11,000.0	75,906.00	35,455.0
E3	—	24,69,126.00	19,460.0	2,22,257.00	87,346.0
E4	C	21,06,100.00	20,300.0	1,87,347.00	63,885.0
E5	—	32,09,059.00	32,161.0	2,81,627.50	1,09,596.0
E6	—	20,97,452.00	17,663.0	1,92,430.00	73,111.0
E7	DC	15,57,123.50	13,659.0	1,30,038.50	49,062.0
E8	DC	31,62,556.00	19,886.0	2,88,109.00	1,38,204.0
E9	—	27,00,840.00	16,775.0	2,41,688.00	1,02,790.0

Table 18 gives figures for cane crushed, cane crushed per 24 hours operation, sugar and final molasses produced. Factory E5 has crushed the highest quantity of cane, 32,09,059 maunds, while the lowest crushing of 9,46,686.0 maunds is recorded by E2 which has also the lowest capacity. Factory E8 has recorded a low figure compared with its capacity. Cane crushed figure per 24 hours operation by E5 is 32,161 maunds, which is well above its normal capacity. Factory E8, however, has crushed only 31,62,556 maunds in spite of its higher capacity. The figures for cane crushed per 24 hours operation are particularly low in relation to their normal capacities for factories E8 and E9 being 19,886 and 16,775 maunds respectively. E8 has produced more sugar than E5 although the latter crushed more cane than the former. The highest quantity of molasses 1,38,204 maunds is produced by E8 though it crushed less cane than E5. This higher quantity of molasses is partly due to lower purity of juice but even then it is a high figure.

GROUP E

Table 19

Composition of cane, Yield of sugar and molasses % cane

Factory Symbol	Sugar %	Fibre %	Primary Juice Purity	Yield Sugar % Cane	Molasses % Cane
E1	11.27	16.61	84.23*	8.257	3.607
E2	10.68	17.05	83.31*	8.02	3.75
E3	11.12	18.72	80.43*	9.01	3.54
E4	10.82	16.72	81.68*	8.90	3.03
E5	11.53	16.35	82.62*	8.776	3.41
E6	11.64	17.68	84.71*	9.17	3.48
E7	10.95	16.98	80.05*	8.35	3.15
E8	12.04	17.57	80.83*	9.11	4.37
E9	11.50	17.01	83.79*	8.96	3.81

*Polarisation Gravity Purity.

The composition of cane, yield of sugar and molasses % cane are given in Table 19. Cane crushed by this group of factories is of average quality, the group average being 11.4 sucrose and fibre a little above 17.23. This group is particularly conspicuous for the high fibre content of cane. Factory E8 crushed cane of the highest sucrose content 12.04, while E2 crushed cane having lowest sucrose % 10.68. The purity of juice is highest for factory E6 being 84.71 and lowest for E7 being 80.05. Highest recovery 9.17 is recorded by E6, while the lowest 8.02 is for E2 as it crushed a very poor cane. E4 a carbonation plant had the lowest molasses yield of 3.03 and curiously enough factory E8, also a double carbonation plant, has reported the highest molasses yield of 4.37%.

GROUP E

Table 20

Milling results and Fuel consumption

Factory Symbol	Added water % cane	Mill Extraction	Coal % Cane	Wood % Cane
E1	16.43	88.82	0.000	3.53
E2	18.42	89.34	3.060	2.30
E3	20.82	92.97	0.005	0.019
E4	25.14	93.25	0.350	0.060
E5	24.89	91.47	0.180	0.00
E6	15.51	91.14	0.036	0.00
E7	16.17	90.60	0.750	0.00
E8	25.02	92.61	2.170	0.026
E9	26.55	91.47	1.790	0.590

Milling results and fuel consumption figures are given in Table 20. The highest extraction of 93.25 has been obtained by E1 with 25.14 added water % cane, while E1 has the lowest extraction 88.82 with added water % cane 16.43. The average extraction 89.56 for the group is rather low. The fuel consumption of factories E2, E8 and E9 is very high, with coal consumption of 3.06, 2.17 and 1.79% cane respectively and wood consumption of 2.30, 0.026 and 0.59% cane respectively. These figures are particularly disappointing in view of high fibre % cane. Factories E3, E5 and E6 show normal fuel consumption, E3 having the lowest fuel consumption with added water % cane 20.82. E5 has a fuel consumption of 0.18 coal % cane with added water % cane 24.89, which is quite a good result. The average added water % cane 21.79 is the highest of all the groups while the fuel consumption is the lowest being 0.979 coal and 0.637 wood per 100 cane. But it should be borne in mind that this group has cane with the highest fibre content.

GROUP E

Table 21

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
E1	82.29	—	73.09
E2	83.24	38.21*	74.36
E3	86.55	37.73†	80.48
E4	87.71	38.49†	81.79
E5	85.71	35.87†	78.37
E6	85.98	33.86*	78.37
E7	83.92	39.08†	76.01
E8	82.00	34.53*	75.67
E9	84.88	32.30*	77.65

*Polarisation Gravity Purity.

†Gravity Purity.

Table 21 gives the boiling house extraction, final molasses purity and overall recovery for individual factories. The highest boiling house extraction of 87.71, as well as overall recovery of 81.79 are obtained by E4, E3 coming next. The lowest boiling house extraction 82.00 is obtained by by E8, while E1 has the lowest overall recovery 73.09. Factory E7 turned out final molasses of highest gravity purity 39.08, while the highest polarisation gravity purity, 38.21 is recorded by E2. Factory E9 turned out molasses of lowest polarisation gravity purity.

The working figures of this group of factories are above the average figures for the whole of India. The overall recovery of this group is 77.54 as against 78.20 of group D, which is the highest for all India. In point of fuel economy it is the best.

GROUP F

In this group 31 factories operated in the season 1934-35, of which 8 factories came forward to join the scheme. Of these 8 factories 4 sent monthly manufacturing returns. Factory F4 was not regular in sending returns and started very late, some time in February. F1, F2 and F4 are double sulphitation plants and F3 is a single sulphitation plant.

All the four factories are very favourably situated as regards climatic conditions, rainfall and soil. The cane is of a very high sucrose content, low fibre % and high purity of juices. Sugar % cane and primary juice purity were as high as 14.00 and 86.6 respectively in the month of February. Crushing season is also very long. Cane is ready for crushing by October and factories can crush economically up to the end of May, getting cane which is not much deteriorated as these areas do not experience very hot weather like other groups. Factories F1 and F3 started crushing in November and stopped in April, while F2 started in October and finished in the end of May. The crushing period for this factory is the longest being more than 7 months while for the other groups it does not exceed 5½ months.

GROUP F

Table 22

Quantities of cane crushed, cane crushed per 24 hours operation and sugar and final molasses produced

All weights are in standard maunds (82 2/7 lbs.)

Factory Symbol	Clarification process	Cane crushed	Cane crushed per 24 hours operation	Sugar produced	Molasses produced
F1	DS	6,17,280.0	4,505.69	61,851.48	17,657.52
F2	DS	10,90,950.0	8,160.00	1,00,861.00	49,311.00
F3	S	8,51,037.0	5,280.00	85,107.00	29,368.00
F4	DS	97,447.6	1,280.00	6,533.00	3,116.70

Table 22 gives the cane crushed, cane crushed per 24 hours operation, sugar and molasses produced for this group of factories. The crushing capacity of factory F1 is very high in comparison with factories F2 and F3 whereas the cane crushed per 24 hours operation is much below even

half its normal capacity. The highest amount of cane crushed is by factory F2 but it did not produce proportionately as much sugar as factories F1 and F3. Factory F4 is a very small unit, crushing not more than 50 tons per day. Molasses produced by factories F2 and F3 is very high.

GROUP F

Table 23

Composition of cane, Yield of sugar and molasses % cane

Factory Symbol	Sugar %	Fibre %	Primary Juice Purity	Yield Sugar % Cane	Molasses % Cane
F1	13.18	10.95	80.04†	10.02	2.86
F2	12.39	15.77	83.70*	9.24	4.52
F3	12.67	16.24	84.54*	10.00	3.45
F4	13.00	16.00	—	6.70	3.20

* Polarisation Gravity Purity.

† Gravity Purity.

Composition of cane, yield of sugar and molasses % cane are given in Table 23. The cane crushed by factory F1 is of highest sucrose content 13.18, lowest fibre % 10.95 and primary juice purity 80.04. The highest yield of sugar 10.02 is for factory F1 whilst F4 had an abnormally low yield, losing nearly 50 % of the sucrose present in cane. With juice of such good purity the final molasses % cane turned out by F2 is much higher than what it should have been with proper working.

GROUP F

Table 24

Milling results and Fuel consumption

Factory Symbol	Added water % cane	Mill Extraction	Coal % cane	Wood % cane
F1	9.95	90.51	3.72	9.69
F2	12.78	89.85	—	—
F3	16.68	89.60	—	—
F4	0.00	80.00	0.00	—

Milling results and fuel consumption figures are given in Table 24. Factory F4 did not use imbibition water at all and is a dry crushing factory and it had, in consequence, an abnormally high loss in bagasse, the mill extraction being only 80.00, the poorest figure of all the reporting factories. Factory F3 used a high amount of water but mill extraction of F1 is higher than that of F3, due to low fibre content. Fuel consumed by F1 is exceptionally high and indicates inefficient working of the boilers. Factories F2 and F3 did not report fuel figures.

GROUP F

Table 25

Boiling House Extraction, Final Molasses Purity and Overall Recovery

Factory Symbol	Boiling House Extraction	Final Molasses Purity	Overall Recovery
F1	83.88	33.67†	76.02
F2	83.02	32.86*	74.58
F3	88.09	37.05*	78.93
F4	—	45.00*	—

*Polarisation Gravity Purity. †Gravity Purity.

Table 25 gives boiling house extraction, final molasses purity and overall recovery of individual factories of this group. The boiling house extraction and overall recovery obtained by factory F3 are highest but it turned out final molasses of high purity. Factory F4 did not report both these figures and its final molasses polarisation gravity purity of 45.0 is the highest of all the reporting factories, thereby losing high quantities of sugar in molasses. The performance of factory F3 is better than that of the other factories in this group. It turned out as high as 11.44 % sugar in the month of February. The molasses % cane figure of 1.68 reported by factory F1 in the month of January is unusually low and appears to be due to some error in calculation. Had the factories worked more efficiently the average yield of sugar % cane for this group could easily have been between 11.0 and 11.5.

In conclusion, I thank the factories, which were good enough to co-operate by supplying monthly manufacturing data throughout the season, and hope that more factories, realising the usefulness and necessity of the present scheme, will join it during the coming crushing season.

FACTORY SYMBOL A1

Clarification process. Double Carbonation with DeHaan Modification

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	214103	233474	262312	495786	259440	755226	262069	1017295	102282	1119577
Maunds cane crushed per 24 hours operation.	..	..	6907	5837	8461	6983	9266	7629	8454	7825	6819	7721
Maunds sugar produced.	..	..	12797	13008	23702	36710	21496	58206	21429	79631	10135	89772
Maunds sugar in process.	..	..	..	978	..	1360	..	1474.2	..	1237.8	..	..
Maunds molasses produced.	..	..	9902	9902	10654	19556	8402	27958	8868	36648	6108	42756
Maunds molasses in process.	..	..	..	743	..	1153	..	887	..	1065	..	..
Yield sugar % cane ..	..	..	6.0	6.0	9.12	7.63	..	..	..	..	8.32	7.96
Yield molasses % cane	..	..	4.62	4.56	4.06	4.17	3.24	3.85	..	..	..	3.82
Sugar % cane ..	..	..	10.2	10.17	11.35	10.79	10.40	..	10.67	..	10.80	10.80
Fibre % cane ..	..	..	13.09	13.20	12.79	12.99	13.40	13.10	12.71	13.00	12.58	12.97
Added water % cane	..	..	15.62	14.90	12.30	14.14	11.60	13.30	11.90	12.94	13.06	12.95
Mixed juice % cane ..	..	..	88.46	88.80	86.40	87.50	84.40	86.40	86.40	86.40	86.80	86.40
Bagasse % cane ..	..	..	27.16	26.10	25.90	26.64	27.20	26.90	25.50	26.54	26.26	26.55
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	8.47	9.5	8.49	9.0	7.72	8.56	7.94	8.40	9.19	8.47
Primary juice purity ..	..	..	74.20	72.30	80.90	76.90	78.30	77.70	76.64	77.59	76.50	77.50
Mixed juice purity ..	..	..	71.40	..	78.90	75.80	76.11	76.80	74.20	75.85	73.80	75.80
Molasses purity ..	..	..	33.40	33.30	32.70	32.80	33.30	33.60	34.31	34.07	34.37	33.93
Mill extraction ..	..	..	92.3	92.3	93.80	93.20	93.0	93.0	93.0	93.0	92.0	92.90
Boiling house extraction.	..	..	..	..	85.63	75.84	85.80	78.0	81.0	79.02	83.7	79.40
Overall recovery ..	..	..	58.2	58.8	80.30	70.70	76.30	72.6	75.30	73.50	77.0	73.70

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	137876.98	137876.98	211823	349700	388418.8	738118.8	308471.2	1046590.0	165864	1212454	..	..
Maunds cane crushed per 24 hours operation.	11529.6	11529.6	14972	13339.4	14982.24	14287.60	15470.4	14547.6	15750	14700	..	..
Maunds sugar produced.	4267	4267	11213	15480	29008	44488	19185	63673	13091	76764	..	..
Maunds sugar in process.	2283	2283	1381	3664	—2352	1312	636	1948	—1864	80	..	..
Maunds molasses produced.	2020	2020	7630.0	9650	14950	24600	7500	32100	5600	37400	..	..
Maunds molasses in process.	..	..	1206.6	6168	—5168	1000	2800	3800	..	300	..	..
Yield sugar % cane ..	4.75	4.75	5.94	5.47	6.87	6.205	6.42	6.27	..	6.338	..	..
Yield molasses % cane	5.06	5.06	4.12	4.52	2.518	3.46	3.30	3.43	2.43	3.11	..	..
Sugar % cane ..	7.93	7.93	8.80	8.45	9.19	8.69	8.65	8.78	8.00	..	..	..
Fibre % cane ..	12.20	12.20	13.25	12.76	13.90	13.22	16.03	13.99	16.45	14.35	..	..
Added water % cane	6.11	6.11	10.75	8.79	9.29	9.05	8.72	8.93	11.06	9.43	..	..
Mixed juice % cane..	74.65	74.65	78.55	77.02	74.56	75.91	70.71	75.20	70.96	74.53	..	..
Bagasse % cane ..	31.46	31.46	32.20	31.77	34.73	33.14	38.01	33.73	40.10	34.90	..	..
Coal % cane ..	6.74	6.74	2.18	3.98	2.62	3.23	2.21	2.93	3.03	3.03	..	..
Wood % cane ..	0.48	0.48	0.12	0.113	0.109	0.113	0.22	0.14	0.37	0.19	..	..
Primary juice purity ..	68.42	68.42	73.17	70.95	75.76	71.84	73.65	72.34	72.64	..	..	..
Mixed juice purity ..	66.39	66.39	71.32	68.97	73.80	70.82	72.28	71.23	70.99	..	..	..
Molasses purity ..	32.40	32.40	32.28	..	32.48	31.70	30.85	31.44	30.95	..	..	..
Mill extraction ..	74.65	74.65	85.0	84.02	85.09	84.69	81.72	83.87	80.70	82.40	..	..
Boiling house extraction.	70.56	70.56	78.60	76.30	87.85	84.30	90.83	85.15	90.90	86.83	..	..
Overall recovery ..	59.29	59.29	66.80	64.10	74.75	71.40	74.23	71.37	..	71.60	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured and calculated

FACTORY SYMBOL A3

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	368335	564030	376538	940568	390702	1331270	..	1735000	..	..
Maunds cane crushed per 24 hours operation.	..	..	12701	11280	13448	12058	..	..	..	..	..	..
Maunds sugar produced.	..	..	28194	38056	33051	71107	33621	104729	..	140023	..	..
Maunds sugar in process.	..	..	845	3087	—798	2282	41	2247	..	2846	..	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane	..	..	7.88	7.29	8.56	7.80	8.59	8.03	..	8.23	..	..
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	..	..	10.35	9.90	11.40	10.50	11.06	10.68	..	10.77	..	..
Fibre % cane ..	..	..	14.03	13.72	14.28	13.92	14.71	14.10	..	13.79	..	..
Added water % cane	..	..	10.40	10.50	11.10	10.80	12.76	11.19	..	13.21	..	..
Mixed juice % cane ..	..	..	82.86	82.34	85.11	83.46	81.68	82.94	..	84.06	..	..
Bagasse % cane ..	..	..	27.54	28.16	25.99	27.34	31.08	28.25	..	29.15	..	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Crusher juice purity ..	..	..	76.60	73.60	81.50	76.60	..	..	..	..	..	..
Mixed juice purity ..	..	..	74.50	72.30	79.10	75.20	78.40	76.1	..	75.8	..	..
Molasses purity ..	..	..	30.50	30.50	30.00	29.70	28.80	29.39	..	27.1	..	..
Mill extraction ..	..	..	89.10	88.70	90.60	89.50	90.70	89.90	..	91.4	..	..
Boiling house extraction.	..	..	..	82.46	..	83.33	..	83.21	..	84.25	..	..
Overall recovery ..	..	..	..	73.11	..	74.42	..	75.26	..	76.44	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	211627	211627	396474	608101	396413	1004514	..	..	..	..
Maunds cane crushed per 24 hours operation.	..	..	17832	17832	18931	18533	18260	18066	..	..	..	..
Maunds sugar produced.	..	..	11783	11783	24905	38240	23754	61994	..	..	..	..
Maunds sugar in process.	..	..	1623	1623	..	261	..	..	..	..	..	..
Maunds molasses produced.	..	..	8050	8050	16109	24874	14422	39510	..	..	..	..
Maunds molasses in process.	..	..	715	715	..	214	..	..	..	..	..	..
Yield sugar % cane ..	..	..	6.30	6.30	6.28	6.29	6.0	6.18	..	..	..	..
Yield molasses % cane	..	..	4.15	4.15	4.06	4.12	3.64	3.93	..	..	..	..
Sugar % cane ..	..	..	8.80	8.80	8.40	8.50	8.00	8.31	..	..	..	..
Fibre % cane ..	..	..	14.60	14.60	14.00	14.20	14.0	14.10	..	..	..	..
Added water % cane	..	..	11.80	11.80	9.80	10.50	7.20	9.20	..	..	..	..
Mixed juice % cane ..	..	..	80.00	80.00	79.8	80.00	78.10	79.20	..	..	..	..
Bagasse % cane ..	..	..	31.80	31.80	30.0	30.50	29.10	30.00	..	..	..	..
Coal % cane ..	..	..	1.44	1.44	2.13	1.89	0.95	1.52	..	..	..	..
Wood % cane ..	..	..	0.41	0.41	0.75	0.63	0.23	0.47	..	..	..	..
Primary juice purity ..	..	..	74.30	74.30	73.4	73.7	72.85	73.40	..	..	..	..
Mixed juice purity ..	..	..	73.3	73.30	72.0	72.30	71.0	71.80	..	..	..	..
Molasses purity ..	..	..	29.50	29.50	28.1	28.5	29.80	28.90	..	..	..	..
Mill extraction ..	..	..	88.10	88.10	88.6	88.4	89.50	88.80	..	..	..	..
Boiling house extraction.	..	..	81.80	81.80	84.2	83.2	84.00	83.70	..	..	..	..
Overall recovery ..	..	..	71.6	71.60	74.70	74.0	75.0	74.50	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL A5

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	64673	64673	212726	277999	283117	561117	211994	773111	..	..	..	..
Maunds cane crushed per 24 hours operation.	9200	9200	10567	10337	11203	10757	11218	10879	..	..	..	..
Maunds sugar produced.	3622	3622	12519	15933	18295	33628	12683	46311	..	..	..	..
Maunds sugar in process.	..	..	..	208	..	808	643	1450	..	..	..	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	5.6	5.6	5.89	5.81	6.46	6.14	6.29	6.18	..	..	..	..
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	..	..	8.64	8.36	8.94	8.65	8.72	8.67	..	..	..	..
Fibre % cane ..	..	..	13.54	13.65	13.50	13.57	14.08	13.72	..	..	..	..
Added water % cane	..	..	4.64	4.92	5.61	5.27	5.78	5.41	..	..	..	..
Mixed juice % cane ..	75.32	75.32	74.80	74.81	75.19	75.01	74.43	74.85	..	..	..	..
Bagasse % cane ..	..	..	29.84	30.11	30.42	30.26	31.35	30.56	..	..	..	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % per cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	..	..	..	..	..	..	..	..	..	..
Mixed juice purity ..	70.5	70.5	70.0	70.2	72.3	71.3	70.74	71.13	..	..	..	..
Molasses purity ..	31.8	31.8	31.0	31.04	30.61	30.82	30.60	30.74	..	..	..	..
Mill extraction ..	..	..	86.71	86.31	87.4	86.9	87.27	86.99	..	..	..	..
Boiling house extraction.	..	..	..	..	82.8	81.65	..	..	..	..	..	..
Overall recovery ..	..	..	..	..	72.30	70.90	72.03	71.24	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	584937	584937	516867	1101804	713042	1814828	544995	2359823	586473.5	2946296.5	..	..
Maunds cane crushed per 24 hours operation.	27312	27312	24863	26070	25320	26188	20815	19999	24375	25443	..	..
Maunds sugar produced.	25532.5	25532.5	34357	59890	49898	109788	33561.5	143349.5	39894.5	183244	..	..
Maunds sugar in process.	6712.0	6712.0	2718	3994	—367	3627	1689	5314	—2486.0	2828.0	..	..
Maunds molasses produced.	18527.0	18527.0	..	..	30463	81571	..	96765	27166	123931	..	..
Maunds molasses in process.	4870.0	4870.0	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	5.52	5.52	6.12	5.80	6.95	6.26	6.46	6.30	6.38	6.31	..	..
Yield molasses % cane	4.00	4.00	4.13	..	4.27	4.49	..	4.10	4.63	4.26	..	..
Sugar % cane ..	8.39	8.39	9.02	8.68	9.62	9.05	9.48	9.15	9.59	9.23	..	..
Fibre % cane ..	14.28	14.28	13.17	13.70	12.44	13.21	13.21	..	12.49	..	..	..
Added water % cane	4.84	4.84	6.74	5.73	7.69	6.50	7.98	6.84	8.18	7.11	..	..
Mixed juice % cane ..	73.64	73.64	77.80	75.59	78.40	76.84	76.57	77.22	79.72	77.72	..	..
Bagasse % cane ..	31.20	31.20	28.94	30.14	29.29	29.66	31.41	29.62	28.46	29.39	..	..
Coal % cane ..	0.67	0.67	0.553	0.62	0.25	0.47	0.33	0.44	0.38	0.42	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	72.88	72.88	75.92	74.40	78.0	..	77.60	76.85	75.33	76.02	..	..
Mixed juice purity ..	71.63	71.63	74.98	73.27	76.75	73.93	75.77	75.50	73.75	74.34	..	..
Molasses purity ..	30.95	30.95	32.92	31.94	31.82	31.89	32.24	31.97	31.08	31.78	..	..
Mill extraction ..	87.27	86.27	90.40	88.26	90.80	89.40	90.72	89.59	91.09	89.96	..	..
Boiling house extraction.	76.21	76.21	75.08	75.66	79.50	77.30	75.15	76.93	73.01	76.02	..	..
Overall recovery ..	65.79	65.79	67.87	66.82	72.18	69.10	68.19	68.78	66.50	68.39	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been weighed

FACTORY SYMBOL A7

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	161587.9	432030.6	200319.3	632349.9	..	..	131776.5	1454749.5	..	..
Maunds cane crushed per 24 hours operation.	..	..	10099	10286	11784	10718.0	..	..	10982	11455	..	..
Maunds sugar produced.	..	..	..	..	..	..	..	..	9749	93229	..	..
Maunds sugar in process.	..	..	..	..	..	..	..	..	..	1948	..	..
Maunds molasses produced.	..	..	..	..	8072.5	22287.0	..	..	..	59706.7	..	..
Maunds molasses in process.	..	..	..	..	..	4397.0	..	..	..	1989	..	..
Yield sugar % cane ..	..	..	..	..	..	..	..	..	5.57	6.55	..	..
Yield molasses % cane	..	..	..	..	4.03	4.22	..	..	..	4.25	..	..
Sugar % cane ..	..	..	8.83	8.33	9.10	8.55	..	..	10.45	9.25	..	..
Fibre % cane ..	..	..	14.36	13.71	12.60	13.28	..	..	14.43	13.22	..	..
Added water % cane			9.33	9.93	7.39	9.12	..	..	13.36	10.46	..	..
Mixed juice % cane ..	..	..	78.54	79.54	80.08	79.80	..	..	82.10	81.64	..	..
Bagasse % cane ..	..	..	30.79	30.39	27.31	29.32	..	..	31.30	28.90	..	..
Coal % cane ..	..	..	..	2.67	..	4.37	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	76.60	72.82	76.42	73.90	..	..	71.23	74.84	..	..
Mixed juice purity ..	..	..	74.56	70.87	74.71	72.15	..	..	68.10	72.53	..	..
Molasses purity ..	..	..	32.16	32.46	30.52	31.75	..	..	29.37	30.26	..	..
Mill extraction ..	..	..	86.77	87.13	88.84	87.71	..	..	87.69	88.39	..	..
Boiling house extraction.	..	..	..	..	..	..	..	..	..	..	..	..
Overall recovery ..	..	..	..	..	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	136042.4	136042.4	474447.8	610490.2	461645	1072810	408313	1481123	557841	2038964	100943.5	2139907.5
Maunds cane crushed per 24 hours operation.	17479	17479	19911.0	19346.0	19879	19571.0	23279	20472	21271	20673	17887.0	20555.0
Maunds sugar produced	3733.1	3733.1	36656.5	40389.6	38975	79410	36512.5	115922.5	49423.5	165346.0	13614.0	178960.0
Maunds sugar in process.	3824.2	3824.2	—1312.2	2512.0	632	3147	196.0	3343.0	518.0	3861.0	—3861.0	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	5.56	5.56	7.45	7.03	8.58	7.70	9.00	8.06	8.94	8.30	9.54	8.36
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	8.64	8.64	10.22	9.80	11.15	10.35	11.79	10.79	11.84	11.08	11.9	11.12
Fibre % cane ..	15.97	15.97	12.60	13.36	14.75	13.93	15.46	14.34	17.70	15.19	17.30	15.30
Added water % cane	10.30	10.30	9.80	10.10	12.90	11.30	11.50	11.40	12.10	11.60	14.10	11.70
Mixed juice % cane ..	74.01	74.01	81.90	80.20	81.40	80.70	79.32	80.34	76.75	79.36	79.01	79.34
Bagasse % cane ..	36.29	36.29	27.90	29.90	31.50	30.60	32.18	31.06	35.35	32.24	34.99	32.36
Coal % cane ..	Nil	Nil	..	..	..	..	Nil	Nil	..	..	Nil	Nil
Wood % cane ..	7.62	7.62	4.2	4.16	5.76	5.29	5.95	5.5	2.04	4.53	9.38	4.76
Primary juice purity ..	71.67	71.67	76.38	75.24	80.58	77.56	82.50	78.70	80.83	79.45	79.30	79.50
Mixed juice purity ..	70.33	70.33	75.11	73.90	79.69	76.37	81.30	77.80	78.90	77.56	77.80	78.05
Molasses purity ..	30.93	30.93	31.07	31.05	31.06	31.06	34.30	32.00	33.11	32.28	34.60	32.50
Mill extraction ..	85.47	85.47	90.74	89.65	91.12	90.28	90.10	90.28	89.25	90.00	89.30	90.00
Boiling house extraction.	..	..	..	..	..	..	..	..	..	..	..	..
Overall recovery ..	..	..	..	..	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL A9

Clarification process. Double Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	93367	93367	316631	409998	400322	810320	335344	1145664	385753	1531417	..	..
Maunds cane crushed per 24 hours operation.	7780	7780	12180	10789	13344	11916	12898	12188	12858	12350	..	..
Maunds sugar produced.	5363.0	5363.0	22605	27968	32276	60244	24350	84594	28467.5	113061.5	..	..
Maunds sugar in process.	675.5	675.5	2347	2347	2023	2023	..	2252.5	..	300.0	..	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	5.74	5.74	7.14	6.82	8.06	7.43	7.26	7.38	7.38	7.38	..	..
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	8.34	8.34	9.39	9.15	10.05	9.59	9.57	9.59	9.67	9.61	..	..
Fibre % cane ..	13.10	13.10	13.20	13.10	12.50	12.80	12.50	12.80	13.8	13.1	..	..
Added water % cane	14.30	14.30	16.10	15.67	15.10	15.40	12.10	14.50	13.1	14.1	..	..
Mixed juice % cane ..	88.00	88.00	88.70	88.60	87.90	88.20	83.40	86.90	82.50	85.8	..	..
Bagasse % cane ..	26.30	26.30	27.40	27.07	27.20	27.2	28.70	27.60	30.60	28.3	..	..
Coal % cane ..	6.33	6.33	3.97	4.50	3.13	3.83	2.76	3.51	2.99	3.38	..	..
Wood % cane ..	1.61	1.61	0.16	0.49	0.37	0.43	0.61	0.49	0.006	0.38	..	..
Primary juice purity ..	69.20	69.20	74.10	73.50	77.00	75.20	76.7	75.20	74.40	75.0	..	..
Mixed juice purity ..	66.40	66.40	72.00	71.40	75.10	73.30	73.90	73.80	72.20	73.10	..	..
Molasses purity ..	29.80	29.80	34.20	33.50	33.50	33.50	30.70	32.80	29.40	32.0	..	..
Mill extraction ..	90.50	90.50	91.30	91.20	92.00	91.60	91.20	91.60	91.50	91.6	..	..
Boiling house extraction.	76.10	76.10	83.20	81.70	87.10	84.50	83.20	84.10	83.40	83.90	..	..
Overall recovery ..	68.90	68.90	76.00	74.50	80.10	77.40	75.90	77.0	76.30	76.90	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	13156	13156	69224	82380	83850	166230	78770	245000	83403	328403	60620	389023
Maunds cane crushed per 24 hours operation.	1644.5	1644.5	2233	2227	2994.5	..	2813	2500	2780	2558	2165	2446
Maunds sugar produced.	552.0	552.0	4893.0	5445.0	6863.0	12308.0	6871.0	19179.0	6850.0	26029.0	5372.0	31401.0
Maunds sugar in process.	179.0	179.0	3.0	182.0	143.0	325.0	—60.0	265.0	35.0	300.0	—300.0	Nil
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	5.56	5.56	7.08	6.83	8.35	7.60	8.64	7.936	8.25	8.017	8.36	8.07
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	9.65	9.65	10.81	10.63	11.71	11.17	11.94	11.42	11.86	11.53	11.91	11.59
Fibre % cane ..	..	..	..	..	15.39	..	14.50	..	16.66	15.57	18.22	..
Added water % cane	6.14	6.14	6.86	6.76	8.48	7.63	9.29	8.16	10.39	8.73	13.16	9.42
Mixed juice % cane ..	70.67	70.67	71.12	71.08	73.26	72.17	74.65	72.97	71.87	72.69	73.17	72.76
Bagasse % cane ..	35.47	35.47	35.74	35.68	35.22	35.46	34.64	35.19	38.52	36.04	39.99	36.66
Coal % cane ..	5.27	5.27	3.62	3.88	2.59	3.23	1.92	2.81	2.05	2.62	3.33	..
Wood % cane ..	0.62	0.62	1.76	1.57	0.53	1.05	1.18	1.09	Nil	0.816	2.71	..
Primary juice purity ..	77.88	77.88	79.75	79.46	83.87	81.70	83.85	82.39	81.45	82.22	81.72	82.15
Mixed juice purity ..	76.07	76.07	78.37	78.00	82.02	80.05	81.96	80.67	79.67	80.41	79.66	80.33
Molasses purity ..	39.83	39.83	36.82	38.23	37.14	37.25	35.66	36.55	38.46	37.03	37.86	37.31
Mill extraction ..	80.00	80.00	81.31	81.19	82.40	81.82	83.50	82.39	81.87	82.30	82.37	82.31
Boiling house extraction.	72.02	72.02	80.55	79.14	86.11	82.71	86.36	84.00	84.44	84.00	84.77	84.15
Overall recovery ..	57.61	57.61	65.50	66.25	70.95	67.67	72.11	69.21	69.13	69.13	69.82	69.26

