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# **DOIWALA SUGAR CO. LTD.**

## **DOIWALA**

**(A Undertaking of Uttarakhand Govt.)**



**Regd. Office.**

**Doiwala , Distt.- Dehradun (U.K.)**

## **FINAL MANUFACTURING** **REPORT**

**R.T. 8 (C)**

**Season 2016-17**

**DOIWALA SUGAR COMPANY LIMITED, DOIWALA (DEHRADUN)**

D\_SCL/181

DATED: 03.05.2017

Secretary,  
Sugar Industries & Cane Development  
Uttarakhand Govt.  
Dehradun

Dear Sir,

We are submitting herewith our Final Manufacturing Report R.T. 8 (C) for the season 2016-17 for your kind information and necessary record please.

Yours faithfully,

**BHAGWAT KISHORE MISHRA**  
P.C.S  
EXECUTIVE DIRECTOR

**Copy of the above is forwarded to the following for information and necessary action**

- 1- Chief Secretary Uttarakhand Govt. Dehradun.
- 2- Principal Secretary, Cane Development & Sugar Industries, Uttarakhand Secretariat, Dehradun.
- 3- Managing Director Uttarakhand Coop. Sugar Factories Fed. Ltd. (Uttarakhand Sugars) Ajabpur Khurd D.Dun
- 4- Managing Director, U.P. State Sugar Corporation Ltd. Lucknow.
- 5- Additional Secretary, Village & Sugar Industry, Uttarakhand Govt. Dehradun.
- 6- Cane Commissioner, Uttarakhand. Government, Udham Singh Nagar.
- 7- Additional Secretary, Sugar & Cane Development, Dehradun.
- 8- Joint Commissioner, Cane & Sugar, Kashipur, Udham Singh Nagar.
- 9- Chief Director (Sugar) Directorate of Sugar Krishi Bhawan, New Delhi.
- 10- Director National Sugar Institute, Kanpur.
- 11- Director, General Indian Sugar Mills Asso., Ansal Plaza, C-Block, II Floor, August Kranti Marg, New Delhi.
- 12- Secretary, U.P. Sugar Mills Association, Ansal Plaza, C-Block, II Floor, August Kranti Marg, New Delhi.
- 13- Sugar Cane Inspector & Assistant Sugar Commissioner (Uttarakhand) Haldwani/Bareilly.
- 14- Excise Commissioner & Controller of Molasses, Uttarakhand, Dehradun.
- 15- Superintendent Central Excise, Dehradun.
- 16- Assistant Commissioner Central Excise, Central Zone, Dehradun.
- 17- Inspector Central Excise, Dehradun.
- 18- District Excise Office, Dehradun.
- 19- Inspector State, Excise, Dehradun.
- 20- Member Secretary U.K. Pollution Control Board, Dehradun.
- 21- Regional Officer Pollution Control Board, Dehradun.
- 22- General Manager/Executive Director, Nadhai, Sitarganj, Gadarpur, Bazpur, Kichha.
- 23- Maha Prabandhak, Uttarakhand Sugar, S-8 Tyonar Villa, C-Block, Ganesh Bihar, Ajabpur Khurd, D.dun.
- 24- Joint Director, Environment & Forest Ministry, Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow.
- 25- Director, MOEF, CGO Complex, Lodhi Raod, New Delhi.
- 26- General Manager, Laksar, Iqbalpur, Uttam, Kashipur Sugar Mill.
- 27- All Departmental Heads, Doiwala Sugar Company Ltd., Doiwala (Dehradun).

**BHAGWAT KISHORE MISHRA**  
P.C.S  
EXECUTIVE DIRECTOR

*Lab 1/c*

## FORM – R.T. 8 (C)

Central Excise Series No. 76

(FOR CENTRAL SUGAR FACTORIES)

FINAL MANUFACTURING REPORT FOR THE SEASON 2016-17

RULE- 83

Name & Address of Factory

Doiwala Sugar Company Ltd., Doiwala D.dun.