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL B2

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	774683	..	843825	..	781616	..	575824	..	..	3500520.6
Maunds cane crushed per 24 hours operation.	..	..	24989	..	27220	..	34262	..	32863.8	..	..	21727.0
Maunds sugar produced.	..	..	57878.0	..	78261.4	..	74932.3	..	54136.1	..	..	320956.1
Maunds sugar in process.	..	..	2510.0	..	2008.5	..	2134.0	..	2000.0	..	..	..
Maunds molasses produced.	..	..	24071.0	..	27989	..	26081.0	..	17829.6	..	..	121078
Maunds molasses in process.	..	..	2900.0	..	402	..	689.0	..	..	..	..	..
Yield sugar % cane ..	..	..	7.80	..	9.51	..	9.86	..	9.75	..	..	9.18
Yield molasses % cane	..	..	3.48	..	3.36	..	3.42	..	3.09	..	..	3.45
Sugar % cane ..	..	..	11.60	..	12.40	..	12.30	..	12.05	..	..	11.60
Fibre % cane ..	..	..	11.95	..	12.79	..	14.80	..	16.21	..	..	14.20
Added water % cane	..	..	22.03	..	21.42	..	20.25	..	23.72	..	..	23.03
Mixed juice % cane ..	..	..	94.50	..	94.58	..	88.70	..	87.25	..	..	91.67
Bagasse % cane ..	..	..	27.53	..	26.84	..	31.55	..	36.47	..	..	31.36
Coal % cane ..	..	..	1.05	..	0.38	..	0.137	..	1.776	..	..	0.995
Wood % cane ..	..	..	0.44	..	0.64	..	0.248	..	0.240	..	..	0.549
Primary juice purity ..	..	..	79.86	..	84.48	..	84.45	..	82.00	..	..	82.46
Mixed juice purity ..	..	..	78.43	..	83.19	..	83.15	..	80.50	..	..	79.91
Molasses purity ..	..	..	31.54	..	32.55	..	32.42	..	32.98	..	..	32.44
Mill extraction ..	..	..	92.89	..	93.64	..	92.32	..	91.70	..	..	92.30
Boiling house extraction.	..	..	..	..	81.12	..	86.80	..	..	..	..	84.97
Overall recovery ..	..	..	66.61	..	75.99	..	79.35	..	79.16	..	..	78.41

NOTE—Purities noted are Gravity Purities and mixed juice has been measured

Clarification process. Single Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	200000	200000	499700	699700	482887	1182587	341618	1524205	413110	1937315	191030	2128345
Maunds cane crushed per 24 hours operation.	..	..	18856	17066	19315	17918	17980	17932	17220	17770	..	..
Maunds sugar produced.	10948.0	10948.0	43334.2	51282.2	45740.0	97022.2	32982.4	130004.6	36887.0	166891.6	19390.5	186282.1
Maunds sugar in process.	2154.7	2154.7	541.2	2695.9	—644.4	2051.5	491.5	2543.0	805.7	3348.7	—3348.7	..
Maunds molasses produced.	3877.3	3877.3	23401.0	27278.3	16994.7	44273.0	11726.0	55999.0	19679.0	75678.0	15734.0	91412.0
Maunds molasses in process.	4584.7	4584.7	—878.7	3706.0	160.0	3866.0	—223.0	3643.0	803.0	4446.0	—4446.0	..
Yield sugar % cane ..	6.55	6.55	8.18	7.71	9.34	8.38	9.80	8.70	9.124	8.79	8.397	8.75
Yield molasses % cane	4.23	4.23	4.51	4.42	3.55	4.07	3.36	3.91	4.95	4.13	5.909	4.29
Sugar % cane ..	9.434	9.434	10.63	10.29	11.566	10.81	12.17	11.11	12.09	11.32	11.47	11.33
Fibre % cane ..	17.84	17.84	15.38	16.07	15.93	16.01	15.36	15.86	17.36	16.19	15.89	16.16
Added water % cane	14.02	14.02	21.11	19.10	20.96	19.86	29.29	21.97	28.34	23.32	28.08	23.76
Mixed juice % cane ..	75.40	75.40	89.41	85.40	88.01	86.47	97.11	88.85	92.34	89.59	93.97	89.99
Bagasse % cane ..	38.61	38.61	31.70	33.70	32.95	33.39	32.18	33.12	36.00	33.73	34.11	33.77
Coal % cane ..	Nil	Nil	0.066	0.04938	0.60	0.27	1.85	0.63	0.842	0.674	1.768	0.772
Wood % cane ..	1.81	1.81	0.751	1.054	.107	1.06	.050	0.93	1.223	0.998	7.973	1.624
Primary juice purity ..	74.29*	74.29*	77.30*	76.36*	82.11*	78.74*	82.35*	79.88*	77.54*	79.30*	74.29*	78.85*
Mixed juice purity ..	71.42*	71.42*	75.61*	74.03*	80.35*	76.65*	80.40*	77.84*	75.36*	77.23*	71.73*	76.51*
Molasses purity ..	32.20†	32.20†	33.05†	32.80†	33.52†	33.09†	34.35†	33.48†	34.85†	33.79†	34.51†	33.91†
Mill extraction ..	85.62	85.62	91.89	90.24	92.10	91.05	92.69	91.45	91.05	91.33	90.68	91.26
Boiling house extraction.	80.62	80.62	83.38	82.71	87.39	84.79	86.60	85.24	82.64	84.68	80.40	84.25
Overall recovery ..	69.08	69.08	76.62	74.65	80.48	77.20	80.27	77.95	75.25	77.34	72.91	79.96

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been measured

FACTORY SYMBOL B4

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	379993·75	524735·75	437759·25	962495·0	342934·5	1305429·5	320472.25	1625901.75	..	..
Maunds cane crushed per 24 hours operation.	..	..	18182	16538	17945·0	17148·0	16327	16925	17854	17376	..	..
Maunds sugar produced.	..	..	24385·0	30380·0	35097·0	65405·0	28665·0	94070·0	29780·0	123850·0	..	..
Maunds sugar in process.	..	..	547·0	1850·0	707·0	2557·0	1·0	2556·0	—2356·0	200·0	..	..
Maunds molasses produced.	..	..	19093·0	23679·0	..	..	..	..	15040·0	74592·0	..	..
Maunds molasses in process.	..	..	471·0	2729·0	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	6.54	6.14	8.18	7.05	8.36	7.40	8.56	7.63	..	..
Yield molasses % cane	..	..	4·90	5·03	4·24	4·57	4·25	4·57	4.69	4·59	..	..
Sugar % cane ..	..	..	9·03	8.74	10.36	9·48	10.51	9·75	10.93	9·98	..	..
Fibre % cane ..	..	..	18.38	18.73	18.23	18.50	18.75	18.65	18.25	18.65	..	..
Added water % cane	..	..	13·56	15·88	19·22	17·39	19·26	17·88	20·90	18·48	..	..
Mixed juice % cane ..	..	..	77·22	78·51	84·90	81·42	83·57	81·98	84·85	82·55	..	..
Bagasse % cane ..	..	..	36·34	37·37	34·32	35·97	35·69	35·90	36·04	35·94	..	..
Coal % cane ..	..	..	0.21	0.013	0.027	0.73	0.015	0.54	0.82	0.62	..	..
Wood % cane ..	..	..	0.85	1.09	0.218	0.69	0.37	0.606	4.19	1.47	..	..
Primary juice purity ..	..	..	73·98	72·94	78·43	75·68	78·98	76·18	77·42	76·24	..	..
Mixed juice purity ..	..	..	70·17	68·86	75·77	72·17	76·12	73·26	74·28	73·48	..	..
Molasses purity ..	..	..	33·12	33·05	33·54	33·25	33·41	33·35	33·13	33·30	..	..
Mill extraction ..	..	..	89·59	88·72	90·85	89·78	91·21	90·18	90·51	90·25	..	..
Boiling house extraction.	..	..	81·30	78·80	86·35	82·57	86·80	83·78	86·02	84·29	..	..
Overall recovery ..	..	..	72·83	69·91	78·40	74·13	79·21	75·56	77·88	76·05	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured and calculated

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	1188240.77	..	..	..	..	..	..	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	35500.8	..	..	..	..	..	..	..	..
Maunds sugar produced.	..	..	..	101887.30	..	..	..	..	..	..	..	..
Maunds sugar in process.	..	..	..	5648.59	..	..	..	..	..	..	..	..
Maunds molasses produced.	..	..	..	44526.6	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	2536.5	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	..	9.05	..	..	..	..	..	..	..	..
Yield molasses % cane	..	..	..	3.96	..	..	..	..	..	..	..	..
Sugar % cane ..	..	..	..	11.18	..	..	..	..	..	..	..	..
Fibre % cane ..	..	..	..	16.85	..	..	..	..	..	..	..	..
Added water % cane	..	..	..	28.41	..	..	..	..	..	..	..	..
Mixed juice % cane ..	..	..	..	95.76	..	..	..	..	..	..	..	..
Bagasse % cane ..	..	..	..	32.65	..	..	..	..	..	..	..	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	1.31	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	..	81.19	..	..	..	..	..	..	..	..
Mixed juice purity ..	..	..	..	78.75	..	..	..	..	..	..	..	..
Molasses purity ..	..	..	..	32.53	..	..	..	..	..	..	..	..
Mill extraction ..	..	..	..	92.66	..	..	..	..	..	..	..	..
Boiling house extraction.	..	..	..	87.08	..	..	..	..	..	..	..	..
Overall recovery ..	..	..	..	80.70	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL B6

Clarification process. Single Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	76655.38	76655.38	192578	269234	169906	425840	219362	645202	195544	840746
Maunds cane crushed per 24 hours operation.	..	..	7300.5	7300.5	8195	7918.5	10955.0	8572.8	12988.8	9556.8	7520.92	7065.09
Maunds sugar produced.	..	..	4775.0	4775.0	17087.5	21862.5	16625	38495.0	22685.0	61180.0	21172.5	82352.5
Maunds sugar in process.	..	..	1562.5	1562.5	533.3	2370.0	—1163.6	1205.6	—810.0	45.0	..	200.0
Maunds molasses produced.	..	..	1556.0	1556.0	5523.7	7139.16	5589.77	12728.93	8000.0	20728.93	6199.07	25920.0
Maunds molasses in process.	..	..	1510.2	1510.2	1986.8	3495.6	..	..	—282.0	18.0	500.0	500.0
Yield sugar % cane ..	..	..	8.27	8.27	9.15	9.0	9.30	9.12	9.65	9.49	..	9.82
Yield molasses % cane	..	..	4.00	4.00	3.90	3.95	3.01	..	3.50	3.20	3.42	3.14
Sugar % cane ..	..	..	11.17	11.17	12.07	11.90	12.01	11.98	12.63	12.32	12.71	12.58
Fibre % cane ..	..	..	14.35	14.35	15.25	15.17	15.76	15.66	16.95	16.30	18.15	16.72
Added water % cane	..	..	14.67	14.67	12.60	11.70	13.20	13.30	13.30	13.36	16.30	13.46
Mixed juice % cane ..	..	..	82.90	82.90	80.40	79.60	79.40	79.60	78.20	79.06	78.90	78.70
Bagasse % cane ..	..	..	31.77	31.77	32.20	32.10	33.80	33.70	35.10	34.30	37.40	34.76
Coal % cane ..	..	..	..	..	..	..	Nil	Nil	..	..	0.0	Nil
Wood % cane ..	..	..	3.70	3.70	5.40	4.55	7.50	6.22	5.40	5.81	11.10	7.4
Primary juice purity ..	..	..	78.42	78.42	81.43	81.01	81.72	80.91	78.20	79.20	77.02	78.61
Mixed juice purity ..	..	..	75.51	75.51	79.67	79.14	79.54	79.26	76.60	77.90	74.50	76.70
Molasses purity ..	..	..	33.27	33.27	34.64	34.52	34.68	34.40	33.40	34.10	32.20	33.16
Mill extraction ..	..	..	89.70	89.70	87.50	87.70	86.80	86.80	85.70	86.40	..	85.9
Boiling house extraction.	..	..	82.45	82.45	87.14	86.20	89.10	87.50	88.90	89.10	..	90.01
Overall recovery ..	..	..	75.80	75.80	75.8	75.60	77.40	75.90	76.40	76.70	..	78.06

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured and calculated

Particulars	February		March		April		May		June		July	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds Gur Melted	13028	13028	47679	60707	51740	112447	53266	165713	51701	217414	33893.55	251307.55
Maunds Gur Melted per 24 Hours operation.	1447.55	1447.55	1799.21	1734.49	1815.44	1770.82	1902.36	1811.07	1782.79	1804.27	1473.63	1751.27
Sugar Produced and in Process.	7338.00	7338.00	28249.0	35587.0	30815.5	66402.5	31157.5	97560.0	31607.50	129167.50	21146.42	150313.92
Molasses Produced and in Process.	4693.12	4693.12	15853.55	20546.67	16394.50	36941.17	19146.00	56087.17	17082.0	73169.17	10530.13	83699.30
Sugar Produced % Gur.	56.32	56.32	59.25	58.63	59.56	59.05	58.49	58.87	61.14	59.41	62.39	59.81
Molasses Produced % Gur.	36.02	36.02	33.25	33.85	31.69	32.85	35.94	33.85	33.04	33.65	31.07	33.31
Coal % Gur	25.94	25.94	26.85	26.65	25.74	26.23	26.53	26.33	28.20	26.77	33.31	27.66
Gur Analysis :—												
Brix	93.64	93.64	94.41	94.24	94.77	94.48	96.54	95.15	96.86	95.56	95.54	95.56
Pol	70.45	70.45	71.69	71.42	72.47	71.91	73.24	72.33	74.51	72.85	74.99	73.14
Purity	75.23	75.23	75.93	75.79	76.47	76.11	75.85	76.02	76.93	76.23	78.49	76.54
Invert	10.42	10.42	9.84	9.96	9.81	9.89	11.56	10.43	10.29	10.40	9.94	10.33
Ash	3.00	3.00	2.90	2.92	2.72	2.83	2.73	2.79	2.66	2.76	2.66	2.75
Nett Rendement ...	49.53	49.53	51.70	51.24	53.14	52.11	52.12	52.13	54.91	52.79	55.74	53.18
Purity of Raw Liquor	76.50	76.50	77.09	76.97	77.57	77.23	77.10	77.19	78.12	77.41	79.67	77.75
Purity of Waste Molasses.	39.88	39.88	39.77	39.79	39.88	39.83	40.15	39.95	40.60	40.11	41.00	40.30
Recovery % Sugar in Gur.	78.82	78.82	81.49	80.94	81.04	80.96	78.74	80.26	80.90	80.41	82.03	80.63

Note—Purities noted are Polarisation Gravity Purities

FACTORY SYMBOL B9

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	424091.45	424091.45	995218	1419309.5	759256.4	2178565.9	840155.7	3018721.6	305810.9	3324532.5
Maunds cane crushed per 24 hours operation.	..	..	20799.0	20799.0	35443.1	29132.0	31558.2	29580.0	31214.5	29981.2	32900	30203.7
Maunds sugar produced.	..	..	26422.5	26422.5	88513.1	114935.6	71467.5	186403.1	77279.4	267270.0	35837.5	299520.0
Maunds sugar in process.	..	..	6000.0	6000.0	3000.0	9000.0	1225.0	10225.0	—3175.0	7050.0	—6970.0	80.0
Maunds molasses produced.	..	..	..	..	..	52000.0	22400.0	73100.0	34000.0	107100.0	..	116000.0
Maunds molasses in process.	..	..	..	..	..	4000.0	500.0	4500.0	—910.0	3590.0	..	..
Yield sugar % cane ..	..	..	7.64	7.4	9.20	8.73	9.57	9.03	8.82	8.96	9.44	9.01
Yield molasses % cane	..	..	..	..	..	3.89	3.01	3.56	3.94	3.66	..	3.49
Sugar % cane ..	..	..	10.87	10.87	12.09	11.52	12.05	11.69	11.88	11.72	..	11.67
Fibre % cane ..	..	..	15.30	15.30	16.10	15.90	..	..	15.80	..	..	..
Added water % cane	..	..	10.09	10.09	11.99	11.09	13.16	11.61	12.51	11.85	12.55	11.91
Mixed juice % cane ..	..	..	81.25	81.25	81.72	81.32	82.60	81.79	81.36	81.54	80.17	81.41
Bagasse % cane ..	..	..	28.84	28.84	30.27	29.77	30.56	29.82	31.15	30.31	32.38	30.50
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	14.13	14.13	1.66	5.54	6.45	5.13	2.09	4.04	14.33	4.87
Primary juice purity ..	..	..	82.10*	82.10*	85.81*	84.33*	85.95*	84.74*	83.30*	84.28*	82.29*	83.94*
Mixed juice purity ..	..	..	79.52*	79.52*	83.56*	81.77*	82.16*	81.99*	79.70*	81.29*	78.54*	80.83*
Molasses purity ..	..	..	33.99†	33.99†	34.69†	34.10†	34.13†	34.11†	34.22†	34.14†	34.42†	34.19†
Mill extraction ..	..	..	89.42	89.42	90.00	89.93	90.88	90.16	89.30	..	90.07	90.31
Boiling house extraction.	..	..	78.60	78.60	84.46	84.26	87.37	85.67	83.84	84.68	89.13	85.01
Overall recovery ..	..	..	70.28	70.28	76.09	75.78	79.42	77.24	74.24	76.45	80.75	77.2

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been measured and calculated

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	476100	556940.0	510543	1067483	449499	1516982	430006	1946988	..	..
Maunds cane crushed per 24 hours operation.	..	..	18700	17900	18910	18360	19600	18700	19000	18800	..	..
Maunds sugar produced.	..	..	42686	48832	51649	101693	47701	150432	48806	200542	..	..
Maunds sugar in process.	..	..	1212	1212	1038	1038	1304	1304	..	..	..	..
Maunds molasses produced.	..	..	13732	17192	12223	31836	11141	44869	13874	60470	..	..
Maunds molasses in process.	..	..	2421	2421	1892	1892	1727	1727	..	..	..	..
Yield sugar % cane ..	..	..	9.22	8.98	10.32	9.62	10.90	10.00	11.35	10.30	..	..
Yield molasses % cane	..	..	3.39	3.52	2.77	3.16	2.87	3.07	3.22	3.11	..	..
Sugar % cane ..	..	..	10.89	10.74	11.92	11.30	12.64	11.70	13.11	12.01	..	..
Fibre % cane ..	..	..	15.02	14.75	17.14	15.89	18.00	16.52	18.82	17.03	..	..
Added water % cane	..	..	24.76	23.31	27.32	25.22	25.82	25.40	26.30	25.60	..	..
Mixed juice % cane ..	..	..	95.50	94.22	92.90	94.43	91.80	93.64	90.90	93.04	..	..
Bagasse % cane ..	..	..	29.26	29.09	34.42	30.79	34.02	31.76	35.40	32.56	..	..
Coal % cane ..	..	..	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	..	..
Wood % cane ..	..	..	1.74	3.12	1.35	2.27	1.25	1.97	0.99	1.75	..	..
Primary juice purity ..	..	..	79.90*	79.38*	84.21*	81.74*	85.40*	82.88*	84.60*	83.27*	..	..
Mixed juice purity ..	..	..	79.00†	78.47†	83.40†	80.94†	84.60†	82.11†	83.70†	82.48†	..	..
Molasses purity ..	..	..	32.75†	32.71†	32.91†	32.79†	33.25†	32.92†	33.28†	33.01†	..	..
Mill extraction ..	..	..	94.50	94.12	94.62	94.39	94.50	94.43	94.40	94.42	..	..
Boiling house extraction.	..	..	88.90	88.30	90.80	89.59	90.60	89.91	91.00	90.17	..	..
Overall recovery ..	..	..	84.10	83.11	85.90	84.56	85.70	84.90	85.90	85.14	..	..

NOTE—Purities noted are P. G. P* and G. P† and mixed juice has been calculated

FACTORY SYMBOL C2

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	544082.5	544082.5	464202.5	1008285	441749.5	1450034.5	166482.25	1616516.75	..	..
Maunds cane crushed per 24 hours operation.	..	..	15545.3	15545.3	16578.75	16004.5	15848.2	15934.4	16648.22	18529.4	..	..
Maunds sugar produced.	..	..	42697.5	42697.5	43867.5	86565.0	44095	130660.0	17265.0	151980	..	..
Maunds sugar in process.	..	..	2460.0	2460.0	540.0	3000.0	1055	4055.0	..	..	..	..
Maunds molasses produced.	..	..	12493.0	12493.0	10280.0	22140.0	12780	34920.0	6493	56255	..	..
Maunds molasses in process.	..	..	5462.5	5462.5	..	..	472	13622.0	..	..	..	..
Yield sugar % cane ..	..	..	8.29	8.29	9.56	8.88	10.22	9.29	10.37	9.40	..	..
Yield molasses % cane	..	..	3.30	3.30	..	..	3.00	3.34	3.90	3.48	..	..
Sugar % cane ..	..	..	10.54	10.54	11.75	11.32	12.44	11.66	13.00	11.86	..	..
Fibre % cane ..	..	..	14.72	14.72	15.65	15.20	16.54	15.57	17.42	16.33	..	..
Added water % cane	..	..	14.72	14.72	14.93	14.89	14.89	14.89	16.41	15.27	..	..
Mixed juice % cane ..	..	..	83.73	83.73	81.80	82.90	79.67	81.92	79.00	80.67	..	..
Bagasse % cane ..	..	..	30.99	30.99	33.13	31.99	35.22	32.97	37.41	34.67	..	..
Coal % cane ..	..	..	1.875	1.875	0.973	1.617	0.572	1.29	2.64	1.49	..	..
Wood % cane ..	..	..	0.564	0.564	0.611	0.628	0.498	0.588	1.77	0.71	..	..
Primary juice purity ..	..	..	81.63	81.63	84.54	83.09	85.51	83.78	83.63	83.77	..	..
Mixed juice purity ..	..	..	80.01	80.01	82.91	81.35	83.85	82.17	82.19	82.18	..	..
Molasses purity ..	..	..	32.71	32.71	31.87	32.27	32.33	32.30	31.34	32.09	..	..
Mill extraction ..	..	..	90.32	90.32	90.72	90.54	90.03	90.39	88.82	89.80	..	..
Boiling house extraction.	..	..	86.13	86.13	89.68	86.63	91.25	88.14	89.78	87.00	..	..
Overall recovery ..	..	..	77.79	77.79	81.36	78.44	82.15	79.67	79.78	79.20	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL C3

Clarification process. Single Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	..	..	..	458423.5	..	..	..	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds sugar produced.	..	..	..	..	..	..	45812.5	..	..	..	..	..
Maunds sugar in process.	..	..	..	..	..	..	703.0	..	..	..	..	..
Maunds molasses produced.	..	..	..	..	..	..	14669.0	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	146.0	..	..	..	..	..
Yield sugar % cane ..	..	..	..	..	..	..	9.84	..	..	..	..	..
Yield molasses % cane	..	..	..	..	..	..	3.10	..	..	..	..	..
Sugar % cane ..	..	..	..	..	..	..	12.70	..	..	..	..	..
Fibre % cane ..	..	..	..	..	..	..	17.30	..	..	..	..	..
Added water % cane	..	..	..	..	..	..	16.10	..	..	..	..	..
Mixed juice % cane ..	..	..	..	..	..	..	81.70	..	..	..	..	..
Bagasse % cane ..	..	..	..	..	..	..	34.40	..	..	..	..	..
Coal % cane ..	..	..	..	..	..	..	1.50	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	0.60	..	..	..	..	..
Primary juice purity ..	..	..	..	..	..	..	88.42	..	..	..	..	..
Mixed juice purity ..	..	..	..	..	..	..	84.51	..	..	..	..	..
Molasses purity ..	..	..	..	..	..	..	35.97	..	..	..	..	..
Mill extraction ..	..	..	..	..	..	..	89.90	..	..	..	..	..
Boiling house extraction.	..	..	..	..	..	..	86.15	..	..	..	..	..
Overall recovery ..	..	..	..	..	..	..	77.50	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL C4

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	..	584882	..	..	..	122375	1676000	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	..	18867.1	..	..	..	6441	14324.5	..	..
Maunds sugar produced.	..	..	..	..	51241.0	..	..	..	..	151128	..	..
Maunds sugar in process.	..	..	..	..	2779.0	..	..	..	..	300.0	..	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	56648.8	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	..	..	9.23	..	..	..	10.62	9.015	..	..
Yield molasses % cane	..	..	..	..	..	..	..	..	..	3.38	..	..
Sugar % cane ..	..	..	..	..	12.71	..	..	..	13.21	11.62	..	..
Fibre % cane ..	..	..	..	..	16.00	..	..	..	..	..	..	..
Added water % cane	..	..	..	..	9.89	..	..	..	13.47	18.56	..	..
Mixed juice % cane ..	..	..	..	..	79.88	..	..	..	81.28	85.60	..	..
Bagasse % cane ..	..	..	..	..	30.01	..	..	..	32.19	32.96	..	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	..	..	84.50	..	..	..	83.85	83.71	..	..
Mixed juice purity ..	..	..	..	..	83.13	..	..	..	81.97	81.87	..	..
Molasses purity ..	..	..	..	..	32.56	..	..	..	32.41	32.50	..	..
Mill extraction ..	..	..	..	..	85.40	..	..	..	85.09	..	..	..
Boiling house extraction.	..	..	..	..	84.24	..	..	..	..	89.7	..	..
Overall recovery ..	..	..	..	..	71.90	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL C5

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	250551	294289	260926	555215	238856	794071	215992	1010063	42557	1052620
Maunds cane crushed per 24 hours operation.	..	..	9390	9140	9530	9310	9920	9500	9280	9450	8170	9380
Maunds sugar produced.	..	..	20094.0	23436.0	22698.0	47854.0	22100	71878	22098	95837	4390	101773
Maunds sugar in process.	..	..	1720	1720.0	1924.0	1924.0	1861	1861	1546	1546	..	..
Maunds molasses produced.	..	..	5446	8400.0	4966.0	15008.0	4398	21862	3862	27547	1224	30492
Maunds molasses in process.	..	..	2642	2642.0	2456.0	2456.0	2034	2034	1721	1721	..	..
Yield sugar % cane ..	..	..	8.71	8.55	9.45	8.96	10.03	9.29	10.95	9.64	10.32	9.67
Yield molasses % cane	..	..	3.23	3.41	2.85	3.15	2.70	3.01	2.49	2.90	2.88	2.90
Sugar % cane ..	..	..	10.54	10.44	11.25	10.82	11.84	11.13	12.74	11.47	12.25	11.50
Fibre % cane ..	..	..	15.02	14.85	16.65	15.64	17.61	16.23	17.72	16.60	18.59	16.68
Added water % cane	..	..	20.65	20.48	20.20	20.34	22.80	21.09	24.40	21.79	22.90	21.83
Mixed juice % cane ..	..	..	91.62	91.85	87.30	89.69	87.60	89.04	88.50	88.95	86.00	88.83
Bagasse % cane ..	..	..	29.03	28.63	32.90	30.65	35.20	32.05	35.90	32.84	36.90	33.00
Coal % cane ..	..	..	1.86	1.63	2.05	1.83	1.90	1.85	2.02	1.88	2.28	1.90
Wood % cane ..	..	..	0.21	0.70	0.00	0.37	0.0	0.26	0.00	0.20	0.00	0.195
Primary juice purity ..	..	..	80.90*	80.53*	82.90*	81.59*	83.80*	82.29*	84.70*	82.78*	82.30*	82.76*
Mixed juice purity ..	..	..	80.10†	79.85†	82.20†	80.94†	82.90†	81.62†	84.10†	82.20†	81.70†	82.20†
Molasses purity ..	..	..	35.05†	35.52†	34.85†	35.22†	34.20†	34.94†	34.00†	34.77†	32.48†	34.68†
Mill extraction ..	..	..	94.40	94.42	93.70	93.99	93.50	93.85	93.60	93.81	93.20	93.79
Boiling house extraction.	..	..	87.10	86.32	89.20	87.79	90.40	88.61	91.30	89.27	90.10	89.30
Overall recovery ..	..	..	82.20	81.50	83.60	82.51	84.50	83.16	85.50	83.74	84.00	83.75

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL C6

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	491644	525573	477521.25	1003094.25	383979.5	1387073.75	427458.25	1814532.0	157298.5	1971830.5
Maunds cane crushed per 24 hours operation.	..	..	21136.8	20001.3	19208.4	19618.5	17972.65	19134.65	17795.3	18810.65	8737.25	18006.2
Maunds sugar produced.	..	..	34100.0	37095.0	44000	81095.0	35705.0	116800.0	41825.0	158625.0	23237.25	178812.5
Maunds sugar in process.	..	..	5610.0	5055.9	218	5273.9	1541.0	6814.9	—233.55	6581.35	—7979.50	..
Maunds molasses produced.	..	..	10150.0	11099.9	13711.0	24811.0	12560.0	41305.58	14753.0	55577.5	5395.32	67954.0
Maunds molasses in process.	..	..	4930.0	4930.0	615.62	5545.62	648.9	5579.94	701.0	6281.0	..	..
Yield sugar % cane ..	..	..	8.07	8.02	9.26	8.61	9.70	8.91	9.73	9.14	9.70	9.06
Yield molasses % cane	..	..	3.06	3.05	3.00	3.02	3.44	3.38	3.61	3.43	3.43	3.44
Sugar % cane ..	..	..	10.45	10.44	11.55	10.95	12.58	11.41	12.75	11.72	12.73	11.79
Fibre % cane ..	..	..	16.46	16.39	16.72	16.54	17.74	16.87	18.29	17.20	18.56	17.30
Added water % cane	..	..	15.25	15.14	16.84	15.94	18.15	16.55	21.90	17.76	22.71	18.15
Mixed juice % cane ..	..	..	80.75	80.71	81.62	81.14	80.92	81.09	82.89	81.51	82.56	81.58
Bagasse % cane ..	..	..	34.50	34.42	35.22	34.80	37.23	35.46	39.01	36.25	40.15	36.57
Coal % cane ..	..	..	0.036	0.048	0.03	0.04	0.96	0.31	0.72	0.40	3.59	0.60
Wood % cane ..	..	..	0.044	0.044	0.095	0.068	0.73	0.078	0.456	0.167	0.85	0.221
Primary juice purity ..	..	..	80.38	80.32	84.30	82.21	85.39	83.09	84.80	83.94	84.74	84.00
Mixed juice purity ..	..	..	78.02	77.92	82.01	79.86	83.49	80.86	82.67	81.28	82.66	81.38
Molasses purity ..	..	..	35.0	34.92	34.32	34.62	36.52	35.15	37.06	35.59	35.50	35.58
Mill extraction ..	..	..	89.10	89.08	89.09	89.08	88.15	88.88	87.84	88.59	87.42	88.50
Boiling house extraction.	..	..	85.00	84.94	88.72	86.73	87.46	86.93	85.64	86.62	87.11	86.65
Overall recovery ..	..	..	75.81	75.66	79.04	77.26	77.10	77.13	75.21	76.67	76.19	76.63

NOTE—Purities noted are————and mixed juice has been————

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	591290.0	591290.0	469616.0	1060906.0	388300	1449206	504204	1953410	100590	2054000
Maunds cane crushed per 24 hours operation.	..	..	..	..	..	..	..	..	16824	17472	15426	17352
Maunds sugar produced.	..	..	45910.0	45910.0	42730	88693.0	36163.0	125243.0	47522	171853	8925	184153
Maunds sugar in process.	..	..	3518.0	3518.0	..	3465.0	..	3078.0	..	3990	..	625
Maunds molasses produced.	..	..	15666.0	15666.0	15370	33758	12783	43540	17890	61101	3259	67228
Maunds molasses in process.	..	..	1722.0	1722.0	..	..	..	3001	..	3330	..	462
Yield sugar % cane ..	..	..	8.36	8.36	9.10	8.69	9.31	8.86	9.42	9.00	..	9.00
Yield molasses % cane	..	..	3.13	3.13	3.27	3.19	3.29	3.21	3.54	3.30	..	3.00
Sugar % cane ..	..	..	10.67	10.67	11.38	11.01	11.86	11.24	12.23	11.49	11.74	11.51
Fibre % cane ..	..	..	15.41	15.41	15.19	15.39	16.26	15.56	17.33	16.02	18.55	16.15
Added water % cane	..	..	15.82	15.82	19.80	17.48	21.02	18.45	21.96	19.35	24.47	19.60
Mixed juice % ane ..	..	..	82.05	82.05	86.30	83.85	85.66	84.24	83.90	84.18	83.24	84.13
Bagasse % cane ..	..	..	33.77	33.77	33.50	33.63	35.36	34.21	38.06	35.17	41.23	35.47
Coal % cane ..	..	..	0.12	0.12	0.10	0.11	0.22	0.14	0.47	0.22	..	0.21
Wood % cane ..	..	..	0.78	0.78	1.17	0.95	0.43	0.93	0.59	0.84	4.53	1.02
Primary juice purity ..	..	..	82.84	82.84	84.99	83.75	85.39	84.20	85.36	84.49	83.55	84.42
Mixed juice purity ..	..	..	80.93	80.93	83.26	81.72	82.92	82.10	83.34	82.41	81.24	82.34
Molasses purity ..	..	..	35.23	35.23	35.32	35.27	36.19	35.61	36.94	36.01	36.43	36.04
Mill extraction ..	..	..	87.63	87.63	89.06	88.24	88.66	..	87.62	88.07	85.95	87.92
Boiling house extraction.	..	..	88.02	88.02	88.03	88.03	88.33	88.22	87.10	87.94	87.02	87.95
Overall recovery ..	..	..	77.13	77.13	78.38	77.71	78.31	77.84	76.28	77.45	74.79	77.32

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	59801.5	59801.5	368322.5	..	341876	770000	355273	1125273	351257	1476530	..	1647083.8
Maunds cane crushed per 24 hours operation.	13289.0	13289.0	..	..	13675	14259	13664	13558	13125	13671	..	16095.0
Maunds sugar produced.	1212.5	1212.5	27970.0	..	27539	60816.0	31135	88262.5	33433	121695.5	..	143247.5
Maunds sugar in process.	3362.0	3362.0	1127.0	..	..	..	1176	5085.0	—481	4604.0	..	524.5
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	1794.0	1794.0	11049.0	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	7.65	7.65	7.90	..	8.06	7.90	9.16	8.30	9.36	8.55	..	8.72
Yield molasses % cane	3.00	3.00	3.10	..	..	..	..	..	..	..	..	..
Sugar % cane ..	10.29	10.29	10.56	..	11.18	10.84	11.99	11.12	12.36	11.55	..	11.47
Fibre % cane ..	15.04	15.04	16.10	..	16.03	15.77	15.25	15.61	18.27	17.33	..	17.72
Added water % cane	9.54	9.54	9.80	..	11.44	9.67	15.60	11.48	19.36	15.48	..	16.53
Mixed juice % cane ..	75.80	75.80	72.50	..	76.21	74.74	84.06	77.70	81.69	78.62	..	78.94
Bagasse % cane ..	33.74	33.74	37.30	..	35.23	34.93	31.54	33.78	37.67	36.86	..	37.59
Coal % cane ..	1.97	1.97	2.30	..	2.14	2.07	2.32	2.06	1.57	1.94	..	2.15
Wood % cane ..	1.22	1.22	2.50	..	2.03	1.83	2.14	2.02	0.79	1.72	..	2.074
Primary juice purity ..	82.30	82.30	83.50	..	85.36	85.00	85.67	85.35	86.09	..	..	85.46
Mixed juice purity ..	80.53	80.53	82.00	..	83.58	82.58	83.96	83.02	84.66	83.34	..	83.47
Molasses purity ..	36.40	36.40	32.37	..	36.71	36.45	35.46	36.24	35.08	35.95	..	35.83
Mill extraction ..	85.38	85.38	85.0	..	86.31	85.79	89.91	87.86	88.28	..	..	88.47
Boiling house extraction.	86.34	86.34	86.41	..	82.90	84.52	84.56	84.87	85.86	85.24	..	..
Overall recovery ..	73.70	73.70	73.50	..	71.56	72.51	75.92	74.64	75.66	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

Clarification process. Single Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	706117.25	878823.5	..	1671612.25	..	2268868	..	2815315.25	..	3036375.75
Maunds cane crushed per 24 hours operation.	..	..	27312	26448	..	27493	..	27168	..	26832.0	..	26904.0
Maunds sugar produced.	..	..	48515	55765	..	119962	..	183210	..	243712.5	..	270270.0
Maunds sugar in process.	..	..	8759	13086	..	16274	..	6675	..	2627.5	..	..
Maunds molasses produced.	..	..	20314	23735	..	53557	..	81560	..	101857	..	109309.0
Maunds molasses in process.	..	..	5800	9800	..	10800	..	4430	..	1327	..	..
Yield sugar % cane ..	..	..	8.11	7.92	..	8.15	..	8.40	..	8.75	..	8.90
Yield molasses % cane	..	..	3.69	3.81	..	3.85	..	3.79	..	3.67	..	3.60
Sugar % cane ..	..	..	10.59	10.47	..	11.02	..	11.26	..	11.58	..	11.67
Fibre % cane ..	..	..	15.16	15.15	..	15.05	..	15.09	..	14.92	..	15.21
Added water % cane	..	..	4.32	4.40	..	5.37	..	6.07	..	6.99	..	8.14
Mixed juice % cane ..	..	..	70.83	70.76	..	72.34	..	73.05	..	74.34	..	75.08
Bagasse % cane ..	..	..	33.49	33.64	..	33.03	..	33.02	..	32.65	..	33.06
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	0.21
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	0.36
Primary juice purity ..	..	..	83.02	83.10	..	83.75	..	84.04	..	84.29	..	84.28
Mixed juice purity ..	..	..	81.12	81.24	..	81.96	..	82.11	..	82.36	..	82.35
Molasses purity ..	..	..	34.79	34.91	..	35.06	..	35.26	..	35.44	..	35.36
Mill extraction ..	..	..	85.08	84.91	..	86.02	..	86.50	..	87.22	..	87.17
Boiling house extraction.	..	..	..	..	..	85.97	..	86.24	..	86.62	..	86.65
Overall recovery ..	..	..	..	..	..	73.96	..	74.60	..	75.56	..	75.54

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured and calculated

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	115832.7	..	501763.6	..	458950.9	..	315934.1	..	293197.0	..	..	..
Maunds cane crushed per 24 hours operation.	16131.4	..	19197.07	..	18543.36	..	15259.44	..	13845.01	..	..	..
Maunds sugar produced.	6845.0	..	37352.50	..	36742.5	..	26237.5	..	27922.5	..	..	..
Maunds sugar in process.	1865.6	..	2307.50	..	1350.42	..	405.12	..	347.38	..	..	..
Maunds molasses produced.	3150.65	..	16077.0	..	13916.34	..	8674.66	..	8084.95	..	..	..
Maunds molasses in process.	335.90	..	431.02	..	357.03	..	1435.23	..	1327.47	..	..	..
Yield sugar % cane ..	7.52	..	7.90	..	8.30	..	8.43	..	9.64	..	..	..
Yield molasses % cane	3.01	..	3.29	..	3.11	..	3.20	..	3.21	..	..	..
Sugar % cane ..	10.73	..	11.11	..	11.70	..	12.55	..	13.16	..	..	..
Fibre % cane ..	14.14	..	13.57	..	13.21	..	12.42	..	12.69	..	..	..
Added water % cane	15.32	..	3.84	..	6.72	..	10.29	..	14.79	..	..	..
Mixed juice % cane ..	86.31	..	76.12	..	80.02	..	84.82	..	88.76	..	..	..
Bagasse % cane ..	29.01	..	27.72	..	26.70	..	25.47	..	26.03	..	..	..
Coal % cane ..	1.015	..	0.0036	..	0.0044	..	0.0061	..	0.0064	..	..	..
Wood % cane ..	2.57	..	0.518	..	2.67	..	0.229	..	5.429	..	..	..
Primary juice purity ..	82.33	..	82.44	..	84.22	..	85.58	..	85.65	..	..	..
Mixed juice purity ..	80.99	..	79.91	..	82.23	..	83.46	..	82.85	..	..	..
Molasses purity ..	38.90	..	37.77	..	37.71	..	36.33	..	35.64	..	..	..
Mill extraction ..	90.26	..	90.24	..	91.74	..	93.47	..	93.53	..	..	..
Boiling house extraction.	76.37	..	77.64	..	76.83	..	70.87	..	77.58	..	..	..
Overall recovery ..	68.97	..	70.02	..	70.00	..	66.29	..	72.56	..	..	..

NOTE.—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

Clarification process. Defecation Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	1645718	1645718	1563574	3209292	1057876	4267168	623351	4890519	39246	4929765
Maunds cane crushed per 24 hours operation.	..	..	55452	55452	60690	57886	53768	56806	50765	55957	41862	55808
Maunds sugar produced.	..	..	124532	124532	145869	270401	103672	374073	62469	436543	10085	446628
Maunds sugar in process.	..	..	11009	11009	—1532	9477	688	10165	—3115	7060	—7060	..
Maunds molasses produced.	..	..	42469	42469	48295	90764	30819	121583	27992	149575	8486	158061
Maunds molasses in process.	..	..	10923	10923	—3835	7088	3443	10531	—2980	7551	—6739	812
Yield sugar % cane ..	..	..	8.24	8.24	9.23	8.72	9.87	9.00	9.52	9.07	7.71	9.06
Yield molasses % cane	..	..	3.24	3.24	2.84	3.05	3.24	3.10	4.01	3.21	4.45	3.22
Sugar % cane ..	..	..	10.79	10.79	11.83	11.29	12.34	11.55	12.21	11.64	12.29	11.64
Fibre % cane ..	..	..	12.58	12.58	13.84	13.19	14.50	13.52	15.48	13.77	15.84	13.78
Added water % cane	..	..	14.12	14.12	16.42	15.24	17.55	15.81	20.69	16.43	27.91	16.53
Mixed juice % cane ..	..	..	83.26	83.26	86.04	84.61	87.49	85.83	87.92	85.66	93.80	85.72
Bagasse % cane ..	..	..	30.86	30.86	30.38	30.63	30.06	29.98	32.77	30.77	34.11	30.81
Coal % cane ..	..	..	..	..	..	..	0.0	0.0	..	..	Nil	Nil
Wood % per cane ..	..	..	0.019	0.019	0.50	..	0.50	1.06	5.90	1.57	38.42	1.86.
Primary juice purity ..	..	..	83.40	83.40	86.02	48.61	85.28	84.79	81.42	83.91	79.01	83.83
Mixed juice purity ..	..	..	81.45	81.45	83.66	82.86	83.06	..	79.06	82.21	75.76	82.15
Molasses purity ..	..	..	35.15	35.15	34.50	34.90	33.27	34.49	32.87	34.18	38.02	34.39
Mill extraction ..	..	..	90.45	90.45	90.44	90.44	90.76	90.56	89.93	90.47	89.91	90.46
Boiling house extraction.	..	..	84.38	84.38	86.32	85.37	88.05	86.08	86.72	86.17	69.75	86.03
Overall recovery ..	..	..	76.36	76.36	78.06	77.23	79.94	77.94	78.02	77.96	62.69	77.83

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been weighed

FACTORY SYMBOL Cr3

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	48480	48480	374133.25	422613.25	391312	813925.25	293122	1107047.25	307352	1354042‡	108159	1462201
Maunds cane crushed per 24 hours operation.	13688.4	13688.4	17234.5	16737.1	16551.4	16708.8	16360.3	16506.4	9914	10743	..	..
Maunds sugar produced.	1305.0	1305.0	22900.82	26415.60	33116.36	59531.96	27256	89296	25838	109745	9939	124022
Maunds sugar in process.	2209.8	2209.8	4924.65	4924.65	—1421.00	3503.00	3489	3489	4338	4338	72	72
Maunds molasses produced.	1212.0	1212.0	12840.71	14052.71	..	..	10552.39	37617.37	13820	59630	6339	65969
Maunds molasses in process.	1115.04	1115.04	859.92	1974.96	..	..	1310.0	1310.00	..	..	0.0	0.0
Yield sugar % cane ..	7.25	7.25	7.43	7.41	8.02	7.75	9.30	8.10	9.80	8.4	9.22	8.48
Yield molasses % cane	4.80	4.80	3.66	3.79	..	...	3.60	3.40	4.50	4.4	5.90	4.51
Sugar % cane ..	9.38	9.38	10.81	10.45	11.58	..	11.50	11.76	12.10	11.8	11.15	11.51
Fibre % cane ..	15.03	15.03	14.87	14.97	14.40	14.66	14.60	14.63	14.70	14.8	15.15	15.09
Added water % cane	16.00	16.00	11.30	14.20	7.65	9.55	12.00	10.77	14.90	11.0	16.41	11.41
Mixed juice % cane ..	85.32	85.32	80.40	82.80	73.04	77.52	80.00	78.76	84.0	79.35	84.90	80.00
Bagasse % cane ..	30.68	30.68	30.90	31.40	34.61	32.03	32.00	32.01	30.9	31.65	31.51	..
Coal % cane ..	Nil	Nil	0.63	..	0.94	..	1.27	1.02	0.99	0.9	2.05	0.98
Wood % cane ..	11.08	11.08	3.75	..	2.22	..	5.70	4.00	5.07	4.3	12.00	4.90
Primary juice purity ..	76.50†	76.50†	79.03†	77.70†	83.52*	..	82.30*	83.02*	80.5*	81.3*	78.00*	80.10*
Mixed juice purity ..	74.10†	74.10†	75.40†	..	80.70*	..	79.50*	80.00*	77.6*	78.8*	74.10*	78.50*
Molasses purity ..	32.16†	32.16†	33.10†	32.40†	37.10*	..	34.30†	35.50	32.6*	..	32.60*	36.90*
Mill extraction ..	..	..	..	..	..	..	90.00	88.50	89.90	89.2	89.90	89.2
Boiling house extraction.	88.60	88.60	80.70	82.80	79.85	..	..	..	..	80.1	88.40	82.6
Overall recovery ..	..	..	..	..	..	..	..	..	..	71.3	79.5	73.7

NOTE—Purities noted are G. P.† and P. G. P.* and mixed juice has been calculated and measured. ‡Cane crushed figures seems wrong

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	80841.5	80841.50	429914.25	510755.75	480694.0	991449.75	304307.75	1295757.5	244647.0	1540404.5	30339.0	1570743.5
Maunds cane crushed per 24 hours operation.	10105.18	10105.18	13868.20	13096.30	15506.26	14163.56	10868.13	13222.01	7891.83	11941.12	3792.37	11465.28
Maunds sugar produced.	3352.50	3352.50	33245.36	40303.74	42691.26	85760.40	27482.10	115322.41	22262.24	140176.81	2849.69	143298.50
Maunds sugar in process.	1417.14	1417.14	2288.74	..	2765.40	..	2079.91	..	2569.43	..	272.00	..
Maunds molasses produced.	Nil	Nil	11032.99	17253.32	9719.64	31674.14	7290.86	42500.84	4500.747	50084.897	481.14	51028.43
Maunds molasses in process.	2425.25	2425.25	3799.05	..	4701.18	..	3535.84	..	3083.31	..	462.40	..
Yield sugar % cane ..	5.90	5.90	8.26	7.891	9.45	8.65	9.71	8.90	10.15	9.10	10.28	9.123
Yield molasses % cane	3.00	3.00	3.45	3.378	3.00	3.19	3.55	3.28	3.10	3.25	3.11	3.25
Sugar % cane ..	10.65	10.65	11.32	11.21	12.54	11.85	12.63	12.03	13.03	12.18	13.01	12.19
Fibre % cane ..	16.74	16.74	16.05	16.15	14.99	15.58	15.977	15.67	16.74	15.84	16.17	15.84
Added water % cane	14.80	14.80	15.00	14.97	12.50	13.77	12.80	13.54	17.01	14.09	23.59	14.27
Mixed juice % cane ..	79.00	79.00	80.20	80.01	79.58	79.80	79.03	79.61	81.81	79.96	88.42	80.12
Bagasse % cane ..	35.80	35.80	34.80	34.96	32.92	33.97	33.77	33.93	35.20	34.13	35.17	34.15
Coal % cane ..	Nil	Nil	0.79	0.66	1.00	0.82	1.51	0.99	1.01	0.993	4.00	1.05
Wood % cane ..	14.02	14.02	3.81	5.42	2.60	4.05	8.18	5.02	8.94	5.64	27.52	6.06
Primary juice purity ..	82.51	82.51	83.91	83.69	86.13	84.82	86.25	85.20	85.95	85.41	85.44	85.41
Mixed juice purity ..	80.24	80.24	81.32	81.10	83.37	82.64	83.31	82.55	82.82	82.65	82.20	82.62
Molasses purity ..	..	..	35.20	35.20	35.48	35.01	35.08	35.40	36.12	35.55	36.83	35.71
Mill extraction ..	86.66	86.66	87.45	86.33	88.19	87.51	87.88	87.71	88.33	87.84	88.62	87.85
Boiling house extraction.	63.92	63.92	83.43	80.60	85.44	83.41	87.47	84.34	88.18	85.04	89.15	85.18
Overall recovery ..	55.39	55.39	72.95	70.38	75.34	72.99	76.86	73.97	77.89	74.70	79.00	74.83

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured and calculated

FACTORY SYMBOL C15

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	272921	272921	389450	662371.0	372568.25	1034939.25	242859	1277798	..	..
Maunds cane crushed per 24 hours operation.	..	..	9116	9116	12982.0	11051.0	12419	11507.0	8225	10696.25	..	..
Maunds sugar produced.	..	..	19030	19030	33270.5	54227.5	33235.5	88865	24595.5	115352.5	..	..
Maunds sugar in process.	..	..	1927	1927	1402.0	1402.0	1892.0	1892	..	..	..	..
Maunds molasses produced.	..	..	7216	7216	10561	19781	9077	31305	8040	41915	..	..
Maunds molasses in process.	..	..	2004	2004	2447	2447	2570	2570	..	..	..	..
Yield sugar % cane ..	..	..	7.67	7.67	8.90	8.40	9.43	8.77	10.13	9.02	..	..
Yield molasses % cane	..	..	3.37	3.37	3.34	3.36	3.13	3.27	3.30	3.28	..	..
Sugar % cane ..	..	..	10.49	10.49	12.02	11.39	12.40	11.75	13.20	12.03	..	..
Fibre % cane ..	..	..	13.70	13.70	13.60	13.70	16.03	14.07	14.84	14.57	..	..
Added water % cane	..	..	11.20	11.20	18.10	15.30	20.40	17.30	23.80	18.50	..	..
Mixed juice % cane ..	..	..	79.40	79.40	84.90	82.20	82.90	82.60	86.6	83.40	..	..
Bagasse % cane ..	..	..	31.80	31.80	33.20	33.10	37.50	34.70	37.20	35.10	..	..
Coal % cane	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane	..	..	9.30	9.30	6.1	7.4	8.20	7.7	..	11.5	..	..
Primary juice purity ..	..	..	82.00	82.0	85.10	84.0	86.50	85.10	85.10	85.10	..	..
Mixed juice purity ..	..	..	79.30	79.3	82.40	81.30	83.40	82.10	82.30	82.20	..	..
Molasses purity ..	..	..	30.40	30.40	32.30	31.70	31.70	31.70	31.50	31.60	..	..
Mill extraction ..	..	..	84.70	84.70	84.2	84.4	85.60	84.90	84.70	84.80	..	..
Boiling house extraction.	..	..	86.20	86.20	87.7	87.1	88.80	87.70	89.10	88.0	..	..
Overall recovery ..	..	..	73.00	73.00	73.8	73.5	76.01	74.50	75.5	74.60	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	295608.4	591650.5	462876.5	1054527.0	429352.75	1483879.75	387625.5	1871505.25	79310.0	1950815.25
Maunds cane crushed per 24 hours operation.	..	..	..	..	..	..	..	..	17408	17688	13843.0	17520.0
Maunds sugar produced.	..	..	29265.0	53797.5	48215.0	102012.5	47112.5	149125.0	44390.0	193515.0	10208.75	203723.75
Maunds sugar in process.	..	..	63.0	1459.0	—95.0	1364.0	701.0	2065.0	—789.0	1276.0	—1276.0	..
Maunds molasses produced.	..	..	10597.25	18108.0	15234.0	33342.0	13051.5	46393.5	12520.0	58913.5	4598.0	63511.5
Maunds molasses in process.	..	..	—342.75	2069.50	413.0	2482.0	708.0	3190.5	—1076.4	2114.1	—2114.1	..
Yield sugar % cane	..	..	9.92	9.34	10.39	9.803	11.136	10.188	11.248	10.408	11.26	10.44
Yield molasses % cane	..	..	3.47	3.41	3.38	3.397	3.20	3.341	2.95	3.31	3.13	3.26
Sugar % cane ..	..	..	12.24	..	12.625	..	13.45	..	13.51	..	13.50	..
Fibre % cane ..	..	..	16.17	..	15.43	..	16.35	..	18.15	..	..	..
Added water % cane	..	..	14.43	..	14.47	..	17.57	..	18.68	..	20.18	..
Mixed juice % cane ..	..	..	81.23	..	82.90	..	83.95	..	82.17	..	87.60	..
Bagasse % cane ..	..	..	33.20	..	31.57	..	33.62	..	36.51	..	32.58	..
Coal % cane ..	..	..	0.015	0.043	0.012	0.03	0.013	0.025	0.01	0.02	0.63	0.047
Wood % cane ..	..	..	0.075	0.52	0.210	0.38	0.230	0.34	Nil	0.27	3.72	0.41
Primary juice purity ..	..	..	84.18	83.24	86.04	84.67	86.48	85.60	86.59	86.10	85.98	..
Mixed juice purity ..	..	..	82.93	..	84.20	..	84.82	..	84.78	..	84.35	..
Molasses purity ..	..	..	30.80	30.56	31.59	31.0	32.91	31.54	31.58	31.56	31.18	31.55
Mill extraction ..	..	..	90.30	..	91.33	..	91.41	..	90.82	..	92.08	..
Boiling house extraction.	..	..	89.72	..	90.12	..	90.61	..	91.67	..	90.57	..
Overall recovery ..	..	..	81.04	..	82.29	..	82.79	..	83.25	..	83.41	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL D1

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	586200	603700	1189900	..	..	..	2220900	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	15843	21104	18454	..	..	..	18883	..	..
Maunds sugar produced.	..	..	..	49865.0	55312	107490	..	..	..	212432	..	..
Maunds sugar in process.	..	..	..	2313.0	2588	2588	..	..	..	..	..	..
Maunds molasses produced.	..	..	..	23062	21628.0	46910.0	..	..	..	83692	..	..
Maunds molasses in process.	..	..	..	2220	1948.0	1948.0	..	..	..	..	..	..
Yield sugar % cane ..	..	..	..	8.9	9.59	9.25	..	..	..	9.565	..	..
Yield molasses % cane	..	..	..	4.31	3.91	4.11	..	..	..	3.770	..	..
Sugar % cane	..	..	..	11.47	12.34	11.83	..	..	..	12.00	..	..
Fibre % cane ..	..	..	..	11.78	12.58	12.11	..	..	..	13.19	..	..
Added water % cane	..	..	..	18.43	16.34	17.27	..	..	..	19.08	..	..
Mixed juice % cane ..	..	..	..	93.61	91.04	92.38	..	..	..	93.23	..	..
Bagasse % cane ..	..	..	..	24.82	25.30	24.89	..	..	..	25.85	..	..
Coal % cane ..	..	..	..	0.52	0.03	0.27	..	..	..	0.319	..	..
Wood % cane ..	..	..	..	1.73	0.34	1.03	..	..	..	0.935	..	..
Primary juice purity ..	..	..	..	81.79	84.59	83.08	..	..	..	84.18	..	..
Mixed juice purity ..	..	..	..	80.88	83.24	81.99	..	..	..	82.43	..	..
Molasses purity ..	..	..	..	33.66	33.35	33.52	..	..	..	33.43	..	..
Mill extraction ..	..	..	..	93.64	94.30	93.98	..	..	..	94.00	..	..
Boiling house extraction.	..	..	..	82.45	83.09	82.78	..	..	..	84.35	..	..
Overall recovery	..	..	..	77.59	78.69	78.19	..	..	..	79.71	..	..

NOTE—Purities noted are Gravity Purities and mixed juice has been measured

FACTORY SYMBOL D2*

Clarification process. Sulphitation

Particular	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	316967.5	316967.5	358485	..	302348.25	..	331005.75	..	107178	..
Maunds cane crushed per 24 hours operation.	..	..	11704.0	11704.0	13277	..	12597.8	..	13240	..	8413.9	..
Maunds sugar produced.	..	..	22787.5	22787.5	28570	..	25042.5	..	29625	..	11047.5	..
Maunds sugar in process.	..	..	2295.0	2295.0	..	..	..	..	..	..	..	..
Maunds molasses produced.	..	..	11500.0	11500.0	11000	..	4000	..	11000	..	6100	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	7.0	7.0	7.74	..	8.09	..	..	..	..	..
Yield molasses % cane	..	..	..	..	3.07	..	..	..	..	..	..	..
Sugar % cane ..	..	..	10.79	10.79	11.31	..	..	..	12.58	..	12.48	..
Fibre % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Added water % cane	..	..	12.10	12.10	10.4	..	9.30	..	13.40	..	13.90	..
Mixed juice % cane ..	..	..	79.59	79.59	80.2	..	81.15	..	74.44	..	73.85	..
Bagasse % cane ..	..	..	32.51	32.51	30.2	..	28.15	..	38.96	..	40.05	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	80.1	80.1	83.0	..	84.40	..	82.80	..	82.8	..
Mixed juice purity ..	..	..	79.7	79.7	81.4	..	81.70	..	80.70	..	81.4	..
Molasses purity ..	..	..	38.0	38.0	39.0	..	38.00	..	36.70	..	37.3	..
Mill extraction ..	..	..	86.09	86.09	88.09	..	87.94	..	84.39	..	84.66	..
Boiling house extraction.	..	..	84.68	84.68	85.00	..	85.62	..	85.94	..	87.11	..
Overall recovery ..	..	..	..	..	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been———

*Figures of this factory have been reproduced as supplied by it.

FACTORY SYMBOL D3
Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	614479	614479	613513	1227992	554115	1782107	583515	2365622	175075	2540697
Maunds cane crushed per 24 hours operation.	..	..	22400	22400	23100	22700	23200	22900	23750	23100	23000	23100
Maunds sugar produced.	..	..	51563	51563	57179	110701	53415	166152	56643	224764	16536	243133
Maunds sugar in process.	..	..	1959	1959	2036	2036	1969	1969	1833	1833	..	..
Maunds molasses produced.	..	..	16774	16774	17765	37034	14861	54546	16916	74072	7524	83955
Maunds molasses in process.	..	..	2495	2495	2651	2651	2610	2610	2359	2359	..	..
Yield sugar % cane ..	..	..	8.71	8.71	9.66	9.18	10.0	9.43	10.03	9.58	9.44	9.57
Yield molasses % cane	..	..	3.13	3.13	3.33	3.23	3.16	3.21	3.31	3.23	4.3	3.30
Sugar % cane ..	..	..	10.87	10.87	11.66	11.26	11.92	11.47	12.06	11.61	11.91	11.63
Fibre % cane ..	..	..	17.13	17.13	17.06	17.10	17.37	17.19	17.73	17.32	18.24	17.38
Added water % cane	..	..	22.50	22.50	27.95	25.20	29.00	26.38	27.40	26.63	28.30	26.74
Mixed juice % cane ..	..	..	87.65	87.65	93.70	90.66	94.20	91.79	92.10	91.86	92.10	91.87
Bagasse % cane ...	..	..	34.85	34.85	34.25	35.54	34.80	34.59	35.30	34.77	36.20	34.87
Coal % cane ..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wood % cane ..	..	..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Primary juice purity ..	..	..	81.96*	81.96*	84.10*	82.90*	84.50*	83.36*	83.40*	83.29*	80.60*	83.08*
Mixed juice purity ..	..	..	80.91†	80.91†	82.76†	81.86†	93.90†	82.54†	82.80†	82.56†	80.00†	82.43†
Molasses purity ..	..	..	38.74†	38.74†	36.15†	37.39†	36.50†	37.11†	36.65†	37.00†	37.60†	37.07†
Mill extraction ..	..	..	91.63	91.63	93.60	92.62	94.00	93.10	94.00	93.34	93.80	93.37
Boiling house extraction.	..	..	86.80	86.80	87.90	87.40	88.60	87.78	88.00	87.80	83.90	87.53
Overall recovery ..	..	..	79.50	79.50	82.30	80.95	83.30	81.72	82.80	81.95	78.70	81.72

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	81695.0	81695.0	427441	509136.0	326897	836033	401266	1237299	90550	1327849	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds sugar produced.	2907.6	2907.6	3339.3	37877.0	22657	60534	30814	101304	..	110536	..	..
Maunds sugar in process.	1278.0	1278.0	.353	1631.0	5072	6703	5163	1910	..	..	..	..
Maunds molasses produced.	1948.0	1948.0	18650	21280.0	5290	26570	8941	49821	..	57183	..	..
Maunds molasses in process.	1880.0	1880.0	447	1645.0	7759	9404	7913	3007	..	..	..	..
Yield sugar % cane ..	7.05	7.05	7.89	7.76	8.48	8.04	8.96	8.34	..	8.324	..	..
Yield molasses % cane	4.69	4.69	4.23	4.50	3.99	4.30	4.20	4.27	..	4.30	..	..
Sugar % cane ..	9.87	9.87	10.97	10.42	11.03	10.66	11.55	10.95	11.42	10.98	..	..
Fibre % cane ..	15.75	15.75	15.71	15.73	15.97	15.84	16.65	16.09	18.81	17.73	..	..
Added water % cane	12.22	12.22	17.76	14.99	20.65	17.04	15.74	16.59	19.42	17.00	..	..
Mixed juice % cane ..	79.17	79.17	86.91	83.04	88.14	84.81	81.48	83.71	..	..	..	..
Bagasse % cane ..	33.05	33.05	30.85	31.95	32.51	32.23	34.26	32.88	..	..	..	..
Coal % cane ..	0.0	0.0	0.114	0.114	0.866	0.530	0.751	0.542	3.88	0.91	..	..
Wood % cane ..	17.49	17.49	5.95	7.80	3.588	6.695	5.559	6.687	8.626	7.02	..	..
Primary juice purity ..	78.31*	78.31*	81.55*	79.93*	82.76*	81.34*	83.03*	81.80*	80.35*	80.69*	..	..
Mixed juice purity ..	78.84†	78.84†	76.86†	77.85†	79.40†	78.53†	79.76†	79.02†	..	..	..	..
Molasses purity ..	35.77†	35.77†	40.31†	38.04†	37.34†	37.69†	36.45†	37.35†	..	..	..	..
Mill extraction ..	89.46	89.46	90.96	90.21	91.82	90.80	91.34	90.96	92.55	91.94	..	..
Boiling house extraction.	78.94	78.94	84.26	81.60	82.59	82.13	83.61	82.83	83.59	82.82	..	..
Overall recovery ..	70.62	70.62	76.60	73.61	75.82	74.58	76.37	75.34	76.35	75.32	..	..

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL D5

Clarification process. Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	561767	561767	635012	1196779	585048	1781827	486745	2268572	..	..
Maunds cane crushed per 24 hours operation.	..	..	23185	23185	25300	24300	26700	25000	27350	25500	..	..
Maunds sugar produced.	..	..	42695	42695	55111	102115	52916	158533	44566	206892	..	..
Maunds sugar in process.	..	..	4309	4309	3502	3502	3793	3793	..	..	..	..
Maunds molasses produced.	..	..	12153	12153	12798	31006	11083	47766	16935	69900	..	..
Maunds molasses in process.	..	..	6055	6055	5677	5677	5199	5199	..	..	..	..
Yield sugar % cane ..	..	..	8.36	8.36	9.23	8.82	9.69	9.11	9.16	9.12	..	..
Yield molasses % cane	..	..	3.24	3.24	2.91	3.06	2.79	2.97	3.48	3.08	..	..
Sugar % cane ..	..	..	10.26	10.26	11.07	10.69	11.57	10.98	11.46	11.08	..	..
Fibre % cane ..	..	..	15.75	15.75	17.33	16.59	17.68	16.95	17.91	17.16	..	..
Added water % cane	..	..	14.19	14.19	18.90	16.69	22.95	18.73	23.90	19.83	..	..
Mixed juice % cane ..	..	..	81.82	81.82	83.80	82.90	87.20	84.31	87.30	84.96	..	..
Bagasse % cane ..	..	..	32.37	32.37	35.10	33.79	35.75	34.42	36.60	34.87	..	..
Coal % cane ..	..	..	0.64	0.64	0.40	0.52	0.20	0.41	0.86	0.51	..	..
Wood % cane ..	..	..	0.42	0.42	0.00	0.19	0.0	0.13	0.15	0.13	..	..
Primary juice purity ..	..	..	78.23*	78.23*	81.70*	79.78*	82.10*	80.54*	79.90*	80.40*	..	..
Mixed juice purity ..	..	..	77.32†	77.32†	80.40†	79.00†	81.30†	79.77†	79.00†	79.61†	..	..
Molasses purity ..	..	..	36.99†	36.99†	35.75†	36.24†	36.10†	36.21†	37.00†	36.39†	..	..
Mill extraction ..	..	..	93.60	93.60	93.10	93.35	93.10	93.24	92.40	93.05	..	..
Boiling house extraction.	..	..	86.90	86.90	89.10	88.12	89.60	88.64	86.10	88.07	..	..
Overall recovery ..	..	..	81.34	81.34	83.00	82.26	83.40	82.64	79.60	81.96	..	..