Registered No. of Factory

Clarification Process used

Double Sulphitation

| S.N.      | Particulars  | This Year 2016-17        | Last Year 2015-16    |
|-----------|--|--------------------------|----------------------|
| <b>1-</b> | <b>TIME ACCOUNT</b>  |                          |                      |
|           | Date of Start  | 02.12.2016 at 11:30 P.M  | 02.12.2015 at 11 P.M |
|           | Date of Finish   | 03.04.2017 at 10:30 P.M. | 01.04.2016 at 11 P.M |
|           | Duration of Season (Days)  | 123                      | 122                  |
|           | Total Days actual crushing   | 120                      | 110                  |
|           | Total hours actual crushing  | 2634-00                  | 2413-00              |
|           | Total hours lost   | 293-00                   | 491-00               |
|           | i) Cane Shortage   | 126-00                   | 200-20               |
|           | ii) Mechanical+Electrical  | 10-35                    | 152-35               |
|           | iii) General Cleaning  | 100-30                   | 97-35                |
|           | iv) Process  | -                        | 4-00                 |
|           | v) Bad Weather   | 10-00                    | 19-10                |
|           | vi) Misc.  | 45-55                    | 17-20                |
| <b>2-</b> | <b>CANE CRUSHED</b>  |                          |                      |
|           | i) Own Estate Cane (Qtls)  | Nil                      | Nil                  |
|           | ii) Gate Cane  | 1258491.08               | 1120201.66           |
|           | iii) Out Station Cane  | 1371975.67               | 1311830.47           |
|           | iv) Rail Cane  | Nil                      | NIL                  |
|           | v) Total   | 2630466.75               | 2432032.13           |
| <b>3-</b> | <b>JUICE &amp; ADDED WATER:</b>  |                          |                      |
|           | Total net mixed juice obtained (Qtls)  | 2821784.76               | 2586016.97           |
|           | Average gross mixed juice% cane  | 107.64                   | 106.70               |
|           | Correction% mixed juice  | 0.34                     | 0.35                 |
|           | Avg. net mixed juice % cane  | 107.27                   | 106.33               |
|           | Avg. added water percent cane  | 39.61                    | 38.65                |
| <b>4-</b> | <b>SUGAR:</b>  |                          |                      |
|           | Quantity of Sugar (Qtls)   | *250250                  | **229905             |
|           | Sugar in process if any (Qtls)   | (+ 305)                  | (+ 319)              |
|           | Total Sugar made (Qtls)  | 250555                   | 230224               |
|           | Sugar recovered from previous season's process (Qtls)                          | (-) 241                  | (-) 286              |
|           | Sugar recovered from previous season's Brown Sugar (Qtls)                      | (-) 1889                 | (-) 1898             |
|           | Sugar recovered from previous season's BISS or Sugar from other sources (Qtls) | (-) 1792                 | (-) 1224             |
|           | Total net Sugar made (Qtls)  | 246633                   | 226816               |

\* This included 2810 Qtls of Brown Sugar of 90.30° Pol

\*\* This included 2890 Qtls of Brown Sugar of 90.20° Pol



Contd....2..

| S.N.      | Particulars  | This Year 2016-17 | Last Year 2015-16 |
|-----------|--|-------------------|-------------------|
| <b>5-</b> | <b>MOLASSES:</b>   |                   |                   |
|           | Total Molasses sent out (Qtls)   | 122800            | 114872            |
|           | Molasses in process if any (Qtls)  | (+) 365           | (+) 380           |
|           | Total Molasses produced (Qtls)   | 123165            | 115252            |
|           | Mol. recovered from Previous season's process (Qtls)                           | (-) 471           | (-) 214           |
|           | Molasses recovered from previous season's Brown Sugar or from Remelting (Qtls) | (-) 926           | (-) 938           |
|           | Molasses recovered from Remelted sugar or other sources (BISS) (Qtls)          | (-) 102           | (-) 64            |
|           | Total net molasses produced (Qtls)   | 121666            | 114036            |
| <b>6-</b> | <b>RECOVERY:</b>   |                   |                   |
|           | Average recovery of sugar Percent cane   | <b>9.38</b>       | <b>9.33</b>       |
| <b>7-</b> | <b>AVERAGE PRODUCTION</b>  |                   |                   |
|           | Final molasses percent cane  | 4.63              | 4.69              |
|           | Bagasse percent cane   | 31.97             | 31.95             |
|           | Filter cake % cane   | 4.00              | 4.00              |
| <b>8-</b> | <b>STORE USED:</b>   |                   |                   |
|           | Coal percent cane  | -                 | -                 |
|           | i) Trial   | -                 | -                 |
|           | ii) Season   | -                 | -                 |
|           | Firewood % cane  | -                 | -                 |
|           | i) Trial   | 0.01              | 0.01              |
|           | ii) Season   | -                 | -                 |
|           | Other Fuel % cane  | -                 | -                 |
|           | i) Trial ( Loose Bagasse)  | 0.22              | 0.27              |
|           | ii) Season   | -                 | -                 |
|           | For Previous of Season coal  | -                 | -                 |
|           | Firewood   | 0.01              | 0.01              |
|           | Lime % Cane( E.T.P)  | 0.0153            | 0.004             |
|           | Lime % Cane (Process)  | 0.204             | 0.204             |
|           | Lime Stone (b) % Cane  | -                 | -                 |
|           | Coke % Cane  | -                 | -                 |
|           | Sulphur % Cane   | 0.055             | 0.058             |
|           | Lubricant (Oil & Grease) % Cane  | 0.49              | 0.54              |
|           | Filter Cloth Sq.   | -                 | -                 |
|           | Filter Bags No. % Cane   | -                 | -                 |
|           | Gunny Bags for sugar No. per 100 Qtls, Cane                                    | 9.63              | 9.55              |
|           | Washing soda Kg. per 100 Qtls Cane   | 0.0475            | 0.0555            |
|           | Caustic soda Kg. per 100 Qtls Cane   | 0.496             | 0.586             |
|           | Hcl  | -                 | -                 |
|           | Per 100 Qtls. Cane)- mention variety   | -                 | -                 |
|           | Single, double or triple Hyd. Kg.  | -                 | -                 |
|           | Per 100 Qtls. Cane   | -                 | -                 |
|           | E.C. Kg. -do-  | -                 | -                 |
|           | Blu Kg. -do-   | -                 | -                 |