NOTE.—Purities noted are P. G. P* and G. P† and mixed juice has been calculated

FACTORY SYMBOL D6

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	319247	..	438918.75	990881.75	259809	125069075	..	1505238	..	..
Maunds cane crushed per 24 hours operation.	..	..	13302	..	13720	17760	12372.0	13448	..	13690	..	..
Maunds sugar produced.	..	..	21900	..	36900	74445	23090	10359	..	126685	..	..
Maunds sugar in process.	..	..	2685	..	..	6055	..	..	..	..	..	..
Maunds molasses produced.	..	..	..	..	15800	38990	8830	47820	..	56470	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	7.70	..	8.41	8.12	8.88	8.28	..	8.416	..	..
Yield molasses % cane	..	..	..	..	3.60	3.94	3.40	3.82	..	3.75	..	..
Sugar % cane ..	..	..	10.47	..	11.41	10.97	12.39	11.26	..	11.31	..	..
Fibre % cane ..	..	..	12.23	..	12.24	12.04	11.54	..	..	12.04	..	..
Added water % cane	..	..	15.22	..	10.66	12.21	11.71	12.08	..	12.37	..	..
Mixed juice % cane ..	..	..	93.60	..	89.71	90.39	92.28	90.70	..	89.64	..	..
Bagasse % cane ..	..	..	21.62	..	20.95	21.82	91.43	21.38	..	22.73	..	..
Coal % cane ..	..	..	..	..	..	..	..	..	..	0.0988	..	..
Wood % cane ..	..	..	5.57	..	4.26	4.75	4.44	4.68	..	5.132	..	..
Primary juice purity ..	..	..	75.73	..	79.91	78.44	81.74	79.16	..	79.70	..	..
Mixed juice purity ..	..	..	73.49	..	77.15	77.93	78.66	..	..	77.02	..	..
Molasses purity ..	..	..	30.80	..	34.35	33.07	36.71	33.87	..	33.57	..	..
Mill extraction ..	..	..	92.90	..	..	93.25	92.70	93.07		92.74	..	..
Boiling house extraction.	..	..	79.20	..	..	79.37	77.28	77.29	..	80.24	..	..
Overall recovery ..	..	..	73.60	..	..	74.02	70.86	70.93	..	74.42	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated and measured

Clarification process. Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	461923	547190	470728	1017918	388585	1406503	411114	1847617	145097	1992714
Maunds cane crushed per 24 hours operation.	..	..	18160	17540	18250	17860	17970	17900	17480	17800	16820	17720
Maunds sugar produced	..	..	33721	38759	36739	79585	30218	114175	36752	154380	11967	169836
Maunds sugar in process.	..	..	3087	3087	4372	4372	3453	3453	3487	3487	..	..
Maunds molasses produced.	..	..	10537	13636	8125	25508	7656	38640	10519	52356	4595	61354
Maunds molasses in process.	..	..	3747	3747	5476	5476	3197	3197	4403	4403	..	..
Yield sugar % cane ..	..	..	7.97	7.83	8.74	8.24	8.66	8.36	9.11	8.54	8.24	8.52
Yield molasses % cane	..	..	3.09	3.17	2.89	3.04	2.79	2.97	3.38	3.08	3.17	3.08
Sugar % cane ..	..	..	10.13	10.05	10.86	10.42	11.25	10.65	11.96	10.96	11.99	11.04
Fibre % cane ..	..	..	24.60	24.42	17.74	17.89	18.03	17.93	18.38	18.04	18.48	18.08
Added water % cane	..	..	86.17	86.41	26.20	25.24	28.70	26.17	29.15	26.82	22.05	26.47
Mixed juice % cane ..	..	..	38.43	38.01	89.20	87.65	90.00	88.28	89.40	88.57	80.80	88.02
Bagasse % cane ..	..	..	1.67	1.69	37.00	37.59	38.70	37.89	39.75	38.25	41.25	38.45
Coal % cane ..	..	..	0.53	0.55	1.00	1.37	1.91	1.52	1.86	1.60	2.07	1.63
Wood % cane ..	..	..	..	..	0.00	0.29	0.00	0.21	0.00	0.16	0.00	0.15
Primary juice purity ..	..	..	80.10*	79.93*	82.70*	81.18*	82.30*	81.42*	81.80*	81.48*	80.60*	81.41*
Mixed juice purity ..	..	..	79.60†	79.25†	81.80†	80.52†	81.40†	80.74†	80.80†	80.79†	79.80†	80.73†
Molasses purity ..	..	..	37.30†	37.46†	39.70†	38.45†	40.70†	39.04†	41.92†	39.79†	40.55†	39.86†
Mill extraction ..	..	..	90.40	90.00	91.70	90.83	90.20	90.65	89.00	90.22	85.60	89.86
Boiling house extraction.	..	..	86.50	85.91	87.40	86.60	84.80	86.09	85.52	85.91	80.00	85.47
Overall recovery ..	..	..	78.20	77.32	80.10	78.66	76.60	78.05	76.10	77.51	68.40	76.81

NOTE—Purities noted are P. G. P* and G. P† and mixed juice has been calculated

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	309880	309880	555705	865585	401420	1267005	465756	1732761	107547.25	1840308.25
Maunds cane crushed per 24 hours operation.	..	..	12911.7	12911.7	20003	18723	18918	18783	17445.4	18403.9	15567.8	18235.1
Maunds sugar produced.	..	..	21150.0	21150.0	47525	67175	34535.2	108026.4	43787.5	151813.9	9883.6	165968.4
Maunds sugar in process.	..	..	4200.0	4200.0	1043	5815.1	3158.1	3470.0	1018.2	4134.6	..	..
Maunds molasses produced.	..	..	6090.1	6090.1	18094	25784.1	11263.0	40547.3	17805.3	58352.6	4366	68512.0
Maunds molasses in process.	..	..	5600.0	5600.0	1355.7	4988.1	2626.0	4431.4	964.7	5759.6	..	..
Yield sugar % cane ..	..	..	8.18	8.18	8.74	8.53	9.39	8.80	9.62	9.00	9.19	9.02
Yield molasses % cane	..	..	3.77	3.77	3.50	3.59	3.46	3.55	4.03	3.70	4.06	3.72
Sugar % cane ..	..	..	11.01	11.01	11.33	11.20	12.01	11.45	12.55	11.76	12.43	11.81
Fibre % cane ..	..	..	13.12	13.12	14.26	13.88	14.78	14.17	15.66	14.53	16.09	14.65
Added water % cane	..	..	18.03	18.03	17.65	17.57	13.67	16.36	15.57	16.13	12.97	15.91
Mixed juice % cane ..	..	..	91.73	91.73	89.97	90.32	84.33	88.44	83.77	87.31	79.63	86.72
Bagasse % cane ..	..	..	26.30	26.30	27.68	27.25	29.34	27.92	31.80	28.82	33.34	29.19
Coal % cane ..	..	..	1.32	1.32	1.16	1.08	1.67	1.27	1.01	1.14	1.93	1.25
Wood % cane ..	..	..	0.937	0.937	0.53	0.46	..	0.31	Nil	0.23	Nil	0.21
Primary juice purity ..	..	..	83.77	83.77	83.61	83.12	84.26	83.64	8391	83.71	81.42	83.41
Mixed juice purity ..	..	..	81.32	81.32	81.41	81.23	82.60	81.58	81.90	81.64	79.09	81.32
Molasses purity ..	..	..	36.73	36.73	35.64	35.85	35.95	35.90	36.11	35.92	38.45	36.43
Mill extraction ..	..	..	91.83	91.83	92.32	92.20	91.48	91.96	90.38	91.52	87.97	91.22
Boiling house extraction.	..	..	80.51	80.51	83.15	82.19	85.15	83.16	83.90	83.33	83.50	83.37
Overall recovery ..	..	..	73.93	73.93	76.76	75.78	77.89	76.47	75.84	76.26	73.46	76.05

NOTE—Purities noted are Polarisation Gravity Purity and mixed juice has been measured

Clarification process. Double carbonation (DeHaan's Modification)

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	626714.2	841825.65	648060.7	1489886.35	494739.3	1984625.65	473091.8	2457717.45	155796.1	2613513.55
Maunds cane crushed per 24 hours operation.	..	..	20217	19132.4	20905	20140	17669.25	20080	15261	19505.7	15563.4	19300
Maunds sugar produced	..	..	50385.0	63120.0	57625	120745	45967.5	166712.5	42480.0	209192.5	13946.6	226066.1
Maunds sugar in process.	..	..	2770.0	2770.0	—11.0	2759	—127.0	2632.0	295.0	2927.0	75.0	75.0
Maunds molasses produced.	..	..	19009.5	22753.2	18187.15	40940.35	14324.8	55265.15	14432.5	69697.5	4449	79003.5
Maunds molasses in process.	..	..	2036.0	2036.0	985.0	3021.0	—449.0	2572.0	1534.0	4106.0	751	751.0
Yield sugar % cane ..	..	..	8.48	7.82	8.89	8.29	9.27	8.53	9.04	8.63	9.0	8.64
Yield molasses % cane	..	..	3.35	2.95	2.95	2.95	2.77	2.91	3.37	3.01	3.275	3.03
Sugar % cane ..	..	..	10.46	10.12	11.14	10.64	11.69	10.89	11.63	11.09	12.345	11.12
Fibre % cane ..	..	..	14.50	14.20	14.36	14.29	14.44	14.27	15.04	14.65	15.47	..
Added water % cane	..	..	10.22	9.50	15.02	12.15	16.02	13.10	17.17	13.80	19.225	14.25
Mixed juice % cane ..	..	..	81.30	80.80	86.02	83.40	87.00	84.30	85.32	84.50	84.10	84.40
Bagasse % cane ..	..	..	28.92	28.70	29.00	28.75	29.02	28.80	31.85	29.30	35.125	29.85
Coal % cane ..	..	..	0.95	0.97	1.17	1.148	0.0589	..	0.0613	0.0476	2.45	1.35
Wood % cane ..	..	..	0.048	0.0482	0.0725	0.0596	0.9720	0.262	0.610	0.315	0.3143	0.315
Primary juice purity ..	..	..	80.37	78.36	82.82	82.68	83.20	81.23	77.51	79.39	79.51	..
Mixed juice purity ..	..	..	78.83	77.27	81.15	80.67	81.28	79.53	75.56	77.54	77.52	..
Molasses purity ..	..	..	35.31	34.59	36.05	..	36.79	35.61	35.42	35.51	36.12	..
Mill extraction ..	..	..	89.80	89.70	90.80	90.30	90.85	90.50	89.85	90.40	87.00	90.10
Boiling house extraction.	..	..	..	85.20	87.36	86.30	87.35	86.60	85.60	86.40	83.70	86.10
Overall recovery ..	..	..	..	76.50	79.33	77.90	79.35	78.40	..	78.10	72.85	77.60

NOTE—Purities noted are Gravity Purities and mixed juice has been calculated

Clarification process. Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	614041	935007	638210	1573217	597013	9170230	470385	2640616	..	..
Maunds cane crushed per 24 hours operation.	..	..	24800	24150	25850	24800	25900	25100	25050	25100	..	..
Maunds sugar produced.	..	..	52001	77425	58248	138313	59574	200934	50848	254185	..	..
Maunds sugar in process.	..	..	2640	2640	3047	3047	2423	2423	..	..	..	..
Maunds molasses produced.	..	..	14727	25047	14352	43114	11925	58629	14255	75862	..	..
Maunds molasses in process.	..	..	3715	3715	3590	3590	2978	2978	..	..	..	..
Yield sugar % cane ..	..	..	8.89	8.56	9.76	8.89	10.38	9.38	10.82	9.63	..	..
Yield molasses % cane	..	..	3.00	3.08	2.82	2.97	2.50	2.84	3.03	2.87	..	..
Sugar % cane ..	..	..	10.46	10.20	11.23	10.61	11.90	10.97	12.60	11.26	..	..
Fibre % cane ..	..	..	15.31	15.58	15.60	15.58	15.48	15.56	15.69	15.58	..	..
Added water % cane	..	..	23.31	23.90	22.07	23.16	22.60	23.01	24.75	23.32	..	..
Mixed juice % cane ..	..	..	94.31	93.74	92.60	92.32	93.30	93.33	94.70	93.57	..	..
Bagasse % cane ..	..	..	29.00	30.16	29.47	29.84	29.30	29.68	30.05	29.75	..	..
Coal % cane ..	..	..	1.52	1.63	1.16	1.44	1.12	1.35	1.65	1.41	..	..
Wood % cane ..	..	..	0.00	0.27	0.00	0.16	0.00	0.12	0.07	0.11	..	..
Primary juice purity ..	..	..	78.78*	78.57*	81.40*	79.65*	82.30*	80.33*	81.80*	80.73*	..	..
Mixed juice purity ..	..	..	78.34†	77.76†	80.38†	78.85†	81.40†	79.60†	81.60†	7.99†	..	..
Molasses purity ..	..	..	34.21†	34.14†	35.10†	34.52†	37.15†	35.16†	38.10†	35.77†	..	..
Mill extraction ..	..	..	95.70	95.16	95.81	95.44	96.00	95.61	96.10	95.72	..	..
Boiling house extraction.	..	..	88.60	87.96	89.10	88.46	90.60	89.13	89.20	89.14	..	..
Overall recovery ..	..	..	84.81	83.70	85.42	84.43	87.00	85.22	85.70	85.32	..	..

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL D11

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	136765.0	136765.0	..	..	..	..	..	..	..	..	..	..
Maunds cane crushed per 24 hours operation.	14396.0	14396.0	..	..	..	..	..	..	..	..	..	..
Maunds sugar produced.	7010.0	7010.0	..	..	..	..	..	..	..	..	..	..
Maunds sugar in process.	2290.0	2290.0	..	..	..	..	..	..	..	..	..	..
Maunds molasses produced.	4004.0	4004.0	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	1524.0	1524.0	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	6.80	6.80	..	..	..	..	..	..	..	..	..	..
Yield molasses % cane	4.04	4.04	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	10.04	10.04	..	..	..	..	..	..	..	..	..	..
Fibre % cane ..	16.77	16.77	..	..	..	..	..	..	..	..	..	..
Added water % cane	22.10	22.10	..	..	..	..	..	..	..	..	..	..
Mixed juice % cane ..	87.60	87.60	..	..	..	..	..	..	..	..	..	..
Bagasse % cane ..	34.50	34.50	..	..	..	..	..	..	..	..	..	..
Coal % cane ..	Nil	Nil	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	7.0	7.0	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	77.08	77.08	..	..	..	..	..	..	..	..	..	..
Mixed juice purity ..	73.39	73.39	..	..	..	..	..	..	..	..	..	..
Molasses purity ..	32.66	32.66	..	..	..	..	..	..	..	..	..	..
Mill extraction ..	88.69	88.69	..	..	..	..	..	..	..	..	..	..
Boiling house extraction.	75.56	75.56	..	..	..	..	..	..	..	..	..	..
Overall recovery ..	67.02	67.02	..	..	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	..	547421	794936	..	..	266622	1517530	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	..	21055	19389	..	..	12119	17443	..	..
Maunds sugar produced.	..	..	..	..	43946	57645	..	..	35378	133075	..	..
Maunds sugar in process.	..	..	..	..	2242	7955	..	..	—9631	..	..	..
Maunds molasses produced.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	..	..	8.39	8.21	..	..	9.66	8.77	..	..
Yield molasses % cane	..	..	..	..	..	..	..	..	..	..	..	..
Sugar % cane ..	..	..	..	..	11.78	11.64	..	..	13.04	12.08	..	..
Fibre % cane ..	..	..	..	..	14.47	14.34	..	..	15.93	14.88	..	..
Added water % cane	..	..	..	..	13.54	14.39	..	..	17.94	15.35	..	..
Mixed juice % cane ..	..	..	..	..	83.38	84.19	..	..	83.65	84.06	..	..
Bagasse % cane ..	..	..	..	..	30.16	30.20	..	..	34.29	31.29	..	..
Coal % cane ..	..	..	..	..	1.09	1.02	..	..	2.84	1.17	..	..
Wood % cane ..	..	..	..	..	1.55	2.13	..	..	9.17	4.48	..	..
Primary juice purity ..	..	..	..	..	83.56	83.00	..	..	84.96	83.80	..	..
Mixed juice purity ..	..	..	..	..	81.44	81.23	..	..	82.82	81.88	..	..
Molasses purity ..	..	..	..	..	39.93	40.37	..	..	40.88	40.02	..	..
Mill extraction ..	..	..	..	..	90.97	90.71	..	..	88.71	90.28	..	..
Boiling house extraction.	..	..	..	..	78.81	77.77	..	..	82.62	79.96	..	..
Overall recovery ..	..	..	..	..	71.12	70.55	..	..	73.29	72.19	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL D13

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	137416.5	137416.5	436094.75	573511.25	521244	1094755.25	..	..	230168.25	1586350	..	..
Maunds cane crushed per 24 hours operation.	13741.6	13741.6	15574.45	15092.4	15330.7	15204.93	..	..	7936.8	14123.2	..	..
Maunds sugar produced.	6477.5	6477.5	33703.0	40180.5	45522.1	85702.6	..	..	20466	132808.7	..	..
Maunds sugar in process.	2375.0	2375.0	700.0	3075.0	30.0	3105.0	..	..	..	..	..	..
Maunds molasses produced.	875.0	875.0	13411.0	14286.0	16960.0	31246.0	..	..	9482	53522	..	..
Maunds molasses in process.	3847.0	3847.0	153.0	4000.0	—214.0	3786.0	..	..	..	..	..	..
Yield sugar % cane ..	6.44	6.44	7.89	7.54	8.73	8.11	..	..	8.89	8.37	..	..
Yield molasses % cane	3.40	3.40	3.11	3.19	3.21	3.20	..	..	4.12	3.37	..	..
Sugar % cane ..	9.03	9.03	10.65	10.26	11.07	10.65	..	..	11.89	11.00	..	..
Fibre % cane ..	12.70	12.70	13.50	13.20	15.10	14.80	..	..	16.90	16.22	..	..
Added water % cane	13.19	13.19	15.12	14.65	15.46	15.03	..	..	13.06	14.56	..	..
Mixed juice % cane ..	82.11	82.11	85.17	84.39	85.49	84.91	..	..	80.98	83.94	..	..
Bagasse % cane ..	31.08	31.08	29.95	30.26	29.97	30.12	..	..	32.08	30.62	..	..
Coal % cane ..	0.74	0.74	0.18	0.32	0.61	0.45	..	..	0.36	1.46	..	..
Wood % cane ..	1.40	1.40	2.10	2.01	1.30	1.70	..	..	6.67	1.95	..	..
Primary juice purity ..	78.97	78.97	80.06	79.77	81.98	80.89	..	..	81.96	81.38	..	..
Mixed juice purity ..	76.13	76.13	76.84	76.66	78.77	77.71	..	..	75.58	77.89	..	..
Molasses purity ..	33.13	33.13	34.09	33.85	34.07	33.92	..	..	34.90	34.28	..	..
Mill extraction ..	87.27	87.27	89.94	89.21	91.33	90.26	..	..	88.48	89.92	..	..
Boiling house extraction.	82.05	82.05	81.85	..	86.36	82.66	..	..	83.32	83.62	..	..
Overall recovery ..	70.87	70.87	73.71	73.09	78.41	75.68	..	..	73.93	75.18	..	..

NOTE.—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	110126	110126	392249.25	502375.25	367191.75	869567.00	182742.25	1052309.25	..	..
Maunds cane crushed per 24 hours operation.	..	..	8471	8471	14009	12253	15300	13378.0	..	..	..	..
Maunds sugar produced.	..	..	3333	3333	25594	33820	32477	66297	16478.63	86889.63	..	..
Maunds sugar in process.	..	..	4893	4893	4260	4260	—146	4114	..	..	..	..
Maunds molasses produced.	..	..	..	..	7548	11111	14519	25630	7996	37955	..	..
Maunds molasses in process.	..	..	3563	3563	5094	5094	—765	4329	..	..	..	..
Yield sugar % cane ..	..	..	7.47	7.47	7.61	7.58	8.80	8.10	9.01	8.257	..	..
Yield molasses % cane	..	..	3.23	3.23	3.22	3.22	3.74	3.44	4.37	3.607	..	..
Sugar % cane ..	..	..	10.71	10.71	11.01	10.94	11.34	11.11	11.97	11.27	..	..
Fibre % cane ..	..	..	16.56	16.56	16.40	16.43	16.69	16.54	16.89	16.61	..	..
Added water % cane	..	..	17.34	17.34	10.42	11.93	20.18	15.42	21.25	16.43	..	..
Mixed juice % cane ..	..	..	80.60	80.60	75.68	76.75	86.00	80.66	86.81	81.73	..	..
Bagasse % cane ..	..	..	36.74	36.74	34.74	35.18	34.18	34.76	34.44	34.70	..	..
Coal % cane	..	..	Nil	Nil	Nil	Nil	Nil	..	..	..	..	..
Wood % cane ..	..	..	15.27	15.27	1.36	4.41	..	..	..	3.53	..	..
Primary juice purity ..	..	..	84.55	84.55	84.31	84.35	83.74	84.00	84.29	84.23	..	..
Mixed juice purity ..	..	..	82.99	82.99	81.97	82.15	81.62	81.06	82.83	81.94	..	..
Molasses purity ..	..	..	Nil	Nil	38.01	..	36.00	..	36.58	..	..	..
Mill extraction ..	..	..	87.02	87.02	86.92	86.91	90.29	88.40	90.58	88.82	..	..
Boiling house extraction.	..	..	80.15	80.15	79.31	79.48	85.74	82.28	83.11	82.29	..	..
Overall recovery ..	..	..	69.74	69.74	68.94	69.10	77.42	72.72	75.29	73.09	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

FACTORY SYMBOL E2

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	286903	286903	210668	497571	315236	812807	..	946686	..	..
Maunds cane crushed per 24 hours operation.	..	..	..	..	..	..	11000	11000	..	11000	..	..
Maunds sugar produced.	..	..	20853	20853	16342	37195	26315	63510	..	75906	..	..
Maunds sugar in process.	..	..	..	..	..	..	..	..	..	..	..	..
Maunds molasses produced.	..	..	10250	10250	7850	18100	12005	30105	..	35455	..	..
Maunds molasses in process.	..	..	..	..	..	..	..	..	..	..	..	..
Yield sugar % cane ..	..	..	7.27	7.27	7.76	7.48	8.35	7.81	..	8.02	..	..
Yield molasses % cane	..	..	3.57	3.57	3.73	3.64	3.81	3.70	..	3.75	..	..
Sugar % cane ..	..	..	9.86	9.86	10.60	10.17	11.07	10.52	..	10.68	..	..
Fibre % cane ..	..	..	16.91	16.91	16.77	16.85	17.36	17.05	..	17.05	..	..
Added water % cane	..	..	22.91	22.91	16.03	20.00	16.62	18.69	..	18.42	..	..
Mixed juice % cane ..	..	..	90.02	90.02	83.06	87.07	80.24	85.27	..	84.83	..	..
Bagasse % cane ..	..	..	32.89	32.89	32.97	32.93	36.38	33.42	..	33.59	..	..
Coal % cane ..	..	..	3.16	3.16	3.28	3.21	2.44	2.91	..	3.06	..	..
Wood % cane ..	..	..	2.59	2.59	2.29	2.46	1.80	2.21	..	2.30	..	..
Primary juice purity ..	..	..	81.83	81.83	83.72	82.84	84.09	83.35	..	83.31	..	..
Mixed juice purity ..	..	..	78.90	78.90	80.75	79.67	80.96	80.19	..	80.36	..	..
Molasses purity ..	..	..	36.92	36.92	37.87	37.45	39.00	38.09	..	38.21	..	..
Mill extraction ..	..	..	90.12	90.12	89.66	89.91	89.05	89.56	..	89.34	..	..
Boiling house extraction.	..	..	81.07	81.07	80.78	80.90	83.18	82.10	..	83.24	..	..
Overall recovery ..	..	..	73.06	73.06	72.43	72.74	74.06	73.53	..	74.36	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	477197	734313	513142	1247455	520690	1768145	493793	2261938	207188	2469126
Maunds cane crushed per 24 hours operation.	..	..	17700	17400	19140	18060	21700	18970	20500	19400	20700	19460
Maunds sugar produced.	..	..	38920	59402	43301	105567	45524	153425	43174	199732	20539	222257
Maunds sugar in process.		..	2864	2864	2334	2334	3133	3133	1986	1986	..	..
Maunds molasses produced.	..	..	14290	25424	15301	44196	14194	61362	14581	79046	5412	87346
Maunds molasses in process.	..	..	3471	3471	2972	2972	3103	3103	2888	2888	..	..
Yield sugar % cane ..	..	..	8.75	8.48	8.90	8.65	9.34	8.85	9.14	8.92	9.91	9.01
Yield molasses % cane	..	..	3.72	3.93	3.56	3.78	3.33	3.64	3.54	3.62	2.62	3.54
Sugar % cane ..	..	..	10.84	10.68	10.97	10.80	11.41	10.98	11.38	11.07	11.69	11.12
Fibre % cane ..	..	..	18.85	19.47	18.32	19.00	18.11	18.73	18.55	18.69	19.10	18.72
Added water % cane	..	..	21.86	22.50	20.29	21.59	20.25	21.19	19.88	20.90	19.95	20.82
Mixed juice % cane ..	..	..	85.70	85.15	85.50	85.26	85.70	85.36	84.30	85.14	83.30	84.99
Bagasse % cane ..	..	..	36.16	37.35	34.79	36.33	34.55	35.83	35.58	35.76	36.65	35.83
Coal % cane ..	..	..	0.017	0.016	0.00	0.009	0.00	0.007	0.00	0.005	0.00	0.005
Wood % cane ..	..	..	0.02	0.065	0.00	0.038	0.00	0.027	0.00	0.021	0.00	0.019
Primary juice purity ..	..	..	80.03*	79.37*	80.70*	79.90*	81.50*	80.40*	80.80*	80.44*	79.60*	80.43*
Mixed juice purity ..	..	..	78.70†	78.34†	79.42†	78.84†	80.70†	79.40†	79.70†	79.50†	79.10†	79.42†
Molasses purity ..	..	..	37.50†	37.75†	37.51†	37.65†	37.90†	37.70†	37.85†	37.73†	37.72†	37.73†
Mill extraction ..	..	..	93.60	93.16	93.30	93.25	93.10	93.21	92.40	93.05	92.10	92.97
Boiling house extraction.	...	..	85.80	84.62	86.30	85.40	87.40	85.93	86.60	86.12	91.60	86.55
Overall recovery ..	..	..	80.30	78.84	80.59	79.63	81.40	80.14	80.00	80.13	84.20	80.48

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL E4

Clarification process. Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	519378	592661	569276	1161937	499043	1660980	445120	2106100	..	2106100
Maunds cane crushed per 24 hours operation.	..	..	20014	19483	21300	20300	20900	20500	19300	20300	..	20300
Maunds sugar produced.	..	..	38082	43235	46580	93429	40599	139176	40786	185284	..	187347
Maunds sugar in process.	..	..	3614	3614	5148	5148	5322	5322	1869	1869	..	..
Maunds molasses produced.	..	..	11851	14193	12183	30967	10624	45284	11088	61704	..	63885
Maunds molasses in process.	..	..	4591	4591	3693	3693	5322	5322	3013	3013	..	..
Yield sugar % cane ..	..	..	8.03	7.90	9.09	8.48	9.20	8.70	9.58	8.89	..	8.90
Yield molasses % cane	..	..	3.17	3.17	2.79	2.98	3.20	3.05	3.17	3.07	..	3.03
Sugar % cane ..	..	..	9.94	9.85	10.86	10.34	11.23	10.61	11.62	10.82	..	10.82
Fibre % cane ..	..	..	16.29	16.28	16.61	16.44	16.89	16.57	17.25	16.72	..	16.72
Added water % cane	..	..	27.21	27.77	24.60	26.22	22.20	25.02	25.60	25.14	..	25.14
Mixed juice % cane ..	..	..	94.78	95.36	91.70	93.56	88.90	92.15	91.50	92.01	..	92.01
Bagasse % cane ..	..	..	32.43	32.41	32.90	32.66	33.30	32.87	34.10	33.13	..	33.13
Coal % cane ..	..	..	0.0	0.36	0.15	0.16	0.0	0.18	0.42	0.23	..	0.35
Wood % cane ..	..	..	0.0	0.00	0.00	0.00	0.0	0.00	0.04	0.01	..	0.06
Primary juice purity ..	..	..	78.81*	79.30*	82.80*	80.95*	82.90*	81.69*	81.80*	81.68*	..	81.68*
Mixed juice purity ..	..	..	78.11†	77.69†	81.20†	79.46†	82.30†	80.36†	80.90†	80.47†	..	80.47†
Molasses purity ..	..	..	38.86†	38.37†	37.30†	38.17†	38.80†	38.38†	38.80†	38.48†	..	38.49†
Mill extraction ..	..	..	93.15	93.00	93.00	93.09	93.20	93.12	93.50	93.25	..	93.25
Boiling house extraction.	..	..	86.30	85.92	89.50	87.67	87.40	87.65	87.80	87.61	..	87.71
Overall recovery ..	..	..	80.39	79.90	83.30	81.62	81.50	81.62	82.10	81.70	..	81.79

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	300735	300735	766542	1067277	843137	1910414	666867	2577281	631778	3209059	..	..
Maunds cane crushed per 24 hours operation.	23133	23133	32275	30135	34768	31621	33447	32208	31017	32161	..	..
Maunds sugar produced.	18896	18896	60690	79586	68106	153908	53555	215368	57868	280405	..	..
Maunds sugar in process.	2787	2787	3429	6216	7905	7905	7169	7169	1222.5	1222.5	..	..
Maunds molasses produced.	6157	6157	19449	25606	21306	54875	17013	79121	20720	107673	..	..
Maunds molasses in process.	4428	4428	3535	7963	7233	7233	7832	7832	1923	1923	..	..
Yield sugar % cane ..	7.21	7.21	8.30	8.04	9.01	8.47	9.10	8.63	9.35	8.776	..	..
Yield molasses % cane	3.52	3.52	2.98	3.14	3.38	3.25	3.72	3.37	3.58	3.41	..	..
Sugar % cane ..	9.67	9.67	10.51	10.27	11.34	10.76	11.68	10.98	11.76	11.53	..	..
Fibre % cane ..	14.99	14.99	15.41	15.29	15.85	15.56	16.98	15.91	18.13	16.35	..	..
Added water % cane	22.38	22.38	21.98	22.09	25.08	23.48	26.63	24.24	27.51	24.89	..	..
Mixed juice % cane ..	86.69	86.69	87.20	87.05	91.28	88.94	91.18	89.50	92.09	90.02	..	..
Bagasse % cane ..	35.69	35.69	34.78	35.04	33.80	34.54	35.45	34.74	35.42	34.87	..	..
Coal % cane ..	0.63	0.63	0.28	0.38	Nil	0.26	0.14	0.23	Nil	0.18	..	..
Wood % cane ..	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Primary juice purity ..	77.40*	77.40*	82.25*	80.88*	83.95*	83.04*	83.15*	83.07*	80.78*	82.62*	..	..
Mixed juice purity ..	76.78†	76.78†	79.69†	78.88†	82.43†	80.71†	81.98†	81.02†	79.99†	79.09†	..	..
Molasses purity ..	35.58†	35.58†	34.29†	34.52†	36.35†	35.43†	36.80†	35.85†	35.16†	35.87†	..	..
Mill extraction ..	89.53	89.53	90.78	90.45	91.56	90.98	91.73	91.18	92.41	91.47	..	..
Boiling house extraction.	82.58	82.58	87.36	86.11	85.95	86.00	85.06	85.75	85.55	85.71	..	..
Overall recovery ..	73.94	73.94	79.31	77.81	78.70	78.24	77.56	78.11	79.06	78.37	..	..

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL E6

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	230748.5	230748.5	484323.0	715071.5	521068.8	1236142.0	428342	1664484.0	432968	2097452.0	..	..
Maunds cane crushed per 24 hours operation.	14760	14760	18336.0	17202.0	19178	18007.0	18117.6	18015.8	16501.0	17663	..	..
Maunds sugar produced.	14972.5	14972.5	41141.5	59280.0	46162.0	108695.0	39385.0	149716.0	42214.0	192430.0	..	..
Maunds sugar in process.	1788.0	1788.0	1378.0	..	3253.0	..	1636.0	..	500.0	..	..	..
Maunds molasses produced.	7027.0	7027.0	12364.0	24630	12663.0	41653.0	13671.0	57615.0	15496.0	73111.0	..	..
Maunds molasses in process.	2696.0	2696.0	2543.0	..	4360.0	..	2291.0	..	..	..	..	..
Yield sugar % cane ..	7.26	7.26	8.78	8.29	9.48	8.79	9.57	8.99	9.86	9.17	..	..
Yield molasses % cane	4.21	4.21	3.07	3.44	3.26	3.36	3.72	3.46	3.57	3.48	..	..
Sugar % cane ..	10.18	10.18	10.93	10.67	11.89	11.23	12.20	11.47	12.30	11.64	..	..
Fibre % cane ..	15.48	15.48	17.02	16.50	17.54	16.99	18.30	17.32	19.12	17.68	..	..
Added water % cane	10.90	10.90	11.50	11.33	15.14	13.11	17.76	14.30	20.49	15.51	..	..
Mixed juice % cane ..	80.86	80.86	79.51	79.99	82.01	80.91	82.77	81.38	83.59	81.81	..	..
Bagasse % cane	30.04	30.04	31.99	31.34	33.13	32.20	34.99	32.92	36.90	33.70	..	..
Coal % cane ..	0.309	0.309	Nil	0.11	0.0	0.06	0.0	0.04	0.0	0.036	..	..
Wood % cane ..	Nil	Nil	Nil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..	..
Primary juice purity ..	81.17	81.17	84.28	83.25	86.03	84.45	85.87	84.81	84.45	84.71	..	..
Mixed juice purity ..	77.79	77.79	80.58	84.33	83.12	81.15	82.67	81.53	81.29	81.50	..	..
Molasses purity ..	29.77	29.77	32.75	32.04	34.81	33.33	35.88	33.97	33.72	33.86	..	..
Mill extraction ..	90.33	90.33	90.97	90.77	91.44	91.07	91.38	91.15	91.13	91.14	..	..
Boiling house extraction.	78.33	78.33	87.13	84.33	86.60	85.49	85.64	85.53	89.47	85.98	..	..
Overall recovery ..	70.76	70.76	79.27	76.54	79.18	77.86	78.24	77.96	79.71	78.37	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated.

Clarification process. Double Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	106745.75	106745.75	394454.25	501200.0	452778.0	953978.0	341276.0	1295254.0	261869.5	1557123.5	..	..
Maunds cane crushed per 24 hours operation.	13343	13343	15969.8	14961.2	14997.0	15130.0	14584.0	14635.0	9649.0	13659.0	..	..
Maunds sugar produced.	5097.5	5097.5	25582.5	30680.0	34970.0	65650.0	35400	101050.0	25544.5	129357.5	..	..
Maunds sugar in process.	1911.0	1911.0	2403.0	4314.0	3607.0	7921.0	—4477	3444.0	..	681.0	..	..
Maunds molasses produced.	1323.0	1323.0	10510.0	11833.0	12723.0	24556.0	13150.0	37706.0	7923.0	—49062.0	..	..
Maunds molasses in process.	2483.0	2483.0	1343.0	3826.0	1230.0	5056.0	—1623.0	3433.0	..	..	..	..
Yield sugar % cane ..	6.56	6.56	7.09	6.98	8.52	7.71	9.06	8.06	9.75	8.35	..	..
Yield molasses % cane	3.56	3.56	3.00	3.12	3.08	3.10	3.37	3.17	3.02	3.15	..	..
Sugar % cane ..	9.44	9.44	10.15	10.00	10.94	10.45	11.54	10.73	12.03	10.95	..	..
Fibre % cane ..	15.46	15.46	16.22	16.06	16.95	16.48	17.46	16.74	18.18	16.98	..	..
Added water % cane	9.18	9.18	12.85	12.07	15.65	13.77	18.01	14.89	22.52	16.17	..	..
Mixed juice % cane ..	77.36	77.36	80.02	79.46	81.75	80.55	83.26	81.26	86.39	82.12	..	..
Bagasse % cane ..	31.82	31.82	32.83	32.61	33.90	33.22	34.75	33.63	36.13	34.05	..	..
Coal % cane ..	0.35	0.35	0.17	0.21	0.59	0.39	0.76	0.57	1.66	0.75	..	..
Wood % cane ..	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..	..
Primary juice purity ..	76.01*	76.01*	78.54*	78.03*	80.16*	79.18*	81.78*	79.89*	81.57*	80.05*	..	..
Mixed juice purity ..	75.05†	75.05†	77.17†	76.75†	78.97†	77.72†	80.37†	78.46†	79.97†	78.69†	..	..
Molasses purity ..	39.59†	39.59†	37.76†	37.86†	39.27†	38.63†	40.10†	38.98†	39.49†	39.08†	..	..
Mill extraction ..	88.74	88.74	89.67	89.49	90.82	90.15	91.20	90.45	91.24	90.60	..	..
Boiling house extraction.	78.17	78.17	77.73	77.82	85.50	81.67	85.77	82.84	88.64	83.92	..	..
Overall recovery ..	69.37	69.37	69.70	69.64	77.65	73.62	78.23	74.93	80.88	76.01	..	..

NOTE—Purities noted are P. G. P.* and G. P.† and mixed juice has been calculated

FACTORY SYMBOL E8

Clarification process. Double Carbonation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	203551	203551	674586	878137	..	..	674200	2303538	587806	2891344	271212	3162556
Maunds cane crushed per 24 hours operation.	10178	10178	12958	11965	..	..	24071	20941	18961	206542	12915	19886
Maunds sugar produced.	11243	11243	56098	64758	..	..	66881	210083	56429	266851	21833	288109
Maunds sugar in process.	4203	4203	..	6810	..	..	..	..	..	..	..	..
Maunds molasses produced.	2386	2386	27156	28321	..	..	26226	89608	29978	118825	19798	138204
Maunds molasses in process.	5121	5121	..	6342	..	..	..	..	..	..	..	..
Yield sugar % cane ..	7.6	7.6	8.32	8.15	..	..	9.92	9.12	9.60	9.23	8.05	9.11
Yield molasses % cane	3.69	3.69	4.03	3.95	..	..	3.89	3.89	5.10	4.11	7.30	4.37
Sugar % cane ..	10.15	10.15	10.94	10.76	..	..	12.56	11.73	13.26	12.04	12.30	12.04
Fibre % cane ..	16.40	16.40	16.20	16.23	..	..	18.10	17.21	18.15	17.15	18.23	17.57
Added water % cane	23.50	23.50	21.90	22.23	..	..	29.00	24.40	27.40	24.98	26.82	25.02
Mixed juice % cane ..	92.10	92.10	88.75	89.63	..	..	93.12	90.04	91.70	90.40	90.53	90.26
Bagasse % cane ..	31.40	31.40	33.15	32.60	..	..	35.88	34.36	35.70	34.58	36.29	24.76
Coal % cane ..	5.36	5.36	1.35	2.28	..	..	2.30	2.10	2.69	2.18	2.16	2.17
Wood % cane ..	0.25	0.25	0.02	0.07	..	..	0.0	0.033	0.007	0.027	0.0	0.026
Primary juice purity ..	76.44	76.44	78.09	77.74	..	..	83.48	81.28	81.01	81.27	76.91	80.83
Mixed juice purity ..	73.42	73.42	75.93	75.36	..	..	80.60	78.60	77.59	78.50	72.52	77.86
Molasses purity ..	33.17	33.17	32.49	..	..	..	35.76	34.23	33.80	34.15	36.35	34.53
Mill extraction ..	92.81	92.81	92.10	92.26	..	..	92.76	92.41	93.14	92.61	92.36	92.61
Boiling house extraction.	81.20	81.20	84.31	82.40	..	..	85.44	84.17	..	83.15	..	82.00
Overall recovery ..	74.88	74.88	76.14	75.74	..	..	78.98	77.75	72.4	76.66	65.46	75.67

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been weighed

FACTORY SYMBOL E9

Clarification process. Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	444141	444141	..	1175241	..	1637300	..	2190800	..	2589700	..	2700840
Maunds cane crushed per 24 hours operation.	23304	23304	..	25848	..	25000	..	25000	..	24096	..	16775
Maunds sugar produced.	30350	30350	..	93724.5	..	135673	..	193524	..	228413	..	241688
Maunds sugar in process.	2656	2656	..	2583.6	..	3548	..	..	..	4718	..	..
Maunds molasses produced.	18042	18042	..	43972.0	..	58792	..	79776	..	95243	..	102790
Maunds molasses in process.	906	906	..	1900.0	..	..	..	..	..	..	..	..
Yield sugar % cane ..	7.43	7.43	..	8.20	..	8.50	..	8.83	..	9.06	..	8.96
Yield molasses % cane	4.06	4.06	..	3.74	..	3.59	..	3.60	..	3.67	..	3.81
Sugar % cane ..	10.02	10.02	..	10.67	..	10.94	..	11.30	..	11.49	..	11.50
Fibre % cane ..	16.17	16.17	..	18.20	..	17.40	..	17.03	..	16.65	..	17.01
Added water % cane	20.62	20.62	..	22.20	..	24.13	..	25.13	..	26.00	..	26.55
Mixed juice % cane ..	86.35	86.35	..	84.78	..	88.36	..	89.76	..	91.00	..	91.43
Bagasse % cane ..	34.27	34.27	..	37.42	..	35.77	..	35.37	..	35.00	..	35.12
Coal % cane ..	1.79	1.79	..	1.07	..	1.21	..	1.20	..	1.480	..	1.79
Wood % cane ..	0.71	0.71	..	0.57	..	0.58	..	0.53	..	0.52	..	0.59
Primary juice purity ..	79.68*	79.68*	..	82.19*	..	83.47*	..	83.95*	..	83.93*	..	83.79*
Mixed juice purity ..	76.12*	76.12*	..	78.80*	..	79.92*	..	80.85*	..	80.65*	..	80.57*
Molasses purity ..	37.84†	37.84†	..	31.05*	..	31.83*	..	32.38*	..	32.40*	..	32.30*
Mill extraction ..	90.31	90.31	..	90.16	..	90.77	..	91.15	..	91.5	..	91.47
Boiling house extraction.	81.87	81.87	..	85.03	..	85.39	..	85.45	..	85.5	..	84.88
Overall recovery ..	74.15	74.15	..	76.85	..	77.69	..	77.89	..	78.2	..	77.65

NOTE—Purities noted are P. G. P.* and True purity† and mixed juice has been measured

FACTORY SYMBOL F1

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	67802.28	67802.28	253544.65	321346.93	117362.7	438709.63	72585.24	511294.87	98054.77	609349.64	7930.66	617280.3
Maunds cane crushed per 24 hours operation.	4843.02	4843.02	8178.85	7140.31	3785.69	5772.31	2592.13	4916.18	3162.97	4513.50	2643.55	4505.69
Maunds sugar produced.	4256.07	4256.07	25555.53	29811.6	13215.93	43027.53	6942.39	49969.92	9765.21	59735.13	2116.35	61851.48
Maunds sugar in process.	1257.71	1257.71	—429.16	828.55	209.39	1037.94	792.25	1830.19	—325.69	1504.50	—1504.5	..
Maunds molasses produced.	1173.90	1173.90	6112.19	7286.09	3959.31	11245.4	1652.36	12897.76	3549.27	16087.61	1569.91	17657.52
Maunds molasses in process.	1972.69	1972.69	848.49	2821.18	—1980.34	840.84	539.44	1380.28	—222.76	1157.52	—1157.52	..
Yield sugar % cane ..	8.13	8.13	9.91	9.53	11.43	10.04	10.65	10.13	9.62	10.05	7.71	10.02
Yield molasses % cane	4.65	4.65	2.74	3.14	1.68	2.75	3.02	2.79	3.39	2.82	5.20	2.86
Sugar % cane ..	11.91	11.91	13.06	12.81	13.55	13.00	14.02	13.15	13.53	13.21	11.51	13.18
Fibre % cane ..	13.00	13.00	10.78	11.32	10.98	11.30	11.86	..	10.92	10.94	11.30	10.95
Added water % cane	10.0	10.0	8.06	8.47	11.40	9.25	14.89	10.05	9.46	9.96	8.50	9.95
Mixed juice % cane ..	83.79	83.79	82.70	82.96	87.96	84.25	88.34	84.84	82.98	84.57	78.0	84.45
Bagasse % cane ..	27.21	27.21	25.36	25.51	23.44	25.00	26.55	25.21	26.48	25.39	30.50	25.50
Coal % cane ..	7.89	7.89	2.59	3.71	3.07	..	5.63	3.96	2.24	3.69	4.06	3.72
Wood % cane ..	5.66	5.66	3.92	3.96	6.64	5.41	12.05	7.50	15.39	8.77	19.82	9.69
Primary juice purity ..	78.93	78.93	82.75	83.52	85.41	83.52	83.04	83.28	80.60	81.89	73.96	80.04
Mixed juice purity ..	77.14	77.14	81.06	81.74	83.64	81.74	81.87	81.94	78.36	80.04	71.78	78.36
Molasses purity ..	32.16	32.16	32.58	33.30	34.73	33.30	35.13	34.18	32.69	33.44	33.94	33.67
Mill extraction ..	88.83	88.83	90.27	90.08	91.66	90.59	91.22	90.64	90.39	90.61	85.00	90.51
Boiling house extraction.	76.84	76.84	84.05	82.58	92.02	85.30	83.26	84.98	78.65	83.70	78.80	83.88
Overall recovery ..	68.26	68.26	75.88	74.39	84.34	77.27	75.96	77.03	71.10	76.07	66.98	76.02

NOTE—Purities noted are Gravity Purities and mixed juice has been measured

Clarification process. Double Sulphitation

Particulars	November		December		January		February		March		April		May	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	113049	159186	188049	347235	183691	530926	155753	686679	105641	792320	150608	942928	148022	1090950
Maunds cane crushed per 24 hours operation.	10455	9467	9629	9547	9113	9388	7728	8952	7049	8643	6696	8275	7536	8160
Maunds sugar produced.	7219	10108	14521	26013	17651	45025	14466	60771	10279	71943	14349	87598	13263.0	100861.0
Maunds sugar in process.	853	..	1384	..	1361	..	1290	..	893	..	1306	..	..	..
Maunds molasses produced.	5776	9248	8858	18650	7376	26475	4869	31725	2968	35338	5989	41407	7904	49311
Maunds molasses in process.	136	..	544	..	449	..	381	..	645	..	80	..	..	..
Yield sugar % cane ..	7.14	6.35	8.40	7.49	10.35	8.48	10.12	8.85	10.57	9.08	10.40	9.29	8.96	9.24
Yield molasses % cane	5.23	5.81	5.00	5.38	4.26	4.98	3.37	4.62	3.42	4.45	4.03	4.39	5.34	4.52
Sugar % cane ..	10.68	9.90	10.93	10.42	13.53	11.45	14.00	12.15	13.61	12.36	13.13	12.46	11.90	12.39
Fibre % cane ..	12.43	12.14	13.39	13.08	15.33	13.90	16.94	14.84	18.21	15.39	16.80	15.58	17.30	15.77
Added water % cane	9.70	9.84	9.26	9.54	13.06	10.72	15.47	12.00	15.15	12.46	17.10	13.08	10.86	12.78
Mixed juice % cane ..	82.78	83.36	78.57	80.94	81.48	81.12	80.36	80.91	77.67	80.45	82.90	80.78	74.45	79.92
Bagasse % cane ..	26.92	26.48	30.69	28.60	31.58	29.60	35.11	31.09	37.48	32.01	34.20	32.30	36.41	32.86
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	79.63	79.38	80.09	79.74	85.24	82.66	86.60	83.88	85.37	84.04	82.75	84.06	80.88	83.70
Mixed juice purity ..	77.50	77.37	76.86	..	82.96	78.39	83.67	79.62	82.68	80.04	80.85	80.30	78.09	80.15
Molasses purity ..	35.56	37.11	29.58	32.98	32.82	32.90	35.92	34.46	41.21	35.32	35.75	35.38	36.81	35.58
Mill extraction ..	90.39	89.94	88.26	88.42	91.70	89.66	90.76	90.03	89.92	90.00	90.60	90.11	88.11	89.85
Boiling house extraction.	71.85	74.71	87.04	80.67	82.59	82.57	79.62	80.89	85.87	81.58	87.40	82.73	85.41	83.02
Overall recovery ..	64.97	64.14	76.85	73.51	76.50	74.06	72.28	72.84	77.66	73.46	79.28	74.56	75.30	74.58

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL F_3

Clarification process. Single Sulphitation

Particulars	November		December		January		February		March		April	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	140923.2	140923.2	138600	..	158500	..	126148.2	564166.1	128669.6	..	157753	851037
Maunds cane crushed per 24 hours operation.	4270.40	4270.4	4950.4	..	5283	..	5255	..	5361.12	..	5512	5280
Maunds sugar produced.	9993.20	9993.20	11905.4	..	16350	..	14095.6	..	14266.4	..	17120	85080
Maunds sugar in process.	223.04	223.04	326.4	..	244.8	..	340.0	..	326.4	..	27	27
Maunds molasses produced.	6552.21	6552.21	5712.0	..	5007.0	..	3590.0	..	4025.6	..	5117	29368
Maunds molasses in process.	..	..	..	..	489.6	..	680.0	..	..	..	..	..
Yield sugar % cane ..	7.20	7.20	8.76	..	10.47	..	11.44	9.45	11.34	..	10.88	10.0
Yield molasses % cane	4.65	4.65	4.12	..	3.46	..	3.38	..	3.13	..	3.26	3.45
Sugar % cane ..	10.19	10.19	11.37	..	12.89	..	14.02	..	14.14	..	13.55	12.67
Fibre % cane ..	16.80	16.80	16.19	..	16.10	..	15.60	..	15.56	..	17.00	16.24
Added water % cane	15.00	15.00	..	..	17.60	..	17.47	..	17.17	..	17.37	16.68
Mixed juice % cane ..	77.42	77.42	..	..	85.03	..	86.83	..	84.50	..	80.59	82.19
Bagasse % cane ..	37.58	37.58	..	..	32.57	..	30.64	..	32.67	..	36.48	34.49
Coal % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Wood % cane ..	..	..	..	..	..	..	..	..	..	..	..	..
Primary juice purity ..	..	..	..	..	84.43	..	..	..	..	..	..	84.54
Mixed juice purity ..	76.34	76.34	79.33	..	80.81	..	82.48	..	82.49	..	83.24	81.00
Molasses purity ..	35.77	35.77	37.00	..	37.76	..	36.67	..	37.96	..	39.75	37.05
Mill extraction ..	86.38	86.38	88.59	..	90.49	..	90.99	..	90.99	..	89.34	89.60
Boiling house extraction.	81.49	81.49	87.02	..	89.78	..	89.69	..	88.17	..	90.02	88.09
Overall recovery ..	70.39	70.39	77.09	..	81.24	..	81.61	..	80.23	..	80.42	78.93

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been measured

FACTORY SYMBOL F4

Clarification process. Double Sulphitation

Particulars	November		December		February		March		April		May	
	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate	Month	Todate
Maunds cane crushed	..	..	..	..	12150	12150	..	57787	..	..	..	97447.6
Maunds cane crushed per 24 hours operation.	..	..	..	..	810	810	..	1230	..	..	..	1280.0
Maunds sugar produced.	..	..	..	..	300	300	..	2956	..	..	..	6533.0
Maunds sugar in process.	..	..	..	..	368	368	..	620	..	..	..	..
Maunds molasses produced.	..	..	..	..	124	124	..	1036	..	..	..	3116.7
Maunds molasses in process.	..	..	..	..	240	240	..	520	..	..	..	..
Yield sugar % cane ..	..	..	..	..	5.5	5.5	..	7.0	..	..	..	6.70
Yield molasses % cane	..	..	..	..	3.0	3.0	..	3.0	..	..	..	3.20
Sugar % cane ..	..	..	..	..	14.0	14.0	..	12.12	..	..	..	13.0
Fibre % cane ..	..	..	..	..	16.0	16.0	..	16.00	..	..	..	16.0
Added water % cane	..	..	..	..	0.0	0.0	..	0.0	..	..	..	0.0
Mixed juice % cane ..	..	..	..	..	62.0	62.0	..	60.0	..	..	..	66.0
Bagasse % cane ...	..	..	..	..	38.0	38.0	..	40.0	..	..	..	34.0
Coal % cane ..	..	..	..	..	0.0	0.0	..	0.0	..	..	..	0.0
Wood % cane ..	..	..	..	..	..	..	..	15.0	..	..	..	..
Primary juice purity ..	..	..	..	..	86.0	86.0	..	..	..	..	..	..
Mixed juice purity ..	..	..	..	..	85.0	85.0	..	85.0	..	..	..	85.0
Molasses purity ..	..	..	..	..	45.0	45.0	..	40.0	..	..	..	45.0
Mill extraction ..	..	..	..	..	80.0	80.0	..	75.0	..	..	..	80.0
Boiling house extraction.	..	..	..	..	..	..	..	..	..	..	..	..
Overall recovery ..	..	..	..	..	..	..	..	..	..	..	..	..

NOTE—Purities noted are Polarisation Gravity Purities and mixed juice has been calculated

Annual Synopsis of Mill Data (season 1934-35)

The 64 factories that sent returns have crushed 11,43,60,570 maunds out of the total forecasted figure of 17,55,69,000 maunds for the season 1934-35. The sugar produced by the reporting factories is 99,40,810 maunds out of 15,787,600 maunds expected to be produced by factories in India during the season 1934-35. This report includes 80.18% of the actual production of sugar in the season 1933-34 and 62.76% of the crop forecasted for the season 1934-35. The average recovery of the reporting factories is 8.69 as against 9.0 for the whole of India given in the Final Sugar Production Forecast.

Climate and other conditions

This year was particularly unfavourable for the sugar industry. The effect of adverse weather conditions, floods, pests and frost is reported to be very considerable in several areas, particularly in the western parts of the United Provinces and the Punjab. A considerable area under cane was seriously attacked by Pyrilla and reports of the incidence of red-rot were received from some parts of North Bihar, but this was later on found to be due to other fungoid diseases confined with attacks of shoot, stem and rot borers. These parts were also attacked by Leaf Hoppers and white ants.

Quality of Cane

On account of the adverse conditions prevailing during the year, the quality of cane was generally poor, and the supply proved insufficient. This is clearly seen in the returns for Group A—which covers the Western parts of the United Provinces, where the sugar in cane is 9.76. As a result of the delay in ripening caused by weather conditions, most of the factories started crushing late. Some of the factories had to be closed down on account of the poor quality of cane and many suffered badly. The general lowering of the quality of cane throughout the Northern Indian sugarcane belt is believed to be due to "Senile degeneration" of the improved varieties and also to the carry over of diseases and pests from crop to crop.

Mill Extraction

It is observed from the figures given in the table that the milling extraction is lowest in India. Some allowance should, however, be made for the very high fibre content in cane which directly influences milling. However, with the equipment that the factories have at present, it should be possible to increase this figure by at least 2 to 4 units. Some of the

factories e.g., in Group D have already shown a high extraction figure and it is hoped that others will follow their example.

Boiling House extraction and Overall Recovery

Even allowing for the lower purity of the juice, India is far behind the other leading sugar producing countries in respect of boiling house extraction and overall recovery also. The Boiling House extraction and over-all recovery for the reporting factories in India are 84.96 and 77.05 respectively as against 91.34 and 86.57 for Java and 92.17 and 89.92 for Hawaii. Even after allowing a part of this difference to the quality of cane and juice, there is still considerable scope for improvement.

Fuel Consumption

Here again, there is a good deal of scope for economy and prevention of waste. If the factories work efficiently and exercise fuel and steam economy by the use of control instruments, it should be possible to work without the use of extra fuel, particularly in North Indian factories where the cane has as high a fibre content as 15 to 16%. The extra fuel consumption by factories in Group F is particularly striking even after allowing for the lower fibre content of cane. Fuel economy and steam economy in the factory are amongst the most important factors in lowering the cost of production of sugar and thus increasing the profits of the manufacturer.

Conclusion

From this brief review of the working of factories in India it is obvious that considerable improvements have yet to be made before Indian factories can be placed on a level with those in foreign countries, in point of efficiency. However, taking into account the very short period during which most of these factories have been in existence there is every reason to hope that India will in a very short time attain a standard of efficiency not far short of that of other and very much older sugar producing countries.

ANNUAL SYNOPSIS OF MILL DATA—SHOWING RESULTS

Group A—WEST U. P.—Saharanpore, Muzaffarnagar, Meerut, Dehra

Factory Symbol	Clarification Process	Maunds Cane Crushed	Maunds Cane Crushed per 24 Hours operation	Maunds Sugar Produced	Maunds Molasses Produced	Yield Sugar % Cane	Yield Molasses % Cane	Sugar % Cane	Fibre % Cane
A1	D.C.	11,19,578.0	7,721.0	89,772.0	42,756.0	7.96	3.82	10.80	12.97
A2	D.S.	12,12,454.0	14,700.0	76,844.0	37,700.0	6.34	3.11	8.83	14.35
A6	D.S	29,46,296.0	25,443.0	1,86,072.0	1,23,931.0	6.31	4.26	9.23	13.40
A7	D.S.	14,57,638.5	11,455.0	95,177.0	61,695.7	6.53	4.25	9.25	13.22
A8	D.S.	21,39,907.0	20,555.0	1,78,960.0	..	8.36	..	11.12	15.30
A9	D.C.	15,31,417.0	12,350.0	1,13,361.5	..	7.38	..	9.61	13.10
A10	D.S.	13,48,702.0	18,518.0	90,268.5	53,940.0	6.69	4.00	9.28	12.36
A11	D.S.	19,21,694.0	16,465.0	1,36,828.0	58,611.0	7.12	3.05	9.09	14.86
A12	D.S.	15,17,834.0	11,952.0	1,02,097.0	..	6.72	..	9.42	13.35
A13	D.S.	23,18,799.0	21,648.0	1,87,213.0	90,062.0	8.07	3.88	10.77	14.11
Totals and True Averages		1,75,14,319.5	1,60,807.0	12,56,593.0	4,68,695.7	7.17	3.80	9.76	13.80

Group B—CENTRAL U. P.—Kheri, Sahajahanpur, Lucknow, Pilibhit, and

B1	D.S.	3,89,023.0	2,446.0	31,401.0	..	8.07	..	11.59	15.51
B2	D.S.	35,00,520.6	21,727.0	3,20,956.0	1,21,078.0	9.18	3.45	11.60	14.20
B3	S.	21,28,345.0	..	1,86,282.1	91,412.0	8.75	4.29	11.33	16.16
B4	D.S.	16,25,901.7	17,376.0	1,24,050.0	74,592.0	7.63	4.59	9.98	18.65
B6	S	8,40,746.0	7,065.1	82,552.5	26,420.0	9.82	3.14	12.58	16.72
B9	D.S.	33,24,532.5	30,203.7	2,99,600.0	1,16,000.0	9.01	3.49	11.67	..
B10	S	8,92,768.1	7,971.1	72,122.5	37,486.8	8.08	4.20	11.32	15.28
Totals and true averages		1,27,01,836.9	86,788.9	11,16,964.1	4,66,988.8	8.79	3.79	11.41	15.80

FROM 64 INDIAN FACTORIES (SEASON 1934-35)

dun, Bijnor, Moradabad districts and Rampur State

Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary Juice Purity	Mixed Juice Purity	Final Molasses Purity	Mill Extraction	Boiling House Extraction.	Overall Recovery	Purities noted are	Mixed juice has been
12.95	86.40	26.55	..	8.47	77.50	75.70	33.93	92.90	79.40	73.70	P. G. P.	M
9.43	74.53	34.90	3.03	0.19	73.08	71.47	32.40	82.40	86.83	71.60	P. G. P.	M
7.11	77.72	29.39	0.42	..	76.02	74.34	31.78	89.96	76.02	68.39	P. G. P.	W
10.46	81.64	28.82	..	..	74.84	72.53	30.26	88.39	..	...	P. G. P.	M
11.70	79.34	32.36	..	4.76	79.50	78.05	32.50	90.00	..	..	P. G. P.	M
14.10	85.80	28.30	3.38	0.38	75.00	73.10	32.00	91.60	83.90	76.90	P. G. P.	M
15.51	86.85	28.66	..	..	75.97	74.55	30.08	..	..	..	P. G. P.	M
14.30	81.49	32.81	1.90	..	73.84	72.31	31.70	88.85	87.53	77.77	P. G. P.	C
..	..	45.62	..	3.00	75.54	73.35	31.96	87.00	..	..	P. G. P.	..
10.80	79.90	30.90	1.463	2.918	80.13	77.43	34.42	90.96	82.37	74.90	G. P.	C&W
11.39	80.97	31.73	1.717	3.232	76.14	74.28	32.10	89.76	81.87	73.69		

Etah, Hardoi, Allahabad, Sitapur, Nainital, Cawnpore, Barabanki, Barielly districts

9.42	72.76	36.66	4.09	2.39	82.15	80.33	37.31	82.31	84.15	69.26	..	..
23.03	91.67	31.36	0.995	0.549	82.46	79.91	32.44	92.30	84.97	78.41	..	..
23.76	89.99	33.77	0.772	1.624	78.85	76.51	33.91	91.26	84.25	76.96	..	..
18.48	82.55	35.94	0.62	1.47	76.24	73.48	33.30	90.25	84.29	76.05	P. G. P.	M
13.46	78.70	34.76	..	7.40	78.61	76.70	33.16	85.90	90.01	78.06	P. G. P.	M&C
11.91	81.41	30.50	..	4.87	83.94*	80.83*	34.19†	90.31	85.01	77.21	P. G. P.* and G. P.†	M & C
..	..	..	3.40	..	80.63	77.64	29.23	..	..	..	P. G. P.	..
19.54	85.65	32.58	1.26	2.634	80.41	77.91	33.36	90.40	85.11	76.95		

Group C—EAST U. P.—Jaunpur, Gonda,

Factory Symbol	Clarification Process	Maunds Cane Crushed	Maunds Cane Crushed per 24 hours operation	Maunds Sugar Produced	Maunds Molasses Produced	Yield Sugar % Cane	Yield Molasses % Cane	Sugar % Cane	Fibre % Cane
C1	D.S.	19,46,988.0	18,800.0	2,00,542.0	60,470.0	10.30	3.11	12.01	17.03
C2	D.S.	16,16,516.8	18,529.4	1,51,980.0	56,255.0	9.40	3.48	11.86	16.33
C4	D.S.	16,76,000.0	14,324.5	1,51,428.0	56,648.8	9.015	3.38	11.62	..
C5	D.S.	10,52,620.0	9,380.0	1,01,773.0	30,492.0	9.67	2.90	11.50	16.68
C6	D.S.	19,71,830.5	18,006.2	1,78,812.5	67,954.0	9.06	3.44	11.79	17.30
C8	D.S.	20,54,000.0	17,352.0	1,84,778.0	67,690.0	9.00	3.30	11.51	16.15
C9	D.S.	16,47,083.8	16,095.0	1,43,772.0	49,412.5	8.72	3.00	11.47	17.72
C10	S.	30,36,375.8	26,904.0	2,70,270.0	1,09,309.0	8.90	3.60	11.67	15.21
C12	D.S.	49,29,765.0	55,808.0	4,46,628.0	1,58,873.0	9.06	3.22	11.64	13.78
C13	D.S.	14,62,201.0	..	1,24,094.0	65,569.0	8.48	4.51	11.51	15.09
C14	S.	15,70,743.5	11,465.3	1,43,298.5	51,023.4	9.123	3.25	12.19	15.84
C15	D.S.	12,77,798.0	10,696.3	1,15,352.5	41,915.0	9.02	3.28	12.03	14.57
C16	D.S.	19,50,815.0	17,520.0	2,03,723.8	63,511.5	10.44	3.26	..	..
C17	D.S.	24,54,716.8	19,600.0	2,13,751.0	87,000.0	8.71	3.55	11.24	15.88
C18	D.S.	14,74,911.3	18,805.5	1,40,665.0	42,772.5	9.54	2.90	12.16	15.85
C19	D.S.	18,84,445.0	15,509.5	1,73,042.5	66,113.0	9.18	3.50	12.15	15.51
C20	D.S.	14,84,134.0	..	1,29,117.0	54,329.0	8.70	3.66	11.37	15.23
Totals and true averages		3,34,90,944.5	2,85,795.7	30,73,027.8	11,29,737.7	9.17	3.37	11.71	15.62

Gorakhpur, Basti and Bahraich districts

Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary juice Purity	Mixed juice Purity	Final Molasses Purity	Mill Extraction	Boiling House Extraction	Overall Recovery	Purities noted are	Mixed juice has been
25.60	93.04	32.56	0.00	1.75	83.27*	82.48†	33.01†	94.42	90.17	85.14	P. G. P.* & G. P.†	C
15.27	80.67	34.60	1.49	0.71	83.77	82.18	32.09	89.80	87.00	79.20	P. G. P.	C
18.56	85.60	32.96	..	..	83.71	81.87	32.50	..	89.70	..	..	..
21.83	88.83	33.00	1.90	0.195	82.76*	82.20†	34.68†	93.79	89.30	83.75	P. G. P.* & G. P.†	C
18.15	81.58	36.57	0.60	0.221	84.00	81.38	35.58	88.50	86.65	76.63	..	..
19.60	84.13	35.47	0.21	1.02	84.42	82.34	36.04	87.92	87.95	77.32	P. G. P.	C
16.53	78.94	37.59	2.15	2.074	85.46	83.47	35.83	88.47	86.51	76.53	P. G. P.	M
8.14	75.08	33.06	0.21	0.36	84.28	82.35	35.36	87.17	86.65	75.54	..	M & C
16.53	85.72	30.81	0.00	1.86	83.83	82.15	34.39	90.46	86.03	77.83	P. G. P.	W
11.41	80.00	31.41	0.98	4.90	80.10	78.50	36.90	89.20	82.60	73.70	P. G. P.	W
14.27	80.12	34.15	1.05	6.06	85.41	82.62	35.71	87.85	85.18	74.83	P. G. P.	M & C
18.50	83.40	35.10	..	11.50	85.10	82.20	31.60	84.80	88.00	74.60	P. G. P.	M
..	..	..	0.047	0.41	..	..	31.55	..	..	..	P. G. P.	M
24.31	91.09	33.22	0.242	7.07	83.36	80.42	36.29	91.22	84.67	77.24	P. G. P.	M
16.67	82.74	33.93	4.30	1.60	84.31	81.81	32.20	90.74	..	..	P. G. P.	M
11.33	79.34	31.99	0.027	1.25	81.64	79.92	36.51	88.68	84.34	74.79	G. P.	C
17.56	82.52	35.04	0.167	1.209	83.21	81.21	32.86	87.24	87.20	76.07	P. G. P.	C
16.88	83.57	33.48	1.01	2.42	83.66	81.7	34.30	89.49	86.39	77.27	..	..

Group D—Saran and Champaran

Factory Symbol	Clarification Process.	Maunds Cane Crushed	Maunds Cane crushed per 24 hours operation.	Maunds Sugar Produced.	Maunds Molasses Produced.	Yield Sugar % Cane	Yield Molasses % Cane.	Sugar % Cane	Fibre % Cane
D1	D.S.	22,20,900.0	18,883.0	2,12,432.0	83,692.0	9.57	3.77	12.00	13.19
D3	D.S.	25,40,697.0	23,100.0	2,43,133.0	83,955.0	9.57	3.30	11.63	17.38
D4	D.S.	13,27,849.0	..	1,10,536.0	57,183.0	8.35	4.30	10.98	17.73
D5	D.C.	22,68,572.0	25,500.0	2,06,892.0	69,900.0	9.12	3.08	11.08	17.16
D6	D.S.	15,05,238.0	13,690.0	1,26,685.0	56,470.0	8.42	3.75	11.31	12.04
D7	D.C.	19,92,714.0	17,720.0	1,69,836.0	61,354.0	8.52	3.08	11.04	18.08
D8	D.S.	18,40,308.3	18,235.1	1,65,968.4	68,512.0	9.02	3.72	11.81	14.65
D9	D.C.	26,13,513.6	19,300.0	2,26,141.1	79,754.5	8.64	3.03	11.12	15.88
D10	D.C.	26,40,616.0	25,100.0	2,54,185.0	75,862.0	9.63	2.87	11.26	15.58
D12	D.S.	15,17,530.0	17,443.0	1,33,075.0	..	8.77	..	12.08	14.88
D13	D.S.	15,86,350.0	14,123.2	1,32,808.7	53,522.0	8.37	3.37	11.00	16.22
D14	D.S.	12,71,964.0	..	1,02,500.0	53,041.0	8.05	4.17	11.26	10.20
D15	D.S.	18,60,664.0	19,120.0	1,69,921.2	65,770.0	9.132	3.53	11.49	14.69
Totals and true averages		2,51,84,915.9	2,12,217.3	22,54,113.4	8,09,015.5	8.95	3.213	11.40	15.42

district of North Bihar

Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary Juice Purity	Mixed juice Purity	Final Molasses Purity	Mill Extraction	Boiling House Extraction.	Overall Recovery	Purities noted are	Mixed juice has been
19.08	93.23	25.85	0.32	0.94	84.18	82.43	33.43	94.00	84.35	79.71	G. P.	M
26.74	91.87	34.87	0.00	0.00	83.08*	82.43†	37.07†	93.37	87.53	81.72	P. G. P* & G. P.†	C
17.00	..	..	0.91	7.02	80.69	..	..	91.94	82.82	75.32	P. G. P.	C
19.83	84.96	34.87	0.51	0.13	80.40*	79.61†	36.39†	93.05	88.07	81.96	P. G. P.* & G. P.†	C
12.37	89.64	22.73	0.099	5.132	79.70	77.02	33.57	92.74	80.24	74.42	P. G. P.	M
26.47	88.02	38.45	1.63	0.15	81.41*	80.73†	39.86†	89.86	85.47	76.81	P. G. P.* & G. P.†	C
15.91	86.72	29.19	1.25	0.21	83.41	81.32	36.43	91.22	83.37	76.05	P. G. P.	M
14.25	84.40	29.85	1.35	0.386	80.85	79.00	36.20	90.10	86.10	77.60	P. G. P.	C
23.32	93.57	29.75	1.41	0.110	80.73*	79.99†	35.77†	95.72	89.14	85.32	P. G. P.* & G. P.†	C
15.35	84.06	31.29	1.17	4.48	83.80	81.88	40.02	90.28	79.96	72.19	P. G. P.	C
14.56	83.94	30.62	1.46	1.95	81.38	77.89	34.28	89.92	83.62	75.18	P. G. P.	M
15.70	92.58	23.18	2.11	2.21	80.50	76.83	32.76	92.47	76.58	70.82	P. G. P.	W
13.17	82.58	30.59	0.035	0.102	84.12	82.00	33.40	91.22	87.00	79.50	P. G. P.	M
18.16	89.74	30.54	1.01	1.51	81.86	80.09	35.76	92.15	84.86	78.20		

Group E—Darbhanga, Muzaffarpur, Purnea,

Factory Symbol	Clarification Process	Maunds Cane Crushed	Maunds Cane crushed per 24 hours operation.	Maunds Sugar Produced.	Maunds Molasses Produced.	Yield Sugar % Cane	Yield Molasses % Cane.	Sugar % Cane	Fibre % Cane
E1	D.S.	10,52,309.3	..	86,889.6	37,955.0	8.26	3.61	11.27	16.61
E2	D.S.	9,46,686.0	11,000.0	75,906.0	35,455.0	8.02	3.75	10.68	17.05
E3	D.S.	24,69,126.0	19,460.0	2,22,257.0	87,346.0	9.01	3.54	11.12	18.72
E4	D.C.	21,06,100.0	20,300.0	1,87,347.0	63,885.0	8.90	3.03	10.82	16.72
E5	D.S.	32,09,059.0	32,161.0	2,81,627.5	1,09,596.0	8.78	3.41	11.53	16.35
E6	D.S.	20,97,452.0	17,663.0	1,92,430.0	73,111.0	9.17	3.48	11.64	17.68
E7	D.C.	15,57,123.5	13,659.0	1,30,038.5	49,062.0	8.35	3.15	10.95	16.98
E8	D.C.	31,62,556.0	19,886.0	2,88,109.0	1,38,204.0	9.11	4.37	12.04	17.57
E9	D.S.	27,00,840.0	16,775.0	2,41,688.9	1,02,790.0	8.96	3.81	11.50	17.01
E10	D.S.	9,21,224.2	11,000.0	77,420.0	35,006.5	8.40	3.80	11.50	13.44
Totals and true averages		2,02,22,476.0	1,61,904.0	17,83,713.5	7,23,610.5	8.83	3.58	11.40	17.23

Group F—Bombay, Madras, Punjab,

F1	D.S.	6,17,280.3	4,505.7	61,851.5	17,657.5	10.02	2.86	13.18	10.95
F2	S.	10,90,950.0	8,160.0	1,00,861.0	49,311.0	9.24	4.52	12.39	15.77
F3	S.	8,51,037.0	5,280.0	85,109.0	29,368.0	10.00	3.45	12.67	16.24
F4	D.S.	97,447.6	1,280.0	6,533.0	3,116.7	6.70	3.20	13.00	16.00
F9	D.S.	16,03,087.5	18,508.0	1,35,508.5	53,503.0	8.45	3.33	..	13.66
F10	D.S.	1,00,886.0	1,834.3	8,453.2	4,289.2	8.378	4.25	11.93	..
F11	D.C.	8,85,389.4	..	58,082.5	40,000.0	6.56	4.52	9.97	13.38
Totals and true averages		52,46,077.8	39,568.0	4,56,398.7	1,97,245.4	8.70	3.76	12.00	14.20
Totals and true averages		11,43,60,570.6	9,47,080.9	99,40,810.5	38,13,293.7	8.692	3.555	11.21	15.50

Note—* = Polarisation Gravity Purity, † = Gravity Purity, C = Calculated, M C = Carbonation, D.C = Double Carbonation.

Shahabad, Patna, Bhagalpur and Gaya districts

Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary juice Purity	Mixed juice Purity	Final Molasses Purity	Mill Extraction	Boiling House Extraction.	Overall Recovery	Purities noted are	Mixed juice has been
16.43	81.73	34.70	..	3.53	84.23	81.94	..	88.82	82.29	73.09	P. G. P.	C
18.42	84.83	33.59	3.06	2.30	83.31	80.36	38.21	89.34	83.24	74.36	P. G. P.	C
20.82	84.99	35.83	0.005	0.019	80.43*	79.42†	37.73†	92.97	86.55	80.48	P. G. P.* & G. P.†	C
25.14	92.01	33.13	0.35	0.06	81.68*	80.47†	38.49†	93.25	87.71	81.79	P. G. P.* & G. P.†	C
24.89	90.02	34.87	0.18	0.00	82.62*	79.09†	35.87†	91.47	85.71	78.37	P. G. P.* & G. P.†	C
15.51	81.81	33.70	0.036	0.00	84.71	81.50	33.86	91.14	85.98	78.37	P. G. P.	C
16.17	82.12	34.05	0.750	0.00	80.05*	78.69†	39.08†	90.60	83.92	76.01	P. G. P.* & G. P.†	C
25.02	90.26	34.76	2.170	0.026	80.83	77.85	34.53	92.61	82.00	75.67	P. G. P.	W
26.55	91.43	35.12	1.790	0.590	83.79	80.57	32.30	91.47	84.88	77.65	P. G. P.	M
14.24	83.03	31.21	1.740	5.580	82.04	79.12	33.30	87.47	81.58	71.36	P. G. P.	M
21.79	87.38	34.42	0.979	0.637	82.37	79.90	35.93	91.49	84.74	77.54		

Sind, Bengal and Burma

9.95	84.45	25.50	3.720	9.690	80.04	78.36	33.67	90.51	83.88	76.02	G. P.	M
12.78	79.92	32.86	..	..	83.70	80.15	35.58	89.85	83.02	74.58	P. G. P.	M
16.68	82.19	34.49	..	..	84.54	81.00	37.05	89.60	88.09	78.93	P. G. P.	M
0.00	66.00	34.00	0.00	..	..	85.00	45.00	80.00	..	..	G. P.	C
13.71	85.89	27.82	6.19	..	82.28	79.08	36.13	91.38	81.38	74.46	G. P.	M
5.22	74.50	30.72	0.83	22.73	79.10	77.13	36.16	85.90	84.80	72.86	G. P.	M
10.04	81.64	28.40	3.77	7.77	77.25	74.63	30.95	90.07	72.16	65.00	P. G. P.	C
12.27	82.58	29.95	4.74	9.45	81.15	79.33	36.36	89.56	82.24	73.87		
17.44	85.39	32.46	1.250	2.064	81.25	79.21	34.59	90.65	84.96	77.05		

= Measured, W = Weighed, D.S = Double Sulphitation, S = Single Sulphitation
Purities Averages are Arithmetical Averages.

Group Totals & Averages

Group	Territories Covered	Maunds Cane Crushed	Maunds Cane Crushed per 24 Hours Operation	Maunds Sugar Produced	Maunds Molasses Produced	Yield Sugar % Cane	Yield Molasses % Cane	Sugar % Cane	Fibre % Cane	Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary juice Purity	Mixed juice Purity	Final Molasses Purity	Mill extraction	Boiling House extraction	Overall Recovery
A	**West U. P.**—Saharanpore, Muzaffarnagar, Meerut, Dehradun, Bijnor, Moradabad districts and Rampur estate ..	1,75,14,319.5	1,60,807	12,56,593	4,68,695.7	7.17	3.80	9.76	13.80	11.39	80.97	31.73	1.717	3.232	76.14	74.28	32.10	89.76	81.87	73.69
B	**Central U. P.**—Kheri, Sahajahanpur, Lucknow, Etah, Hardoi, Allahabad, Sitapur, Nainital, Cawnpore, Barabanki, Pilibhit, and Barielly districts	1,27,01,836.9	86,788.9	11,16,964.1	4,66,989	8.79	3.79	11.41	15.80	19.54	85.65	32.58	1.26	2.634	80.41	77.91	33.36	90.40	85.11	76.95
C	**East U. P.**—Jaunpur, Gonda, Gorakhpur, Basti and Bahraich districts ..	3,34,90,944.5	2 85,795.7	30,73,027.8	11,29,737.7	9.17	3.37	11.71	15.62	16.88	83.57	33.48	1.01	2.42	83.66	81.70	34.30	89.49	86.39	77.27
D	Saran and Champaran districts of North Bihar	2,51,84,915.9	2,12,217.3	22,54,113.4	8,09,015.5	8.95	3.212	11.40	15.42	18.16	89.74	30.54	1.01	1.51	81.86	80.09	35.76	92.15	84.86	78.20
E	Darbhanga, Muzaffarpore, Purnea, Sahabad, Patna, Bhagalpur and Gaya districts ..	2,02,22,476	1,61,904	17,83,713.5	7,23,610.5	8.83	3.58	11.40	17.23	21.79	87.38	34.42	0.979	0.637	82.37	79.90	35.93	91.49	84.74	77.54
F	Bombay, Madras, Burma, Sind, Bengal, and Punjab	52,46,077.8	39,568	4,56,398.7	1,97,245.4	8.70	3.76	12.00	14.20	12.27	82.58	29.95	4.74	9.45	81.15	79.33	36.36	89.56	82.24	73.87
	Totals and Averages of 64 Indian Cane Sugar factories ..	11,43,60,570.6	9,47,080.9	99,40,810.5	38,13,293.7	8.692	3.555	11.21	15.50	17.44	85.39	32.46	1.25	2.064	81.25	79.21	34.59	90.65	84.96	77.05

Countries	Season	Yield Sugar % Cane	Yield Molasses % Cane	Sugar % Cane	Fibre % Cane	Added Water % Cane	Mixed juice % Cane	Bagasse % Cane	Coal % Cane	Wood % Cane	Primary Juice Purity	Mixed Juice Purity	Final Molasses Purity	Mill Extraction	Boiling House Extraction	Overall Recovery
India ..	1934—35	8.692	3.555	11.21	15.50	17.44	85.39	32.46	1.250	2.064	81.25	79.21	34.59	90.65	84.96	77.05
Java ..	1933	11.83	2.76	13.72	12.60	17.50	92.69	24.63	0.258*	..	87.20*	85.40*	30.60*	94.70	91.34	86.57
Hawaii ..	1934	11.89	1.98	12.80	12.62	35.07	112.73	22.34	..	..	86.98‡	84.29	34.64†	97.53	92.17	89.92
Cuba ..	1931	12.51	2.69c	13.87	10.92	20.13	96.41	23.72	..	..	85.57*	..	33.22	94.62	92.70	87.74
Queensland ..	1933	13.05	2.62	14.85	12.0	..	..	26.93	..	..	89.40	..	38.55	94.49	91.81	86.76
Puerto Rico ..	1932	11.32	..	12.62	13.65	28.56	99.33	29.23	..	..	..	..	30.78a	94.56	91.87	86.80
Philippines ..	1932—33	11.23	2.90	12.89	11.47	11.90	87.34	24.56	..	..	84.33‡	84.10†	34.88†	93.03	91.05	84.70
Mauritus ..	1934	10.66	3.00	12.79	13.40	26.6	100.6	26.00	..	..	86.90*	83.80*	39.70a	94.20	89.10	82.20
British Guiana ..	1932	9.00	3.98	11.05	12.48	..	..	26.36	..	..	81.44‡	79.43	32.68	91.84	85.49	78.56
Natal ..	1934—35	9.37	3.67b	11.88	15.24	30.25	95.46	34.79	..	..	86.03‡	84.02a	42.58*	91.07	85.20	77.59

NOTE—* = Polarisation Gravity Purity; ‡ = Crusher Juice Purity; † = Gravity Purity; a = Clerget Purity; b = Assumed 85° Brix; c = Calculated to 88 Brix. The figures for India are the average of 64 factories reported.

APPENDICES

APPENDIX I

Mr. R. C. Srivastava's letter addressed to Mr. K. C. Banerjee, Secy. Sugar. T. Association, for circulation to all the members of the Association.

River View
Cawnpore.
19th January, 1931

My dear Banerjee,

I am sorry I could not write to you earlier regarding the Sugar Technologists' Association. I have been away to Bombay and have just come back.

I have given a good deal of consideration to the predicament of the Association and how best to put matters right. I have come to the conclusion that the best course will be for me to address a formal letter to you making definite suggestions for re-organizing the Association and to ask you to circulate this amongst the members. I accordingly send herewith the detailed letter and I hope you will agree with the suggestions made therein.

If you desire, I can send you copies of the letter for circulation, if you let me know the number which will be required.

I am writing informally to Mr. Noel Deerr and some other influential members also.

Yours sincerely
Sd. R. C. Srivastava

K. C. Banerjee Esq., Secretary
The Sugar Technologists' Association (of India)
67, George Town, Allahabad

River View
Cawnpore
19th January, 1931

My dear Banerjee,

The present unsatisfactory condition of the Sugar Technologists' Association of India is a matter of considerable disappointment to me. From figures supplied by you it appears that there are only about a dozen members left now. No annual conventions were held during 1929 and 1930, and, for all practical purposes, the institution has been dead for a

considerable time now. This is most unfortunate at a time when the industry is passing through a crisis and a case for fiscal protection is sought to be made out. If the industry is to advance, it is for the technical men engaged in it to lead the way. To do so effectively, it is essential that they should organize themselves. The Association was an attempt at such organization, and the fact that it is, so early in its career, showing unmistakable signs of decay and disintegration, is greatly to be regretted by every one who has the interests of the industry at heart.

I am sure you will agree with me that every effort should be made not only to save the institution but to completely overhaul it and place it on a proper basis for the future. It is with this object in view that I am taking the liberty of addressing this letter to you and making a few suggestions. I trust that even if they are not acceptable in their entirety to a majority of the past and present members, they will at least serve as a basis of discussion.

My suggestions in outline are as follows:—

(a) The accounts of the Association should be completed up-to-date and audited. A proper inventory should be prepared, and maintained in the future, of the books, journals and other property of the Association.

(b) It is necessary to keep the working expenses of the Association as low as possible. The items of expenditure should be scrutinized and suggestions made for retrenchment.

(c) In future a budget should be prepared each year for the following year's expenses and no expenditure should be incurred till the budget has been passed in a general meeting.

(d) The office-bearers were originally elected for three years and their term has already expired. New office-bearers should be elected now.

(e) Mr. Noel Deerr, who resigned his membership some time back, should be invited to become a member again and to accept the Presidentship.

(f) All those who have ceased to be members, either through non-payment of dues or by resignation, should be requested to resume their membership. Where necessary, payment of arrears may be arranged in instalments.

(g) Provided the result of action taken on the points mentioned above is satisfactory, a scheme should be prepared for submission to Government asking for financial assistance and other facilities. If desired, I can later on help in preparing

the scheme. The suggested lines on which Government help may be sought are:—

(i) An initial lump sum grant.
(ii) A recurring annual grant for five years.
(iii) Facilities for members to do research work in certain Government laboratories and experiment stations, during the off season, provided the problems as well as the workers are previously approved by the Association.
(iv) Facilities for the use of certain technical libraries of the Government.
(v) Crop forecast reports, commercial statistics, official bulletins, and other similar information should be regularly supplied to the Association.

(h) A small sub-committee, consisting of two or three members (one of whom should be Mr. Noel Deerr) should be appointed to give effect to the above proposals and to submit proposals for generally overhauling the Association.

I shall be grateful if you will please circulate this letter amongst the past and present members of the Association and take such action as they may desire. If you or the other members wish me to assist in this matter in any manner, my services are at their disposal.

Before concluding, please allow me to express my appreciation of all that you have done for the Association during the last four years. The work, particularly during its initial stages, was arduous and recently your private troubles must have been a source of additional anxiety to you. That, in the face of all these difficulties, you have continued to carry on the work, is a matter for which you deserve the thanks of the Association.

Yours sincerely
Sd. R. S. Srivastava

K. C. Banerjee Esq.
Secretary
The Sugar Technologists' Association (of India)
67, George Town, Allahabad

APPENDIX II (a)

Circular letter issued to members whose subscriptions were in arrears

THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA

All communications should be addressed to the Secretary

Nawabganj
Cawnpore
12th September, 1931

To

Members whose subscriptions were in arrears

Dear Sir,

The Third Annual Convention of the Association was held at Gorakhpore on the 16th May, 1931, in which new office-bearers as per attached list were elected. The present position of the Association was discussed and a Sub-Committee consisting of Messers. Noel Deerr, R. C. Srivastava and H. N. Batham was appointed for the purpose, *inter alia*, of completely overhauling the Association and of preparing a scheme for submission to Government asking for official recognition and financial assistance. That there are good prospects of getting a favourable response from the Government may be gathered from the following recommendation of the Tariff Board (*vide* page 98 of Report on the Sugar industry 1931):—

> "We hope that in Northern India it will be possible as a result of the scheme of protection to organize a strong Manufacturers' Association providing adequate representation for all the interests concerned, which will be able to take up such problems as the fair distribution of the supplies of cane, the improvement of methods of cultivation, the supply and distribution of improved varieties of cane and the exchange of information regarding manufacture, and will generally assume the position occupied in other countries by central research associations. If such an association is formed, it will be necessary, we believe, in the early years for the Imperial Council of Agricultural Research to contribute to the funds of the Association. Such contribution would of course be dependent on the methods and decisions of the Association and its members being approved by the Imperial Council."

Before approaching the Government and, in fact, before taking any steps for improving the condition of the Association, it is essential that the existing members should pay up their dues and that they should assist in securing new members. We have no doubt that you will co-operate with us by sending a remittance in settlement of your account particulars of which are given below. Should it be more convenient to you, please send at

least a year's subscription now and inform the Secretary how you would like to pay the balance. The Association needs funds urgently for organizing itself and hence early payment of at least a year's subscription is requested.

The Secretary will also be glad to receive suggestions from you for new members.

An early reply is requested.

Yours faithfully
Noel Deerr
President
R. C. Srivastava
Secretary

STATEMENT OF ACCOUNT

Entrance Fees
Annual subscription due from 31.12.31. to .....

Total due Rs. _____

APPENDIX II (b)

Circular letter issued to Sugar machinery manufacturers

THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA

All communications to be addressed to the Secretary

Nawabganj
Cawnpore
12th September, 1931

To

Sugar Machinery Manufacturers

Dear Sirs,

The Indian Sugar industry is expanding rapidly. The Tariff Board has recommended that the industry should be granted protection for a long term of years and it is practically certain that the Legislature will accept these recommendations. This should further hasten the process of expansion.

This Association, which is the only one of its kind in the country and is now in the sixth year of its existence, provides a common meeting ground for Sugar engineers, chemists, manufacturers and specialists in all

branches of sugar technology. These men will no doubt play an important part in the development of the industry in the future.

It will evidently be to the advantage of all concerned if Sugar Machinery manufacturers could be brought into contact, through membership of this Association, with Sugar Technologists in India. We have therefore pleasure in inviting you to become a Companion Member. The Entrance fees for such membership is Rs. 30 and the subscription Rs. 15 per year (or Rs. 35 and Rs. 20 respectively in the case of members outside India). Each Companion Member is entitled to be represented on the Association by a nominee. An application form and a copy of regulations are enclosed herewith.

The Secretary would also be pleased to receive, for the Association library copies of catalogues, bulletins and such other literature bearing on your products as you may desire to send for the use of the members.

Yours faithfully
Noel Deerr
President
R.C. Srivastava
Secretary

APPENDIX II (c)

Circular letter dated September 193 issued to factory owners and firms.

(Draft of letter to be addressed to firms and factory owners)

THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA

All communications to be addressed to the Secretary

Nawabganj
Cawnpore
12th September, 1931

To

Firms and Factory owners

Dear Sir,

The Sugar Technologists' Association of India is now in the sixth year of its existence. The Third Annual Convention was held at Gorakhpore on the 16th May 1931, and a sub-committee consisting of Messers. Noel Deerr, R.C.Srivastava and H.N.Batham was appointed for overhauling the Association. So as to increase its usefulness to members and make it more truly representative of all the interests concerned, a scheme is also

being prepared for submission to Government asking for official recognition and financial assistance. That there are good prospects of getting a favourable response from the Government, may be gathered from the following recommendation of the Tariff Board (*vide* page 98 of Report on the Sugar Industry 1931) :—

> "We hope that in Northern India it will be possible as a result of the scheme of protection to organise a strong manufacturers' Association providing adequate representation for all the interests concerned, which will be able to take up such problems as the fair distribution of the supplies of cane, the improvement of methods of cultivation, the supply and distribution of improved varieties of cane and the exchange of imformation regarding manufacture, and will generally assume the position occupied in other countries by central research associations. If such an association is formed, it will be necessary, we believe, in the early years for the Imperial Council of Agricultural Research to contribute to the funds of the Association. Such contribution would of course be dependent on the methods and decisions of the Association and its members being approved by the Imperial Council."

In order that the Association may be in a position to do what similar bodies in other countries are doing, it is essential that it should have the support of all those connected with the industry. We particularly invite all firms and factory owners engaged in the manufacture of Sugar to become Companion Members. The entrance fees for such membership is Rs. 30/- and the subscription Rs.15 per year (or Rs.35 and Rs.20 respectively in the case of members outside India). Each Companion Member is entitled to be represented on the Association by a nominee.

An application form and a copy of regulations is enclosed herewith.

Yours faithfully
Sd. Noel Deerr
President
Sd. R. C. Srivastava
Secretary

APPENDIX II (d)

Suggestions made by the Secretary S. T. A. for the Revision of Rules and Regulations of S. T. A.

REVISION OF RULES AND REGULATIONS

A copy of the present rules is attached (marked annexure E). In order to place the management and normal working of the Association on a more regular basis, it is desirable to amend these. The wording also could be improved.

When submitting an application for grant to Government a copy of the rules will have to be forwarded. The rules in their present form are not suitable for this purpose.

A few suggestions for amending the rules are made below:—

(a) The powers and duties of the various Office-Bearers should be clearly defined.

(b) The holding of at least one general meeting per year should be made compulsory.

(c) The annual budget should be submitted for sanction to the annual meeting and no expenditure should be incurred till this has been done.

(d) A statement of account duly audited and signed by the President, Secretary and Treasurer should be placed before the annual meeting.

(e) The Secretary should submit an annual report to the annual meeting describing the activities of the Association during the year and reviewing the sugar industry of India.

(f) Rules should be prescribed for approving papers before they are read at any Convention.

(g) Rules are required for opening and operating the bank account of the Association—without these no bank will open an account. Cheques should be signed jointly by the Secretary and Treasurer.

(h) The Executive and Administrative head of the Association is the President. The Secretary and Treasurer work under his instructions and guidance. It is necessary to prescribe rules to ensure that this is given effect to in practice.

(i) No office-bearer should be allowed to make any payment to himself without the President's sanction.

(j) It should be the duty of the Secretary to maintain a correct and up-to-date inventory of the property of the Association. This

should include all articles whether received for payment or in exchange or as gifts.

(k) The President may at his discretion permit any business of the Association (excepting that of the Annual General Meeting) to be transacted by circulation, provided three weeks time from the date of issue of the circulars is allowed for the receipt of replies. In such cases decision should be taken in accordance with the views of the majority of those replying provided at least 50 per cent of the members addressed reply.

(l) Membership of the Association should be extended so as to permit suitably qualified cane growers and manufacturers of sugar and gur by indigenous methods being admitted.

Sd. R. C. Srivastava
Secretary
The Sugar Technologists' Association of India

APPENDIX II (f)

Circular letter sent to all factories for manufacturing reports

THE SUGAR TECHNOLOGISTS' ASSOCIATION OF INDIA

All communications to be addressed to the Secretary

Nawabganj
Cawnpore
September, 1931

Dear Sirs,

Arrangements are now being made for holding the next Annual Convention and for publishing the Year Book. The usual consolidated statement of working figures for all factories will form part of the Year Book. We have therefore pleasure in requesting you to kindly supply figures required to complete the enclosed form for the seasons.....

As in previous years the names of individual factories will be kept strictly confidential.

Yours faithfully
Sd. Noel Deerr
President
Sd. R. C. Srivastava
Secretary

APPENDIX II (g)

Note put up by Mr. R. C. Srivastava, Secretary, S. T. A., for conducting Research and Investigation Work.

NOTE REGARDING RESEARCH AND INVESTIGATION WORK

Only two annual conventions of the Association have so far been held at which papers were read. In both these difficulty was experienced in getting a sufficient number of papers of the proper kind. It was partly on account of this that no conventions were held in the following two years.

The reason for this dearth of papers is not far to seek. With a few exceptions, most factories in this country have ill-equipped laboratories and none too large a staff of chemists. Moreover the most essential requisites for research work of a useful nature, namely selection of problems, co-ordination amongst different workers and guidance from the more experienced members are non-existent. So long as these deficiencies are not made good work of the proper kind will not be done and papers, which after all are only the records of such work, will continue to remain scarce.

To accomplish the objects indicated above, the following proposals are made for the consideration of the Sub-Committee:—

(a) A Standing Committee on Research and Investigations should be appointed consisting of 5 members, the President and Secretary being ex-officio Chairman and Secretary of the Committee respectively.

(b) Members of the Association should be invited to send suggestions to the Committee regarding problems on which work should be done.

(c) Factories and others interested in the industry should be invited to send problems.

(d) The problems for investigations should relate to the following sections:—

(i) Sugarcane agriculture
(ii) Sugar Engineering
(iii) Manufacturing processes
(iv) Chemical Control
(v) Indigenous methods of gur and sugar manufacture

(e) The Committee should select out of these such problems as are of general interest in preference to those likely to benefit particular parties.

(f) The Committee should allot each piece of research or investigation to such member or members of the Association as may in its opinion be suitably qualified for the purpose.

(g) The Committee should assist the workers in securing laboratory and library facilities for doing the work allotted, by making arrangements with government departments, sugar factories and other institutions.

(h) The selected members should submit a general outline indicating lines on which they propose to conduct the work for approval of the Committee before commencing work.

(i) The Committee should, as far as possible, fix the time within which each work is to be finished. The Committee may require interim progress reports to be submitted in the case of prolonged researches.

(j) The paper or report embodying the results should be submitted to the Committee and if approved by it, may be read before the Annual Convention by the member concerned, or may be ordered to be published in his name.

Sd. R. C. Srivastava
Secretary
The Sugar Technologists' Association of India

APPENDIX III (a)

Mr. R. C. Srivastava, Secretary, S. T. A. Report with a note containing suggestions received from members.

Note I

Secretary's report

The Sugar Technologists' Association (of India) was started in 1925. Two Conventions have so far been held in 1927 and 1928. Two Year Books for 1927 and 1928 were published. A handbook entitled "Methods of Chemical Control for Cane Sugar Factories and Gur Refineries" was published under the authority of the Association in 1928. This was drafted by a Committee consisting of Dr. J. H. Haldane, Mr. R. C. Srivastava and Mr. K. C. Banerji. The handbook was compiled under the direct supervision of Mr. Noel Deerr, who also contributed a Foreword to it. The handbook is now out of print.

A meeting of the Association was held in Gorakhpur on 16th May, 1931, when the present office-bearers were elected. The meeting also appointed a Special Sub-Committee consisting of Mr. Noel Deerr, Mr. R. C. Srivastava and Mr. H. N. Batham for reorganizing the Association. The revised Rules and Bye-laws of the Association were drafted and approved by the Sub-Committee in January, 1933.

Notices were issued on 11th February, 1932, 6th May, 1932, and 1st July, 1933, for holding a Convention of the Association, but the Convention could not be held as sufficient response was not received from members.

Immediately after the present Secretary took over charge, an effort was made to increase the membership and to realize the arrears of subscription. The improvement in the financial position of the Association is evident from the Accounts which are being presented separately.

The Association is still very far from being active. In view of the expansion of the Sugar industry which has recently taken place, it is necessary to put the Association into proper working condition. The present meeting has been convened for the purpose of finding ways and means of achieving this object. Invitations to attend the meeting were issued to all persons whose names appear on the books of the Association whether they are at present members or not. Letters were also sent to all sugar factories in India requesting them to send representatives to the meeting.

Suggestions for re-organizing the Association were invited from members and others and a summary of the suggestions so far received is attached.

Sd. R. C. Srivastava
Secretary

Mr. Thomas Jacob, Chief Chemist, Upper Ganges Sugar Mills, Ltd., Seohara, in his letter dated 29th September, 1934, suggests the following:—

"I would like to see some of the following Committees formed :—

(1) General Committee
(2) Membership and Registration Committee
(3) Standardization of Chemical Control
(4) Utilization and disposal of Waste Products
(5) Training of Sugar-house Assistants
(6) Railway trucks and Field Tramlines
(7) Clarification and Filtration
(8) Milling Machinery
(9) Boiling House Equipment and Practice
(10) Boilers and Boiler Practice
(11) New Processes and Appliances
(12) Irrigation and Drainage
(13) Cane Planting and Cultivation
(14) Cane Pests and Diseases
(15) Publication Committee

I think with some or all of those in existence a lot of useful information could be gathered together to help the industry along.

If these Committees are formed, each member of the Committee could work in his own section and pass his notes on to the convener of the Committee who could then make a representative report to be read or published at or before the next general meeting."

Mr. R. P. Sanghi, Chief Chemist, Punjab Sugar Mills Ltd., Ghughli, in his letter dated 3rd October, 1934, suggests the following:—

"I think we should form a federation to safeguard interests of the employees, also we should start a paper."

Mr. G. P. Uplap, Chief Chemist, Daurala Sugar Works, Daurala, in his letter dated 3rd October, 1934, suggests the following:—

"I suggest that, three committees should be formed as mentioned below with the specific work assigned to them under their headings. The Chairman of above committee of one or more members should be empowered to co-opt, as many as he thinks necessary for collecting the data on his subject.

We have some experiment stations. They should not be classed separately. But, they should be given respective seats in the above three committees. The duty of these three committees is to collect data (a) pertaining to their subject and read paper on it with their conclusions etc. (b) Each committee Chairman must hold himself responsible for arranging a certain number of papers in his department to be read in the next convention.

The three Committees will be as below:—

(1) Committee on general economical problems pertaining to the Cane Sugar Industry. This will control the periodical of the Association also.

(2) The Committee on agricultural problems will deal on:—

(a) Sugarcane quarantine
(b) The physiology of cane etc.
(c) On soils
(d) On cultivation and field operations
(e) On Fertilisers
(f) On Irrigation
(g) On Diseases of Sugarcane, insect pests etc.
(h) On Sugarcane varieties
(i) On Maturing and Harvesting

(3) The Committee on factory operation and chemical control:—

(I) Engineering:—

(a) Cane transportation
(b) Mills with their settings
(c) Boilers—Kinds of boilers; their heating surfaces required, their placing, Boiler materials, fuel consumption.
(d) On general sugar machinery—Condensers, vacuum pumps as distinguished from other pumps, engines etc., workshop.
(e) Lubricants

(II) Manufacturing:—

(a) Clarification with the clarifying agents etc.
(b) Filter presses with filter mediums etc.
(c) Heating and evaporation
(d) Crystallisation

(e) Purging with its machinery and the chemicals used in whitening sugar
(f) Drying and packing
(g) Bye-products and their utilisation as:—Mud, Bagasse, Molasses.
(h) Laboratory—Chemical control reports etc., analysis.

Mr. U. C. Srivastava, Chief Engineer, M. K. Sugar Mills Ltd., Ramkola, in his letter dated 2nd October, 1934, suggets as follows:—

"No Association can be carried on unless it is of any benefit to its members. At present its aim is only to solve the difficulties of sugar factories in order to have best efficiency in Indian Sugar Industry.

Association should think over this matter and make some rules for employment of Managers, Chemists and Engineers with grade of their qualification and experience for sugar factories and they should have their proper authority and responsibility over their staff. After coming to a decision Government should be approached in order to pass the rules and make it under law to bring in force.

Aim of this Association should be also to find remedy for removing grievances of employees of sugar factories, just as at present Government is thinking of imparting justice to cane growers.

APPENDIX III (b)

Secretary's note in connection with the Accounts of the S. T. A. Association.

ACCOUNTS

The charge of the Association was made over to the undersigned by the late Secretary in the month of July, 1931. The accounts of the Association were written up to the 31st of May, 1931, and the books showed a Cash Balance of Rs.119-4-9 and a balance of deposit with The Punjab Sugar Mills, Ltd., Ghughli, of Rs.29-13-6. Out of the former sum Rs.19-8-0 was handed over on the 31st of July, and the balance of Rs.100 together with other sums, as pointed out by the Auditor in his report dated 24th September, 1931, was paid by instalments thereafter, the last instalment being received in May, 1933. The sum of Rs.29-13-6 was duly received from the Punjab Sugar Mills, Ltd., Ghughli, on the 7th August, 1931.

The accounts as written up to the 31st of May, 1931 by the late Secretary, were audited by Mr. G. D. Nigam, Accountant, Cawnpore. A copy of his report is placed below.

Several new members were made and arrears of subscription were realized from the existing members, and the finances of the Association are now in a much better state, the cash and bank balances amounting to Rs.1,715-4-8 on the 30th of September, 1934.

The accounts of the Association upto November, 1933, were again audited by Mr. G. D. Nigam, Accountant, Cawnpore, and a copy of his report dated 27th February, 1934, is also placed below. The accounts have, however, been written up to the 30th September, 1934.

R. C. Srivastava
Secretary

R. C. Srivastava Esq., B.sc., Secretary
Sugar Technologists' Association of India
Cawnpore

Cawnpore
24th September, 1931

Dear Sir,

I have examined the books of the Association, viz., Cash Book, Personal Ledger and General Ledger and checked the Vouchers and Receipts from April 1928 to May 1931, and have to bring to your notice the following irregularities:—

1. The following sums were realized but they were not entered in the Personal Ledger of the parties.

(a)	L. Kesar Ram Narang	Rs. 15/-	December 1929
(b)	R. C. Srivastava Esq.	Rs. 12/-	February 1931
(c)	G. P. Uplap Esq.	Rs. 24/-	7th April 1931
(d)	W. R. Sandwell Esq.	Rs. 3/-	10th July 1929
(e)	R. F. Hutchinson Esq.	Rs. 3/-	21st August 1928

2. The following sums were realized from the members but the money was not entered in the Cash Book. These sums have now to be entered in the Cash Book and the balance made good:—

(a)	K. P. Banerji	L. F. 52	2-10-1928	Rs. 4-12-0
(b)	K. K. Bhargava	L. F. 78	1-1-1930	Rs. 20-0-0
(c)	S. N. Ghatak	L. F. 79	1-1-1930	Rs. 16-0-0
(d)	Vasant Rai Misra	L. F. 80	1-1-1930	Rs. 32-0-0
(e)	G. W. Douglas	L. F. 81	1-1-1930	Rs. 32-0-0
(f)	R. P. Jetley	Receipt 158	14-4-1928	Rs. 10-0-0
				Rs. 114-12-0

3. Australian Sugar Producers' Association got credit of Rs. 15/- each on 2-2-30 and 2-2-31 in Ledger Folio 49, but the sum is not entered

in the Cash Book. It is explained by the late Secretary that the party supplied a Journal and this credit was given in the Personal Ledger. If this is the case there should be an entry crediting subscription account and debiting the Publication account as was done in the previous years.

4. S. P. Sinha paid Rs. 9/- as per Receipt No. 171 dated 16-7-28 but the money was actually entered in the Cash Book in June 1928. The late Secretary explained that the Receipt was issued when he received information from the Treasurer and hence the entry in Cash Book in June 1928 is to be applied against Receipt No. 171.

A mention of this fact may now be recorded in the counterfoil of the Receipt under the signature of the Secretary.

5. General Ledger Folio 74—This account has to be written up to include entries of F. 60, 78, 80, 82 to 87.

6. No receipt was issued to L. Kesar Ram Narang for Rs. 15/- realised in December 1929.

No subscription Register is maintained and subscription account is not debited with the sum accrued from month to month and thus it has to be assumed that those who paid money obtained Receipts.

The omission of the issue of the receipt in this case requires explanation.

7. The books show an advance of Rs. 640/- against Continental Commercial Co., and Rs. 1/8/- against Framji and may be recovered or adjusted.

Punjab Sugar Mills had Rs. 29/13/6 as at 31-5-31 and cash in hand as at 31-5-31 as per Cash Book is Rs. 119/4/-

A sum of Rs. 204/- is invested in Furniture and Fittings which sum is the cost of a Typewriter purchased.

8. Account Library & Publication shows payments made as per

Ledger Folio	34	Rs. 198- 9-6
,,	,, 64	,, 663- 4-6
,,	,, 87	,, 9- 0-0
		,, 870-14-0

but income from sale of the books amounts to Rs. 168/4/9. Kindly verify from the files the books given away free and the balance that the Association should now possess.

9. Establishment charges incurred from March 1929 to May 1931 amount to Rs. 430/- (General Ledger Folio 65 & 83). The rules are

not clear on this subject and there must be sanction to pay dues of previous years. The receipts recorded in some cases are very irregular and do not bear signature of the payee.

10. Travelling Expenses paid to Mr. K. C. Banerji as follows require sanction:—

April 1928	Rs.	7- 0-0
August 1928	,,	8- 4-0
April 1929	,,	8-10-0
October 1929	,,	20- 0-0
November 1930	,,	20- 0-0
January 1931	,,	20- 0-0
February 1931	,,	20- 0-0
March 1931	,,	9- 0-0
	,,	112-14-0

Yours faithfully
Sd. G. D. Nigam
Hony. Auditor

R. C. Srivastava Esq., B.sc.
Secretary
Sugar Technologists' Association of India, Cawnpore

Cawnpore
27th February, 1934

Sir,

I have examined the books of the Association from June 1931 to November 1933 and find them in order. The irregularities noticed by me in my last report dated 24th September 1931 have been remedied, viz.,

1. The items mentioned in para 1 of the Report dated 24th September 1931 have since been entered in the books.

2. The sum of Rs. 114/12/- noticed in para 2 has been realised and appears in the Account.

3. The cash balances mentioned in para 7 have also been realized.

The General abstract of the Account represents a healthy position of the Association's affairs.

A gross sum of Rs. 584/6/5 has been realized from the sale of the books as against Rs. 168/4/9 in the last account and the balances in hand and in Bank etc. amount to Rs. 1,759/12/2.

I may add that the accounts have this year been maintained and drawn up in a very neat and correct manner that I have had no difficulty in getting through the whole account.

I trust your Association will find its affairs very satisfactory this term.

I beg to remain
Sir
Your most obedient servant
Sd. G. D. Nigam
Hony. Auditor.

Remuneration for Clerk

The services of a part-time clerk have been utilized for doing the typing and Accounts work of the Association, since the undersigned took charge in July 1931. A payment of Rs. 10/- per month was made for doing similar work by the previous Secretary. Sanction may be given for the payment of a suitable remuneration to the present incumbent.

R. C. Srivastava
Secretary

APPENDIX III (c)

Secretary's note in connection with Continental Commercial Co.'s case.

Continental Commercial Co.'s case

This firm supplied all stationery and did all printing work for the Association. Apart from other papers printed at the press, three books were printed, viz., Years Books for 1927 and 1928 and "Methods of Chemical Control." Two hundred copies of each of the two Year Books were printed. The Year Books were issued to members free of cost, but were sold to non-members at Rs. 3/- per copy. A number of these Year Books appear to have been sold according to records. "Methods of Chemical Control" is a priced book (Rs. 3/- per copy for members and Rs. 6/- for non-members). Three hundred copies of this book are said to have been printed.

The late Secretary transferred to the undersigned 10 and 73 copies respectively of each of the two Year Books and 130 copies of "Methods of Chemical Control." It will be noticed that apart from the copies of the Year Books sold to non-members, 170 copies of Methods of Chemical Control were sold by the late Secretary, both to members and non-members. A sum of Rs. 168/4/9 only, however, was actually shown by the late Secretary as having been received from the sale proceeds of these books, but no account was rendered as to how this amount was arrived at.

When the accounts were handed over to the undersigned, the balance of Cash in hand was Rs. 119/4/9 plus Rs. 29/13/6 being the balance of

deposit with the Punjab Sugar Mills. The accounts however, showed a debit of Rs. 531/6/9 payable to the Continental Commercial Co. for printing work done by them. In spite of repeated requests, the late Secretary failed to clear the accounts of the books and to get the claim of the Continental Commercial Co. settled. The firm eventually filed a suit in Calcutta against the late Secretary, the present Secretary and the Treasurer (Mr. H. N. Batham) for a sum of Rs. 614/11/9 (Rs. 531/6/9 principal and Rs. 83/5/- interest and other charges).

The Association secured the services of a lawyer to defend the case. The undersigned also pressed Mr. Banerji, the late Secretary, to get the matter settled, who eventually got the case compromised for Rs. 350/-. In the absence of the President, who was then out of India, and as there was not sufficient time to obtain the approval of the Council beforehand, the Secretary and the Treasurer jointly decided to make this payment, subject to the following conditions :—

(1) That Mr. Banerji got the case withdrawn unconditionally and the Continental Commercial Co. promised to make no further claim against the Association,

(2) That Mr. Banerji explained the whole transaction before the next meeting of the Association, and that if the members were not satisfied with his explanation, Mr. Banerji would be responsible for the money (Rs. 350/-).

Copies of relevant letters are placed below.

A sum of Rs. 23/2/- was paid to the lawyer as his professional fees.

It may be added that a sum of Rs. 584/-/6 has been realized from the sale of books transferred to the undersigned.

Sd. R. C. Srivastava
Secretary

Copy of letter dated the 29th June 1933 from K. C. Banerji Esqr., George Town, Allahabad, to R. C. Srivastava Esqr., Secretary, The Sugar Technologists' Association, Nawabganj, Cawnpore.

Mr. Chatterji of Continental Commercial Co. had been to me and I understand nothing has been settled as yet. He has I think taken a postponement till 6th July.

In case you want to get the thing settled as per my proposal you may send me a cheque addressed to them for Rs. 350/- and I shall get the case withdrawn on condition that the matter will be placed before the next meeting and then decided if anything further should be paid to him. After all he has done the work and why his payment should be withheld.

However the final decision rests with you and you would do as you think best.

Copy of joint letter dated 1st July 1933 from R. C. Srivastava Esq., Secretary, and H. N. Batham Esq., Treasurer, to K. C. Banerji Esq., C/o Calcutta Engineering Co., 9, Clive Row, Calcutta.

I am in receipt of your letter dated the 29th June 1933 regarding the case filed by the Continental Commercial Co. I am somewhat surprised at the contents of this letter, as they differ from what you had written in your letter dated the 17th May 1933. In this letter you had stated "I may be in Calcutta during the first week of June and at that time I shall see him and persuade him to **accept this sum finally.** You may put it before the General Meeting of the Association in October or November whenever you may hold it and I hope to be able to explain everything." In your letter of the 29th June you want a cheque to be sent when you would "get the case withdrawn on condition that the matter will be placed before the next meeting and then decide **if anything further should be paid to him."**

2. In the absence of Mr. Noel Deerr, Mr. Batham and myself have considered your proposal and in order to put an end to this litigation we send herewith a cheque for Rs. 350/- drawn in your favour. We authorize you to pay this amount to the Continental Commercial Co. subject to two conditions—firstly, that they will withdraw the case unconditionally and will have no further claim of any kind either against the Association or against any member thereof, and secondly that you will explain the whole transaction before the next meeting of the Association and that if the members are not satisfied with your explanation you will be responsible for this money.

APPENDIX III (d)

Secretary's note with regard to the position of old members of the Association who have not paid their dues.

Note 5

Position of old members of the Association

The total membership of the Association up-to-date is about 100, but excepting for a very few members, most of them have not paid their dues. There are some cases in which even the Entrance Fee has not been paid. It is a matter for consideration what action should be taken for realizing the arrears. In coming to a decision on this matter, due allowance should be made for the fact that the Association had done very little work for

several years, and it would therefore not be fair to the members to ask them to pay their arrears of subscription in full.

It is suggested that the following two alternatives may be offered to the old members :—

(a) If they wish to continue as members, they should pay all their outstanding dues up-to-date, but as the Association has not been functioning for nearly six years, credit may be given to them for 2 years' subscription.

Members who are in arrears for less than 2 years, should be allowed credit for the difference against their future subscriptions.

(b) They may submit fresh applications for membership and, if elected, may pay the prescribed Entrance Fees and annual subscription as new members.

One month's time should be given to the members to exercise the above option.

Sd. R. C. Srivastava
Secretary

APPENDIX III (e)

Budget estimate for 1935 with the Secretary's explanatory note

Note 6

Budget estimate for 1935

A Budget estimate for the calendar year 1935 is attached.

It will be observed that provision has been made in this for some whole-time staff for the Association. It is felt that if the Association is to become an active body, some staff must be provided, specially as the industry has grown considerably during recent years. The Assistant Secretary (salary Rs. 100-10-200) should be a graduate who has received technological training in sugar manufacture and possesses some actual factory experience. The clerk (salary Rs. 50-2½-75) should know typing and accounts work. The peon is required for general office work.

The other items in the Budget are self-explanatory.

The total budget estimate amounts to Rs. 4070/- out of which Rs. 3,000/- are estimated to be recoverable in the form of subscriptions from members leaving a net expenditure of Rs. 1070/-. The cash balance at the credit of the Association is over Rs. 1700/-.

Sd. R. C. Srivastava
Secretary

Proposed Budget Estimate of the Sugar Technologists' Association of India, for one year (January to December 1935)

		Rs.
1.	**Pay of Establishment**	
	1—Assistant Secretary in the grade of Rs. 100-10-200	1200
	1—Clerk-typist in the grade of Rs. 50-2½-75	600
	1—Peon - Rs. 10-1-12	120
2.	**Supplies & Services**	100
3.	**Library** *	500
4.	**Contingencies**	
	(a) Stationery	100
	(b) Printing	250
	(c) Commercial A/c †	500
	(d) Convention ‡	500
	(e) Miscellaneous Contingencies	200
	Total	4070

* In order to build up a Library, it is proposed to call for donations.

† Expenditure under this head is meant for paying for printing of books, which will be paid back by the sale of books.

‡ Expenditure under this head may be realized in full from donations received from members etc.

Recoveries

Recoveries from subscription from members will amount to approximately .. .. Rs. 3,000

Amount of Cash in hand and in Bank on 30th September 1934 .. .. Rs. 1,715/4/8.

APPENDIX III (f)

Secretary's note proposing for obtaining manufacturing returns from Factories, with the proposed forms for returns

Note 8

Obtaining manufacturing returns from Factories

A subject of considerable interest to Sugar Technologists as well as sugar manufacturers is the study of statistics relating to operating results obtained by different factories in the country. It is suggested that the Association should invite factories (particularly those which become members of the Association) to submit confidentially fortnightly returns in

the attached forms. The Association should compile these and issue consolidated statements within a fortnight, the consolidated statements being supplied free of charge to members. The consolidated statements would not disclose names of individual factories and the returns received from factories will be kept strictly confidential.

Sd. R. C. Srivastava
Secretary

Form of Monthly return from Cane factories

Season — Month
Name of Factory
Clarification Process — Month — To-date
Maunds cane crushed
Maunds cane crushed per 24 hours operation
Maunds sugar produced (and in process)
Maunds Molasses produced (and in process)
Yield Sugar % cane
Yield Molasses % cane
Sugar % cane
Fibre % cane
Added Water % cane
Mixed Juice % cane
Bagasse % cane
Coal % cane
Wood % cane
Mixed Juice Purity
Molasses Purity
Mill Extraction
Boiling House Extraction
Overall Recovery

Form of Monthly return from Cane Factories

Season — Monthly
Name of Refinery
Maunds Gur Melted — Monthly — To-date
Maunds Gur Melted per 24 hours operation
Sugar Produced and in Process
Molasses Produced and in Process
Sugar Produced % Gur

Molasses Produced % Gur
Coal % Gur
Gur Analyses—Brix
Sugar
Purity
Invert
Ash
Nett Rendement
Purity of waste molasses
Recovery % Sugar in gur

NOTE—Should Gur Drainings be treated, the maundage, Brix and Purity only should be reported.

APPENDIX III (g)

Secretary's note regarding Association's Library

Note 10

Association Library

The Association had a small Library, but no proper record appears to have been maintained of the books and journals received. There are only a small number of volumes in the Association Library at present.

It is necessary to have an up-to-date Library of technical books and journals. They are required for the work of the Association as well as for the use of its members.

To build up a good library will cost a large sum of money. It is therefore suggested that sugar mill owners and others may be approached for donations for this purpose. A recurring provision of Rs. 500/- per year will also be necessary for the maintenance of the Library and subscriptions of Journals.

Suitable rules for the Library will have to be made. Special provision is necessary for facilitating the issue of books and circulation of journals amongst outstation members.

Sd. R. C. Srivastava
Secretary

APPENDIX III (h)

Secretary's proposal for the formation of a special Sub-Committee for drafting a Scheme for grant to the Association from I. C. A. R. India.

Note 11

Application for Grant

The Tariff Board had recommended (*vide* paragraph 99 of Report on the Sugar Industry 1931) that suitable assistance should be given by Government to a strong manufacturers' association "which will be able to take up such problems as the fair distribution of the supplies of cane, the improvement of methods of cultivation, the supply and distribution of improved varieties of cane and the exchange of information regarding manufacture, and will generally assume the position occupied in other countries by central research associations." The present Association, if properly organized and if its constitution and membership are approved by the Imperial Council of Agricultural Research, should be eligible for a grant from that body. It is suggested that a suitable scheme should be drafted for this purpose by a special Sub-Committee.

Sd. R. C. Srivastava
Secretary

Complete List of Cane Sugar Factories and Gur Refineries, 1935-36

Published by
THE SUGAR TECHNOLOGISTS' ASSOCIATION
(OF INDIA)
NAWABGANJ, CAWNPORE

LIST A

List of modern Sugar Factories and Refineries existing in India in the year 1933-34

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	I—Factories working with cane						
	Punjab						
1.	The Phulerwan Sugar and Oil Mills, Ltd., Phulerwan. (Mg. Agents: Radha Krishna Bros.)	Sargodha	Phulerwan	Phulerwan N.W.R.	300		
2.	The Bhalwal Sugar Mills, Co., Ltd. (Mg. Agent: Captain Malik Sardar Khan Noon, Rais, Tahsil Bhalwal.)	Shahpur	Bhalwal	Bhalwal N.W.R.	100	The Fullerton Hadgart Barclay, Ltd., Paisley, Scotland.	D.S.
3.	Gujranwala Sugar Mills, Co., Ltd. (Mg. Agents: Messrs. Narang Bros. & Co., Ltd., Lahore.)	Gujranwala	Rahwali	Rahwali N.W.R.	300	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	D.S.
4.	*The Saraswati Sugar Mills. (Mg. Agents: Messrs. Jailakshmi Sugar Co., Ltd., Doiwala.)	Ambala	Jagadhri	Jagadhri N.W.R.	400	Messrs. Stork Werks-Poor, Amsterdam, Holland	D.C.S.
5.	*The Punjab Sugar Corporation, Ltd., Sonepat, Near Delhi. (Mg. Agents:	Rohtak	Sonepat	Sonepat N.W.R.	300	Messrs. Mirrlees Watson & Co., Ltd.,	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	The Ganesh Flour Mills & Co., Lyallpur & Delhi.)					Glasgow.	
	United Provinces						
1.	Jai Lakshmi Sugar Co., Ltd., Doiwala. (Managing Dir: Jishnu Lal Esq., B.Sc., Doiwala.)	Dehradun	Doiwala	Doiwala E.I.R.	250	Messrs. Stork Werks-Poor, Amsterdam, Holland.	D.C.
2.	The Ganga Sugar Corporation, Ltd., Nawa Shahr, Hazara, via Abbottabad. (Mg. Agents: The Ganga Sugar Corporation, Ltd., College Road, Rawalpindi, Punjab.)	Saharanpur	Deoband	Deoband N.W.R.	600-800	George Fletcher & Co., Derby, England.	D.C.
3.	The Amritsar Sugar Mills Co., Ltd., P.O. Baheri. (Mg. Dir: Sardar Amar Singh Sahib, Amritsar.)	Muzaffarnagar	Rohana Kalan	Rohana Kalan N.W.R.	600-800	Messrs. Prague Skoda Works Czechoslavakia.	D.S.
4.	*The Upper Doab Sugar Mills, Ltd. (Mg. Agents: Messrs. Hari Raj Swarup Rajendra Lal & Bros., Muzaffarnagar.)	Muzaffarnagar	Shamli	Shamli S.S.RY.	600-800	Messrs. Blairs, Ltd., Glasgow, Scotland.	D.S.

5. *The Upper Jumna Swadeshi Sugar Mills Co., Ltd., Mansurpur. (Mg. Agents: Messrs. Hari Raj Swarup Rajendra Lal & Bros., Muzaffarnagar.)	Muzaffarnagar	Mansurpur	Mansurpur N.W.R.	400-500	Messrs. J. J. Gilain, Belgium.	D.S.
6. Upper India Sugar Mills, Ltd., Khatauli. (Mg. Agents: Messrs. Mitra Mandal, Burn Bastion Road, Delhi.)	Do.	Khatauli	Khatauli N.W.R.	500-600	Messrs. Stork Werks-Poor Amsterdam, Holland.	D.S.
7. Bhogpur Sugar Factory, Bhogpur, P. O. Najibabad, E. I. R. (Props: Raja Hari Kishan Kaul, 29, Lawrence Road, Lahore & Ishwar Das Lakshmidas, Hughes Road, Bombay.)	Bijnor	Bhogpur	Najibabad E.I.R.	50	Messrs. Skoda-Werks, Prague, Czechoslavakia.	S.
8. The Dhampur Sugar Mills, Ltd. (Mg. Prop: H. R. Sugar Factory, Nekpur.)	Do.	Dhampur	Dhampur E.I.R.	450-500	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	D.S.
9. The Upper Ganges Sugar Mills, Ltd. (Mg. Agents: Birla Bros., Ltd., 8, Royal Exchange Place, Calcutta.)	Do.	Seohara	Seohara E.I.R.	1100	Messrs. Societe Anonyme Des Ateliers de Boussu, A. Boussu of Belgium & others	D.S.
10. R. B. Narain Singh Sugar Mills, Ltd., Baraut. (Mg. Dir: Sardar Ranjit Singh, 2-A, Curzon Road, New Delhi.)	Meerut	Baraut	Baraut S.S.RY.	600-750	Messrs. J. J. Gilain, Belgium.	D.S.
11. *The Diwan Sugar Mills, Sakhoti Tanda, (Prop: Seth Dhanpatmal Diwanchand, Lyallpur.)	Do.	Sakhoti Tanda	Sakhoti Tanda	400-500	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification process
12.	*Daurala Sugar Works, Daurala. (Props: The Delhi Cloth & General Mills Co., Ltd., Delhi.)	Meerut	Daurala	Daurala N.W.R.	900	Messrs. Stork Werks-Poor, Amsterdam, Holland.	D.S.
13.	*The Indra Sugar Works, Ltd., Clement Street, Meerut Cantonment. (Mg. Agents: Incharam & Co., Bankers & Agents, Clement Street, Meerut.)	Do.	Maliana	Meerut City N.W.R.	300	Messrs. Jessop & Co., Ltd., Calcutta.	D.S.
14.	*Delhi Sugar Mills, Ltd. (Mg. Agents: Messrs. Krishna Sugar Syndicate, 11, Curzon Road, New Delhi.)	Do.	Mohiuddinpur	Mohiuddinpur N.W.R.	400	Messrs. J. J. Gilain, Belgium.	D.S.
15.	Modi Sugar Mills, Ltd. (Mg. Agents: Messrs. Multani Mal & Sons, Patiala.)	Do.	Begamabad	Begamabad N.W.R.	500	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.
16.	*Simbhaoli Sugar Mills. (Mg. Prop: Sardar Raghbir Singh Sendhanwalia, O. B. E., P. O. Baksar, Dt. Meerut.)	Do.	Simbhaoli	Simbhaoli E.I.R.	400	Messrs. Stork Werks-Poor, Amsterdam, Holland.	D.S.

17.	*Prag Sugar Factory, Kichha. (Mg. Agents: Messrs. Shiam Lal Prag Narain Vakil, Rawatpura, Agra.)	Nainital	Kichha	Kichha R.K.R.	600-800	Messrs. Maxwell & Co.	D.S.
18.	*Khandke Sugar Mills, Ltd., Baheri. (Mg. Agents: Messrs. D. N. Khandke & Co., Baheri, Dt. Bareilly.	Bareilly	Baheri	Baheri R.K.R.	150	Messrs. Krupp Wolf, Germany, & Rest English Plant.	D.S.
19.	The Kesar Sugar Works, Ltd., Baheri. (Mg. Agents: Messrs. Kilachand & Devchand & Co., Allahabad Bank Building, Apollo Street, Fort, Bombay), P. O. B. No. 746.	Do.	Do.	Do.	800	Messrs. Stork Werks-Poor, Amsterdam, Holland.	D.S.
20.	H. R. Sugar Factory, Nekpur. (Mg. Dir: Raja Radha Raman.)	Do.	Nekpur	Bareilly R.K.R.	600	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.
21.	Saraswati Sugar Syndicate, Ltd. (Mg. Agent: The Neoli Syndicate, P. O. Soron, Dt. Etah.)	Etah	Manpur Nagaria	Manpur Nagaria	450-600	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	D.S.
22.	L. H. Sugar Factories & Oil Mill, Ltd. (Mg. Dir : Sahu Jagdish Pd. Jee Sahib, Pilibhit.)	Pilibhit	Pilibhit	Pilibhit R.K.R.	600	Messrs. George Fletcher & Co., Derby, England.	D.S.
23.	Do.	Do.	Do.	Do.	450	Do.	D.S.
24.	Do.	Do.	Do.	Do.	150	Messrs. Blairs, Ltd., Glasgow. John Mcneill & Co., Ltd., Glasgow, & George Fletcher & Co., Derby, England.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories & Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
25.	*The Hindusthan Sugar Mills, Ltd., Golagokarannath. (Mg. Agents: Messrs. Bachraj & Co., Ltd., 395, Kalba Devi Road, Bombay 2)	Kheri	Gola Gokarannath	Gola Gokarannath. R.K.R.	1000	Messrs. Mirrlees Watson & Co., Ltd., Glasgow, (Old), (New). Messrs. Henry Mariolle De Lattre Fronard.	D.S.
26.	The Aira Sugar Factory, P. O. Aira Estate, Khamaria. (Owners: The Shree Maha Lakshmi Sugar Corporation, Ltd., Kheri.)	Do.	Khamaria	Lakhimpur R.K.R.	150	Messrs. Mirrlees Watson & Co., Ltd., Glasgow.	S.
27.	*Rosa Sugar Factory & Distillery, Rosa. (Mg. Agents: Lyall Marshall & Co., 4, Faerlie Place, Calcutta.)	Shahjahanpur	Rosa	Rosa E.I.R.	600	A. & W. Smith, Ltd., Blairs, Ltd., H. W. Aitken & Co., Ltd., Glasgow and others.	D.S.
28.	The Oudh Sugar Mills, Ltd. (Mg. Agents: Messrs. Birla Bros., Ltd., Jahangir Wadia Buildings, Esplanade Road, Fort, Bombay.	Sitapur	Hargaon	Hargaon R.K.R.	1200	Messrs. Henry Mariolle & De Lattre, Paris.	D.S.
29.	*The Lakshmi Sugar Mills, Co., Maholi. (Props: R. B. Seth Ajudhia Pd.,	Do.	Maholi	Maholi E.I.R.	400	Messrs. Fawcett Preston & Co., Ltd.,	D.S.

	Hony. Magistrate, Anarkali, Lahore, & Shiv Pd. Banarsidas Agarwal, Bankers and Mill Owners, 85, Lake Road, Lahore.)					Liverpool.	
30.	The U. P. Cooperative Sugar Factory, Ltd., Biswan. (Resident Dir: The Hon'ble R. B. Lala Mathura Pd. Mehrotra, Biswan.)	Sitapur	Biswan	Biswan B.N.W.R.	300	Messrs. Jessop & Co., Ltd., Calcutta.	D.S.
31.	Seth Gulzarimall Kamchand Sugar Mills, Jarwal Road. (Props: Lala Jaswant Rai & Sons, Karachi, & Messrs. Gulzari Mall Ram Chand, Bankers, Lahore.)	Bahraich	Jarwal Road	Jarwal Road B.N.W.R.	400	Messrs. J. J. Gilain, Belgium.	D.S.
32.	*The Burhwal Sugar Mills, Co., Ltd., Burhwal, Head Office, Collectorganj, Cawnpore.	Barabanki	Burhwal	Burhwal E.I.R. & B.N.W.R.	300	Messrs. Krupp Wolf, Germany.	S.
33.	*The Lucknow Sugar Works, Ltd., Aishbagh, Lucknow.	Lucknow	Lucknow	Aishbagh	400	Messrs. George Fletcher & Co., Ltd., Derby, England.	D.S.
34.	*Experimental Sugar Factory of the H. B. Tech. Institute, Cawnpore.	Cawnpore	Nawabganj	Rawatpur B.B.&C.I.R.	22	Messrs. Krupp Wolf & Messrs. Mirrlees Watson, Glasgow & Duncan Stewart & Co., Ltd., Glasgow.	D.S.
35.	The Balrampur Sugar & Co., Ltd. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., Cawnpore.)	Gonda	Balrampur	Balrampur B.N.W.R.	600-700	Messrs. Mirrlees Watson & Co., Ltd., Glasgow.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
36	The Nawabganj Sugar Mills, Co., Ltd., Nawabganj. (Mg. Agents: Messrs. Narang Bros., & Co., Ltd., 3, Montgomery Road, Lahore.)	Gonda	Nawabganj	Nawabganj B.N.W.R.	1100	Messrs. J. J. Gilain, Belgium, A. & W. Smith Ltd., Glasgow.	D.S.
37.	*The Seksaria Sugar Mills Co., Ltd., Babhnan. (Mg. Agents: Messrs. Govind Ram Ram Nath & Co., 18, *Mullick Street*, Calcutta.)	Do.	Babhnan	Babhnan B.N.W.R.	500	Messrs. Mirrlees Watson & Co., Ltd., Glasgow.	D.S.
38.	The Basti Sugar Mills Co., Ltd., Walterganj. (Mg. Agents: Messrs. Narang Bros. & Co., Ltd., 3, Montgomery Road, Lahore.)	Basti	Walterganj	Walterganj B.N.W.R.	550-600	Messrs. J. J. Gilain, Belgium.	D.S.
39.	*The Basti Sugar Mills Co., Ltd., Basti. (Mg. Agent: The Hon'ble Mr. G. C. Narang, 5, Montgomery Road, Lahore.)	Do.	Basti	Basti B.N.W.R.	550-600	Messrs. George Fletcher & Co., Ltd., Derby, England.	D.C.
40.	Madho Kanhaiya Mahesh Gauri Sugar Mills, Ltd., Jagdishpur, P. O.	Do.	Jagdishpur	Munderwa	400-500	Messrs. Duncan Stewart & Co., Ltd., Glas-	D.S.

	Munderwa. (Mg. Agent: Badri-das Gauri Dutt.)					gow.	
41.	The Popular Sugar Co., Ltd., Barhni, Ramdatganj. (Mg. Agents: Seth Nadhan Singh & Sons, Gujranwala, Punjab.)	Do.	Barhni	Barhni B.N.W.R.	650	Messrs. H. W. Aitken & Co., Ltd., Paisley, Glasgow.	D.S.
42.	Ganesh Sugar Mills Ltd., Pharenda. (Mg. Agents: Messrs. Poddar Jaipuria & Co., Jaipuria House, P. O. Beadon Street, Calcutta.)	Do.	Pharenda	Pharenda B.N.W.R.	550-600	Messrs. Blairs Ltd., Glasgow. Extn. by Messrs. Fullerton, Hadgart & Barclay Ltd., Paisley, Scotland.	D.S.
43.	The Lakshmi Devi Sugar Mills, Chitauni. (Mg. Agents: Messrs. Agarwal & Co., P. O. Raja Bazar, Khadda.)	Do.	Chitauni	Chitauni B.N.W.R.	400	Messrs. Mirrlees Watson & Co., Ltd., Glasgow.	D.S.
44.	The Vishnu Pratap Sugar Works, Khadda. (Mg. Agent: R. B. Jagdish Narain Singh, Padrauna.)	Do.	Khadda	Khadda. B.N.W.R.	400	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.
45.	Ledi Sugar Factory, Ledi, P. O. Nichloul. (Mg. Agent: Dr. K. K. Bhargava, Ledi, P. O. Nichloul, Dt. Gorakhpur.)	Do.	Ledi	Siswa Bazar B.N.W.R.	75	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	S.
46.	The Mahabir Sugar Mills Ltd., Siswa Bazar. (Mg. Agents: Messrs. Dwarkadas Baijnath, Siswa Bazar, Dt. Gorakhpur.)	Do.	Siswa Bazar	Siswa Bazar B.N.W.R.	400	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
47.	*The Punjab Sugar Mills Co., Ltd. Ghughli. (Chairman Hon'ble Sir G. C. Narang, 5, Montgomery Road, Lahore.)	Gorakhpur	Ghughli	Ghughli B.N.W.R.	500	Messrs. John McNeil & Co., Ltd., Glasgow, Harvey Engineering Co., Ltd., Glasgow, The Mirrlees Watson Co., Ltd., Glasgow.	D.S.
48.	Shanker Sugar Mills, P. O. Captainganj. (Mg. Agents: Messrs. Indra Chand Hari Ram, Captainganj.)	Do.	Captainganj	Captainganj B.N.W.R.	600	Messrs. Blairs Ltd., Glasgow.	D.S.
49.	The Diamond Sugar Mills Ltd., Pipraich. (Mg. Agents: Messrs. Murarka & Sons, Ltd., 10, Clive Street, Calcutta.)	Do.	Pipraich	Pipraich B.N.W.R.	400-450	Messrs. J. J. Gilain, Belgium.	S.
50.	The Pipraich Sugar Mills, Ltd., Pipraich.	Do.	Do.	Do.	250	Messrs. Duncan Stewart & Co.,. Ltd., Glasgow.	S.

51. *Saraya Sugar Factory, Sardarnagar. (Senior Mg. Partner: Sardar Bahadur Sir Sunder Singh, Majithia, Kt., C. I. E., P. O. Sardarnagar, Dist. Gorakhpur.)	Do.	Sardarnagar	Sardarnagar B.N.W.R.	2000	Messrs. Compagnie De Fives-Lille, Paris, France, Harvey Engineering & Co., Ltd., Watson Laidlaw & Co., Ltd., Glasgow, Heemaf Amsterdam, Holland. Stork-werks-Poor, Holland, Ingersoll Rand (India) Ltd., New York.	D.S.
52. *Gauri Bazar Factory of the Cawnpore Sugar Works, Ltd., Gauri Bazar. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., Cawnpore.)	Do.	Gauri Bazar	Gauri Bazar B.N.W.R.	325	Messrs. Harvey Engineering Co., Ltd., Messrs. The Mirrlees Watson Co., Ltd., & others.	S.
53. Shree Sitaram Sugar Co., Ltd., Baitalpur, P. O. Deoria. (Mg. Agents: Messrs. Karamchand Thappar & Bros., Ltd., 5, Royal Exchange Place, Calcutta.)	Do.	Baitalpur	Baitalpur B.N.W.R.	500-650	Messrs. Krupp Gruson Work Magdeburg, Germany.	D.S.
54. *Hanumat Sugar Mills, Deoria, P. O. Deoria. (Props: Messrs. Lakshmi Narain Mathura Pd., Bankers & Cloth Merchants, Tahsil Deoria, and others.)	Do.	Deoria Tahsil	Tahsil Deoria B.N.W.R.	100	Messrs. Harvey Engineering Co., Ltd., Glasgow.	S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
55.	*Noori Sugar Works, Bhatni. (Props: Messrs. Noori Mian & Co., Bhatni.)	Gorakhpur	Bhatni	Bhatni B.N.W.R.	500-600	Messrs. Harvey Engineering Co., Ltd., Glasgow.	S.
56.	*Ishwari Khetan Sugar Mills, Ltd., Lakshmiganj. (Mg. Agents: Messrs. Devi Dutt Suraj Mull, Padrauna, Dt. Gorakhpur.)	Do.	Lakshmiganj	Lakshmiganj B.N.W.R.	650-700	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	D.S.
57.	Maheshwari Khetan Sugar Mills, Ramkola. (Mg. Agents: Messrs. Devi Dutt Chaturbhuj, Ramkola.)	Do.	Ramkola	Ramkola B.N.W.R.	400	Do.	D.S.
58.	The Ramkola Sugar Mills Co., Ramkola. (Messrs. R. B. Lala Tirath Ram Shah, Isherdas Sawhney, Nawashahar (Hazara) N. W. F. P.	Do.	Do.	Do.	600	Messrs. J. J. Gilain, Belgium.	D.S.
59.	*Padrauna Rajkrishna Sugar Works, Ltd., Padrauna. (Owned by the Padrauna Raj, Padrauna.)	Do.	Padrauna	Padrauna B.N.W.R.	882	Messrs. Harvey Engineering Co. Ltd., & Duncan Stewart & Co. Ltd., Glasgow.	S.

60. *The Jagdish Sugar Works. (Mg. Agents: Raja Bahadur Brij Narain Singh & Co., Padrauna.)*	*Do.*	*Kathkuiyan*	*Kathkuiyan* B.N.W.R.	400	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.
61. *United Provinces Sugar Factory, Bubnowlie, P. O. Seorahi. (Mg. Agents: James Finlay & Co., Ltd.)	Do.	Bubnowlie	Bubnowlie B.N.W.R.	750	Messrs. Sugar Machinery Manufacturing Co., Ltd., & Messrs. Blairs Ltd., Glasgow.	D.S.
62. *The Ratna Sugar Mills Co., Ltd., Shahganj. (Mg. Agents. Kashi Pd. & Co., Benares Cantonment.)	Jaunpur	Shahganj	Shahganj E.I.R.	500	Messrs. H. W. Aitken & Co., Ltd., Paisley, Glasgow.	D.S.
63. *Shree Krishna Deshi Sugar Works, Jhusi, Dt. Allahabad. (Messrs. Kishori Lal Mukand Lal, 6-Shibhu Thakur Lane, Calcutta.)	Allahabad	Jhusi	Jhusi B.N.W.R.	400	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	S.
64. *Tribeni Desi Sugar Works, Naini. (Prop: Mr. A. Beni Prasad, Naini, Allahabad.)	Do.	Naini	Naini E.I.R. & G.I.P.	200	Messrs. A. & W. Smith & Co., Ltd., Glasgow. C. S. Messrs. George Fletcher, & Co., Ltd., Derby, England. Messrs. J. McNiel & Co., Ltd., Govan, Glasgow. Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	Bihar and Orissa						
1.	Harinagar Sugar Mills, Ltd., Ramnagar. (Mg. Agents: Narayanlal Bansilal, 207, Kalba Devi Road, Bombay 2.)	Champaran	Ramnagar	Harinagar B.N.W.R.	800-1000	Messrs. Skoda India, Ltd., Calcutta.	D.S.
2.	New Swadeshi Sugar Mills, Ltd., *Narkatiaganj*. (*Mg. Agents: Messrs. Birla Bros., Ltd., Jehangirwadia* Buildings, 2nd Floor, Esplanade Road, Fort, Bombay.)	Do.	Narkatiaganj	Narkatiaganj B.N.W.R.	750	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	D.S.
3.	Pursa Sugar Factory, Pursa, P. O. Lauriya. (Props: Pursa Co., Ltd., Pursa.)	Do.	Pakri	Chanpatia B.N.W.R.	425	Messrs. Harvey Engineering Co., Ltd., Glasgow. Messrs. Blairs Ltd., Glasgow. Messrs. John Thompson W. T. B. Ltd.	S.

4. *Chanapatia Factory of the Champaran Sugar Co., Ltd., Chanpatia.* (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., P. O. B. No. 21, Cawnpore.)	*Do.*	*Chanpatia*	*Do.*	850	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	D.S.
5. Motilal Padampat Sugar Mills Co., Ltd., Majhowlia. (Resident Director: Babu Dwarka Das, Majhowlia.)	Do.	Majhowlia	Majhowlia B.N.W.R.	450	Messrs. Krupp Wolf, Magdeburg, Germany.	S.
6. Sagauli Sugar Factory Sagauli. (Mg. Agent: Mohamad Hanif No. 5, Raj Mohan Street, Calcutta.)	Do.	Sagauli	Sagauli B.N.W.R.	500-650	Messrs. Krupp Wolf, Magdeburg, Germany.	D.S.
7. *Shree Hanuman Sugar Mills, Ltd., Motihari. (Mg. Agents: Messrs. Daulat Ram Rawat Mull, 178, Harison Road, Calcutta.)	Do.	Motihari	Motihari B.N.W.R.	700	Messrs. Blairs Ltd., Glasgow, S. W.	D.S.
8. Factory of the Champaran Sugar Co., Ltd., Barah Chakia. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., P. O. Box 21, Cawnpore.)	Do.	Barah Chakia	Chakia B.N.W.R.	1000	Messrs. Harvey Engineering Co., Ltd., Glasgow.	D.C.
9. Sasa Musa Sugar Works, Sasa Musa, P. O. Moniara. (Prop: S. K. Mohammad Ibrahim Sahib, 3, Damzens Lane, Calcutta.)	Saran	Sasa Musa	Sasa Musa B.N.W.R.	450	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
10.	Vishnu Sugar Mills Ltd., Harkhua, P. O. Gopalganj. (Mg. Agents: Messrs. Bilas Rai Bansi Lal & Co., Aga. Khan Building, Dalal Street, Fort, Bombay.)	Saran	Harkhua	Harkhua B.N.W.R.	450	Messrs. Krupp Wolf Magdeburg, Germany.	D.S.
11.	*Shree Krishna Gyanoday Sugar Mills. (Prop: Maharaja Bahadur Raj Hathwa, P. O. Hathwa.)	Do.	Mirganj	Hathwa B.N.W.R.	800	Messrs. Henry Mariolle Delattre Co., Ltd., Fronard, Paris.	D.S.
12.	Factory of the Purtabpore Sugar Co., Ltd., Mairwa. (Mg. Agents: Messrs. Begg Dunlop & Co., Ltd., 2, Hare Street, Calcutta.)	Do.	Mairwa	Mairwa B.N.W.R.	650	Messrs. McOine Harvey Ltd., Glasgow, Scotland.	D.C.
13.	*Factory of the New Sawan Sugar & Gur Refining Co., Ltd., Siwan. (Mg. Agents: Messrs. Andrew Yule & Co., 8, Clive Road, P. O. Box No. 150, Calcutta.)	Do.	Siwan	Savan B.N.W.R.	650	Messrs. George Fletcher & Co., Ltd., Derby, England.	S.
14.	Indian Sugar Works. (Mg. Agent: Maulvi Mohamad Abdul Razzaq, Siwan.)	Do.	Siwan	Savan B.N.W.R.	500	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	S.

15. *Bihar Sugar Works, Pachrukhi. (Agents: Messrs. Bakubhai Ambalal & Co., 27, Bastion Road, Fort, Bombay.)	Do.	Pachrukhi	Pachrukhi B.N.W.R.	800	Maschinenfabrik Grevenbroich. Magdeburg, Germany.	D.C.
16. *Factory of the Maharajganj Sugar Co., Ltd., Maharajganj.	Do.	Maharajganj	Maharajganj B.N.W.R.	150		S.
17. *Bharat Sugar Mills Ltd., Sidhwalia. (Mg. Agents: Messrs. Birla Bros. Ltd., 8, Royal Exchange Place, Calcutta.)	Do.	Sidhwalia	Sidhwalia B.N.W.R.	300	Messrs. Blairs Ltd., Glasgow.	S.
18. *Marhowrah Factory of the Cawnpore Sugar Works, Ltd. (Mg. Agents: Messrs. Begg Sutherland & Co., Cawnpore.)	Do.	Marhowrah	Marhowrah B.N.W.R.	925	Messrs. McOine Harvey Ltd., Glasgow Scotland.	D.C.
19. Sitalpore Sugar Works, Ltd. (General Manager: H. K. Ghosh Esqr., c/o Indian Press Ltd., Allahabad.)	Do.	Sitalpore	Sitalpore B.N.W.R.	600	Messrs. Krupp Wolf, Magdeburg, Germany.	D.S.
20. The Belsund Sugar Co., Ltd. (Mg. Agents: Messrs. James Finlay & Co., Ltd., 1, Clive Street, Calcutta.)	Muzaffarpur	Riga	Riga B.N.W.R.	450-500	Messrs. Blairs Ltd., Glasgow.	D.S.
21. The Motipur Sugar Factory, Ltd., Motipur. (Props: Seth Haji Abdulla Haroon, Karachi and Seth Abdool Rahim Oosman, Calcutta.)	Do.	Motipur	Motipur B.N.W.R.	900	Messrs. Stork Werkspoor Amsterdam, Holland.	D.C.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
22.	Japaha Sugar Factory, Japaha. (Props: Messrs. Geo. Richardson, E. H. Hudson, S. Richardson and others.)	Muzaffarpur	Japaha	Muzaffarpur B.N.W.R.	400	Messrs Harvey Engineering Co., Ltd., Glasgow.	S.
23.	*Samastipur Central Sugar Co., Ltd., Samastipur. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., Cawnpore.)	Darbhanga	Samastipur	Samastipur B.N.W.R.	650-700	Messrs. Harvey Engineering Co., Ltd., & Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	S.
24.	*Ryam Sugar Co., Ltd., Ryam. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd., P. O. Box No. 21, Cawnpore.)	Do.	Ryam	Tarsarai B.N.W.R.	750	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	C.
25.	Lohat Sugar Works of the Darbhanga Sugar Co., Ltd. (Mg. Agents: Octavius Steel & Co., P. O. Box No. 55, Calcutta.)	Do.	Lohat	Sakri B.N.W.R.	1300	Do.	S.
26.	*Sakri Sugar Mills. (Mg. Agents: Messrs. Octavius Steel & Co., P. O. Box No. 55, Calcutta.)	Do.	Sakri	Sakri B.N.W.R.	700	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	S.

27.	*Shri Lakshmi Narayan Sugar Works*, Nirmali. (Props: Gupta Bros. & Co., P. O. Nirmali.)	Bhagalpur	Manohar-Patti	Nirmali B.N.W.R.	75	Maschinenfabrik A. G. Sangerhausen, Germany.	S.
28.	Semapur Sugar Works, Semapur, P. O. Katihar. (Mg. Agents: Octavius Steel & Co., Ltd., 14, Old Court House Street, Calcutta.)	Purnea	Semapur	Semapur B.N.W.R.	500	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	D.C.
29.	Ganga Deshi Sugar Factory, Buxar. (Props: Messrs. B. N. Brothers & Sons, Dumraon.)	Shahabad	Buxar	Buxar E.I.R.	100	1. Messrs. George Fletcher & Co., Ltd., Derby, England. 2. Messrs. Harvey Engineering & Co., Ltd., Glasgow. 3. Messrs. Empire Engineering Co., Cawnpore. 4. Messrs. Duncan Stewart Co., Ltd., Glasgow. 5. The Mirrlees Watson Co., Ltd., Glasgow.	S.
30.	Dumraon Raj Sugar Factory. (Prop: Maharaja Bahadur Sir Kesho Prasad Singh, Kt., C. B. E., Dumraon Raj, P. O. Dumraon.)	Do.	Bikramganj	Bikramganj A.S.L.R.	250	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
31.	Rohtas Sugar Ltd. (Mg. Agents: Messrs. Imam Jaidayal & Co., 10, Chapel Road, Dinapur, Patna.)	Shahabad	Dehri-on-Sone	Dehri-on-Sone E.I.R.	1500	Messrs. A. & W. Smith & Co., Ltd., Scotland.	D.C.S
32.	The South Bihar Sugar Mills Ltd. (Mg. Agents: Messrs. Nirmal Kumar Jain & Co., Devasram, Arrah.)	Patna	Bihta	Bihta E.I.R.	850	Messrs. Henry Mariolle Delattre Co., Ltd., Fronard, Paris.	D.S.
33.	*Gaya Sugar Mills, Ltd., P. O. Guraru Purani Godown, Gaya.	Gaya	Guraru	Guraru E.I.R.	400	Messrs. Krupp Wolf, Magdeburg, Germany.	S.
	Bengal						
1.	*Sitabganj Sugar Mills, P. O. Sitabganj. (Props: Messrs. Surajmal Nagarmal, 61, Harrison Road, Calcutta.)	Dinajpur	Sitabganj	Sitabganj E.B.R.	400-550	Messrs. Hallesche Maschinenfabrik & Eisengeserei Halle, Germany.	D.S.
2.	*North Bengal Sugar Mills Co., Ltd., P. O. Gopalpur. (Props: Messrs. Surajmal Nagarmal, 61, Harrison Road, Calcutta.)	Rajshahi	Gopalpur	Gopalpur E.B.R.	500-650	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	D.S.

Burma							
1. The Sahmaw Sugar Factory of the Burma Sugar Co., Ltd., P. O. Sahmaw, Upper Burma. (Mg. Agents: Messrs. Finlay Fleming & Co., Ltd., Merchant Street, Rangoon.)	Myitkyina	Sahmaw	Sahmaw Burma Rlys.	350	Messrs. Blairs, Ltd., Glasgow.		
Madras							
1. Aska Sugar Works and Distillery, Aska. (Props: Messrs. Permanand Sahu, Loknath Sahu, Jeewan Sahu, Ramchandra Sahu and Gopinath Sahu.)	Ganjam	Barhampore	Barhampore B.N.W.R.	100			
2. The Sri Ram Krishna Cooperative Industrial and Credit Society, Tummapala, via Anakapalle, Dist. Vizagapatam.	Vizagapatam	Tummapala	Anakapalle M.S.M.	50	Messrs. Fawcett Preston & Co., Ltd., Liverpool.	S.	
3. The Etikoppaka Sugar Factory. (Prop: Mr. R. B. C. V. S. Narasimha Raju Garu, B.A., B.L., President of the Etikoppaka Co-operative Industrial & Credit Society, Ltd., Etikoppaka.)	Do.	Etikoppaka	Narasipatam Rd. M.S.M.	50	Do.	D. S.	
4. Sri Ram Krishna Sugar Factory. (Mg. Agent: Rao Bahadur C. V. S. Narasimha Raju Garu, Etikoppaka, Vizigapatam.)	East Godavari	Kirlampudi	Samalkot	100	Messrs. John McNeill & Co., Ltd., Govan, Scotland.	D.S.	

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
5.	*The Indian Sugar & Refineries Ltd. (Mg. Agents: Messrs. Ranga Nathan & Co., Ltd., 9, Armenian Street, Madras.)	Bellary	Hospet	Hospet M.S.M.	400	Messrs. A. & W. Smith & Co., Ltd., Glasgow.	
6.	*The East India Distilleries & Sugar Factories, Ltd., Nellikuppam. (Mg. Agents: Messrs. Parry & Co., P. O. Box 12, Madras.)	South Arcot	Nellikupam	Nellikupam S.I.R.	850	Messrs. The Mirrlees Watson Co., & Duncan Stewart & Co., Ltd., Glasgow.	D.
7.	*Coimbatore Sugar Mills Ltd., Podanur, Coimbatore District.	Coimbatore	Podanur	Podanur S.I.R.	50	Messrs. Marshall Sons & Co., Ltd., Calcutta.	S.
	Bombay						
1.	The Belapur Co., Ltd., P. O. Harigaon. (Mg. Agents: Messrs. Brady & Co., Royal Insurance Buildings, Church Gate Street, Fort Bombay.)	Ahmadnagar	Harigaon	Belapur G.I.P.	600	Messrs. Blair Ltd., & McLean Ltd., & Duncan Stewart & Co., Ltd., Glasgow.	S.
2.	The Saswad Mali Sugar Factory, Ltd. (Mg. Dir: H. B. Grime Esqr., Kopargaon.)	Sholapur	Akluj	Pandharpur B.L.R.	200-400		

3. *Marsland Price & Co., Ltd., Bombay. (Mg. Agents: The Tata Construction Co., Ltd., Phoenix Building, Ballard Estate, Bombay.)*	*Poona*	*Kalamb*	*Baramati* B.L.R.	450	Messrs. Krupp Wolf, Magdeburg, Germany.	D.S.
4. The Maharashtra Sugar Mills, Ltd., P. O. Belapur Road. (Mg. Agents: Messrs. M. L. Dahanukar & Co., Ltd., Shrikrishna Nivas, Kalbadevi Road, Bombay No. 2.)	Ahmadnagar	Belapur Rd.	Belapur G.I.P.	200-250 will be extended to 500-600	Messrs. Krupp Wolf, Magdeburg, Germany.	S.
5. The Ravalgaon Sugar Farm, Ltd., P.O. Ravalgaon, via Malegaon Camp. (Mg. Agents: Messrs. Walchand & Co., Ltd., Phoenix Building, Ballard Estate, Fort, Bombay.)	Nasik	Ravalgaon	Manmad G.I.P.	300	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.
Indian States						
1. The Jagatjit Sugar Mills Co., Ltd., Phagwara. (Mg. Agents: Messrs. Narand Bros. & Co., Ltd., 5, Montagomery Road, Lahore.)	Jullundur	Phagwara	Phagwara N.W.R.	400	Messrs. George Fletcher & Co., Ltd., Derby, England.	C.
2. Raza Sugar Co., Ltd., Roshan Bagh, Rampur State. (Mg. Agents: Messrs. Govan Brothers, Ltd., Roshan Bagh, Rampur.)	Rampur	Roshan Bagh	Rampur E.I.R.	800	Stork Werkspoor, Amsterdam, Holland.	D.S.
3. Kolhapur Sugar Mills, Ltd. (Mg. Agents : Messrs. Shirgaokar Bros. Kolhapur, Shahapuri.)	Kolhapur	Kolhapur	Kolhapur M.S.M.	300	Messers. Fawcett, Preston & Co., Ltd., Liverpool.	D.S.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
4.	The Phalton Sugar Works, Ltd., Phalton. (Mg. Dir: Vaman Shridhar Apte Esq., 315, Girgaon, Back Road, Bombay 4.)	Satara	Pimpalwadi	Lonand M.S.M.	450-550		
5.	Shree Bhagwat Singhjee Sugar Works, Ltd., Gondal. (Mg. Dir: M. N. Chinoy Esq., Gondal.)	Rajkot	Gondal	Gondal Gondal Railway	60	Messrs. Sangerhausen A.G., Germany.	
6.	The Mysore Sugar Co., Ltd., Bangalore.	Mysore	Mandya	Mandya Mysore Railway	1400	Messrs. The Mirrlees Watson Co., Ltd., Scotland.	D.S.
	II. Factories working with Raw Sugar alone.						
	Punjab						
1.	Harkishan Sugar Mills, Amritsar.	Amritsar	Amritsar	Amritsar N.W.R.			
2.	Amritsar Sugar Mills, Co., Ltd., Amritsar. (Mg. Dir: Sardar Amar Singh, Amritsar.)	Do.	Do.	Do.	700 Mds.		

3. *The* Lakshmi Sugar & Oil Mills, Ltd., Amritsar. (Mg. Dir: Babu Bansi Dhar Sahib, Chatiwind Gate, Amritsar.)	Do.	Chatiwind	Do.	300 Mds.	Messrs. Krupp Wolf, Magdeburg, Germany.
4. Shree Guru Arjan Dev Sugar Mills. (Mg. Agent: Seth Sundar Singh, Butari.)	Do.	Butari	Butari N.W.R.	500 Mds.	
United Provinces					
1. Unao Sugar Mills, Unao. (Owners: Messrs: Shri Krishna Dass Jagan Nath Prasad, Unao Sugar Mills, Unao.)	Unao	Unao	Unao B.N.W. & E.I.R.		Messrs. Harvey Engineering & Co., Ltd., Glasgow.
2. Cawnpore Sugar Works, Ltd. (Mg. Agents: Messrs. Begg Sutherland & Co., Ltd, P. O. Box 21, Cawnpore.	Cawnpore	Couperganj	Cawnpore Central E.I.R.		Messrs. Duncan Stewart & Co., Ltd., Glasgow & others.
3. Baijnath Balmukund Sugar Factory, Anwarganj. (Props: Mr. Banke Behari Lal & Mr. Mandan Behari Lal, Anwarganj, Cawnpore.)	Cawnpore	Anwarganj	Anwarganj B.N.W. & B.B. & C.I.R.		Messrs. Manlove, Alliott & Co., Ltd., Nottingham; Watson, Laidlaw & Co., Ltd., Glasgow.
4. Union Indian Sugar Mills, Nawabganj. (Props: Messrs. Kamlapat Motilal, Cawnpore.)	Do.	Rawatpur	Rawatpur B.B. & C.I.R.		Messrs. John McNeill & Co., Ltd. Glasgow.

LIST "A"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	Madras						
1.	The Deccan Sugar & Abkari Company Ltd., Samalkot. (Mg. Agents: Messrs. Parry & Co., P. O. Box 12, Madras.)	East Godavari	Samalkot	Samalkot M.S.M.			
2.	Al. Vr. St. Sugar Mills, Techanalur.	Tinnevelly	Techanalur	Tinnevelly S.I.R.			
	Indian States						
1.	The Travancore Sugar Limited, Thuckalay. (Mg. Agents: Vinayak Kumar & Co., Thuckalay, South Travancore.)	Trivandrum	Thuckalay	Trivandrum S.I.R.			

Provincial Distribution of Sugar Factories existing in 1933-34.

Provinces	Cane Factories	Gur Refineries	Total
1. Punjab.	5	4	9
2. United Provinces.	64	4	68
3. Bihar & Orissa.	33	–	33
4. Bengal.	2	–	2
5. Burma.	1	–	1
6. Madras.	7	2	9
7. Bombay.	5	–	5
8. Indian States.	6	1	7
Total.	123	11	134

Note:—The capacities noted in these lists are approximate, as additions to plant are made frequently.
S.=Single Sulphitation; D.S.=Double Sulphitation; C.=Single Carbonation; D.C.=Double Carbonation; D.C.S.=Double Carbonation and Juice Sulphitation; D.=Defecation

LIST "B"

New Sugar Factories that were constructed for working during 1934-35.

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	I—Factories working with cane						
	(1) Punjab						
1.	*The Punjab National Sugar Mills, Lyallpur. (Mg. Agent: Sh. Sharif Ahmad, Lyallpur.)	Lyallpur	Lyallpur	Lyallpur N.W.R.	70		
2.	The Arya Sugar Mills, Dinanagar. (*Props: Messrs. Ganga Bishen Dev Raj Dinanagar.*)	Gurdaspur	Dinanagar	Dinanagar	100		
	(2) United Provinces						
1.	*Seth Shiv Pd. Banarsidas Sugar Mills, Bijnor. (Props: Messrs. Shiv Pd. Banarsidas Agrawal, Bankers & Mill Owners, 85, Lake Road, Lahore.)	Bijnor	Bijnor	Bijnor E.I.R.	400	Messrs. Blairs, Ltd., Glasgow.	S.
2.	The Muradnagar Sugar Works, P. O. Muradnagar. (Prop: Balkrishendas, Raghvir Shalla, Bharatpur.)	Meerut	Muradnagar	Muradnagar N.W.R.	50-75	Messrs. Bhana Mal Gulzari Mal, Delhi.	S.

3. *The Lakarmandi* Sugar Mills & Co., Ltd., Lakarmandi. (Dir: The Lakarmandi Sugar Mills & Co., Ltd., Nawabganj, Dt. Gonda.)	Gonda	Lakarmandi	Katra B.N.W.R.	100-150	Messrs. Krupp Wolf, Magdeburg, Germany.	D.S.
4. The Campierganj Sugar Mills, Ltd., Campierganj. (Mg. Dir: H. M. Nisarullah, B.A., M.L.C., Rais, Quazipore Khurd, Gorakhpur.)	Gorakhpur	Campierganj	Campierganj B.N.W.R.	150	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.
(3) Bihar & Orissa						
1. *Dalsinghsarai Sugar Works, Ltd., Samastipur. (Mg. Agents: Messrs. Behar Trading Corporation, Samastipur.)	Darbhanga	Ujiarpur	Ujiarpur B.N.W.R.	300		
2. New India Sugar Mills, Ltd., Hasanpur Road, P. O. Sakarpura. (Mg. Agents: Messrs. B. R. Loyalka & Co., 7, Lyons Range, Calcutta.)	Do.	Sasan	Hasanpur Road B.N.W.R.	350 May be extended to 800 tons.	Messrs. Blairs, Ltd., Glasgow.	D.S.
(4) Bengal						
1. **Shree Radha Krishna Sugar Mills, Ltd., Beldanga. (Mg. Agents: Messrs. Johajharia Bros., 138, Harrison Road, Calcutta.)	Murshidabad	Beldanga	Beldanga E.B.R.	400	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	S.
2. Serampore Sugar Works, Ltd., Serampore.	Hooghly	Bullavpore	Serampore E.I.R.			

LIST "B"—(Contd.)

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
3.	The East Bengal Sugar Mills, Ltd. (Mg. Agents: Messrs. Ramnath Das & Co., Ltd., Reg. Office No. 30, 31,32, North Brook Hill Road, Dacca.)	Dacca	Shome Kaliganj	Arikhola A.B.R.	100-150	Messrs. Krupp Wolf, Magdeburg, Germany.	
4.	The Deshbandhu Sugar Mills, Ltd., Charsindur. (Mg. Agents: Messrs. Industrial Agency, 6, Patuatuly, Dacca.)	Do.	Charsindur	Gorshal Flag A.B.RY.	150-200	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.
5.	Shikarpur Sugar Mills. (Prop: Raja P. D. Raikut Bahadur M.L.C., Baikunthpur Raj, Jalpaiguri.)	Jalpaiguri	Shikarpur	Belacoba	150	Messrs. Blairs Ltd., Glasgow & Mclean Ltd.	
	(5) Burma						
1.	Zeyawadi Sugar Factory. (Prop: R. B. Hari Har Pd. Sinha, 11, Reddiar Avenue, Wiugaba Road, Rangoon.)	Taungoo	Zeyawadi	Zeyawadi B. RY.	600-800	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.

2.	*The Thaton Sugar Works, Ltd., P. O. Bilin, Lower Burma. (Mg. Agents: Messrs. Robertson & Co., P. O. Box 383, 80, Strand Road, Rangoon.)	Thaton	Hnipale	Hnipale B. RY.	400		
	(6) Madras						
1.	Sreerama Sugar Mills, Bobbili. (Props: Raja of Bobbili and Shree Kunwar Rajah of Venkatagiri.)	Vizagapatam	Bobbili	Bobbili	150	Messrs. Blairs, Ltd., Glasgow.	S.
2.	The Vuyyur Cooperative Industrial and Credit Society, Ltd., Vuyyur.	Kistna	Vuyyur	Bezwada M.S.M.R.	800-1200	Messrs. A. & W. Smith & Co., Ltd., Glasgow.	D.S.
	(7) Bombay						
1.	*The Pioneer Sind Sugar Mills Co., Ltd. (Mg. Agents: Messrs. Mohatta Mukhi & Co., Ltd., P. O. Box No. 26, Mohatta Buildings, Mcleod Road, Karachi.)	Nawabshah	Pritamabad	Khadro Jodhpur Bikaner Ry.	300	Messrs. The Mirrlees Watson Co., Ltd., Glasgow.	D.S.
	Indian States (Central India)						
1.	The Jaora Sugar Mills, Jaora. (Props: Kaluram Govindram, Jaora.)	Jaora (C. I.)	Jaora	Jaora B.B.&C.I. R. Y.	250 to be extended to 400 tons.	Messrs. Duncan Stewart & Co., Ltd., Glasgow.	D.S.

*These factories have also refining plants.

**This worked for the part of the season 1933-34.

LIST "B"—(Contd.)

Serial No.	Name of Factories and Managing Agents.	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	II—Factories working with raw sugar alone						
	United Provinces						
1.	Ganga Sugar Works, Balwali. (Mg. Agent: Pandit Vishnu Dutt, Ganga Glass Works, Ltd., Balwadi.)	Bijnor	Balawali	Balawali	500 mds.		
	Madras						
1.	*Lakshmi Sugar Mills.*	Tinnevely	Alvartirunagri	Alvartirunagri	3½ to 4 tons.		

Provincial Distribution of New Sugar Factories constructed for working during 1934-35.

Provinces	Cane Factories	Gur Refineries	Total
Punjab ...	2	...	2
United Provinces ...	4	1	5
Bihar & Orissa ...	2	...	2
Bengal ...	5	...	5
Burma ...	2	...	2
Madras ...	2	1	3
Bombay ...	1	...	1
Indian States ...	1	...	1
Total	19	2	21

Note:—The capacities noted in these lists are approximate as additions to plant are made frequently.

LIST "C"

Provisional list of Sugar Factories projected for working during season 1935-36.

Serial No.	Name of Factories and Managing Agents	District	Location	Nearest Railway Station	Capacity in tons	Plant Manufacturers	Clarification Process
	Factories to work with cane						
	United Provinces						
1.	The Lakshmi Sugar & Oil Mills Ltd., Hardoi.	Hardoi	Hardoi	Hardoi E.I.R.			
	Bihar & Orissa						
1.	The Patna Sugar Mills Ltd., Khagaul. (Mg. Agents: Amirchandra & Co., Arrah.)	Patna	Khagaul	Dinapore E.B.R.			
2.	The Kisan Sugar Mills Ltd., Sitalpur. (Mg. Agents: The Bihar Industrial Chamber, Vishramghat, Hajipur.)	Saran	Sitalpur	Sitalpur B.N.W.R.			
	Bengal						
1.	The Oriental Sugar Works Ltd., Majdia, Dt. Murshidabad. (Mg. Agents: Jayanti Agency, Calcutta.)	Murshidabad	Majdia	Majdia E.B.R.			

2. The All India Sugar Mills, Katwa, Dt. Burdwan. (Head Office: 135, Canning Street, Calcutta.)	Burdwan	Katwa	Katwa E.I.R.				
Madras							
1. The Co-operative Industrial & Credit Society, Perikidu, near Nuzirid Rly. Station.							
Indian States							
1. The Buland Sugar Mills, Rampur. (Mg. Agents: Messrs. Govan Bros. Ltd., Roshan Bagh, Rampur.)	Rampur state	Rampur	Rampur E. I. R.	800	Messrs. George Fletcher & Co., Ltd., Derby, England	D.C.	

Provincial Distribution of New Sugar Factories projected for working during the season 1935-36

Provinces		Cane Factories		Total
United Provinces.	...	1	...	1
Bihar & Orissa.	...	2	...	2
Bengal.	...	2	...	2
Madras.	...	1	...	1
Indian States.	...	1	...	1
Total	...	7	...	7

Provincial Distribution of all Sugar Factories expected to work during the season 1935-36

Provinces		Cane Factories		Gur Refineries		Total
Punjab.	...	7	...	4	...	11
United Provinces.	...	69	...	5	...	74
Bihar & Orissa.	...	37	...	—	...	37
Bengal.	...	9	...	—	...	9
Burma.	...	3	...	—	...	3
Madras.	...	10	...	3	...	13
Bombay.	...	6	...	—	...	6
Indian States.	...	8	...	1	...	9
Total	...	149	...	13	...	162

Note:—The capacities noted in these lists are approximate, as additions to plant are made frequently.

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AND

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