Contd...3...

| S.N. | Particulars        | This Year 2016-17 | Last Year 2015-16 |        |
|------|--------------------|-------------------|-------------------|--------|
| 9-   | <b>ANALYSIS:</b>   |                   |                   |        |
|      | Cane               | Sugar %           | 11.39             | 11.39  |
|      |                    | Fibre %           | 14.83             | 14.84  |
|      | Primary Juice      | Sugar %           | 14.08             | 14.00  |
|      |                    | Brix %            | 17.85             | 17.75  |
|      |                    | Purity            | 78.88             | 78.87  |
|      | Mixed              | Sugar %           | 9.95              | 10.03  |
|      |                    | Brix %            | 12.88             | 12.98  |
|      |                    | Purity            | 77.25             | 77.27  |
|      | Last Mill Juice    | Sugar %           | 1.57              | 1.59   |
|      |                    | Brix %            | 2.27              | 2.27   |
|      |                    | Purity            | 69.16             | 70.04  |
|      | Clarified Juice    | Sugar %           | 10.02             | 10.07  |
|      |                    | Brix %            | 12.87             | 12.94  |
|      |                    | Purity            | 77.86             | 77.82  |
|      | Filter Press Juice | Sugar %           | -                 | -      |
|      |                    | Brix %            | -                 | -      |
|      |                    | Purity            | -                 | -      |
|      | Unsulphured Syrup  | Sugar %           | 36.39             | 37.58  |
|      |                    | Brix %            | 46.70             | 48.25  |
|      |                    | Purity            | 77.92             | 77.89  |
|      | Sulphured Syrup    | Sugar %           | -                 | -      |
|      |                    | Brix %            | -                 | -      |
|      |                    | Purity            | -                 | -      |
|      | MASSECUITE A       | Brix %            | 94.08             | 94.32  |
|      |                    | Purity            | 84.01             | 84.33  |
|      | MASSECUITE B       | Brix %            | 96.01             | 96.22  |
|      |                    | Purity            | 68.37             | 69.69  |
|      | MASSECUITE C       | Brix %            | 101.23            | 101.59 |
|      |                    | Purity            | 49.43             | 49.61  |
|      | MASSECUITE D       | Brix %            | -                 | -      |
|      |                    | Purity            | -                 | -      |
|      | <b>MOLASSES</b>    |                   |                   |        |
|      | A- HEAVY           | Brix %            | 84.82             | 84.73  |
|      |                    | Purity            | 67.69             | 69.00  |
|      | A- LIGHT           | Brix %            | 74.02             | 72.91  |
|      |                    | Purity            | 90.75             | 91.62  |
|      | B- HEAVY           | Brix %            | 83.69             | 82.34  |
|      |                    | Purity            | 44.13             | 44.70  |
|      | B- LIGHT           | Brix %            | -                 | -      |
|      |                    | Purity            | -                 | -      |
|      | C- LIGHT           | Brix %            | 76.68             | 77.77  |
|      |                    | Purity            | 60.59             | 60.72  |
|      | D- LIGHT           | Brix %            | -                 | -      |
|      |                    | Purity            | -                 | -      |

Contd..4..

| S.N.       | Particulars   | This Year 2016-17 | Last Year 2015-16 |
|------------|---|-------------------|-------------------|
|            | <b>SUGAR (Average):</b>   |                   |                   |
|            | Sugar (Average Sugar %(d) white   | 99.79             | 99.78             |
|            | Moisture %  | 0.02              | 0.02              |
|            | Final Molasses Sugar %  | 24.82             | 24.69             |
|            | Brix %  | 90.17             | 89.02             |
|            | Purity  | 27.53             | 27.74             |
|            | Bagasse Sugar %   | 2.26              | 2.29              |
|            | Water %   | 50.35             | 50.28             |
|            | Fibre %   | 46.38             | 46.45             |
|            | Filter Cake Sugar %   | 1.74              | 1.64              |
|            | Lime Kiln Gas CO <sup>2</sup> %   | -                 | -                 |
|            | Boiler Feed Water pH  | 9.00              | 9.00              |
| <b>10-</b> | <b>MILL EXTRACTION, BOILING HOUSE EXTRACTION &amp; OVERALL EXTRACTION</b> |                   |                   |
|            | Mill Extraction   | 93.68             | 93.59             |
|            | Reduced Mill Extraction   | 94.81             | 94.75             |
|            | Boiling House Extraction  | 87.72             | 87.34             |
|            | Reduced Boiling House Extraction  | 92.64             | 92.41             |
|            | Overall Extraction  | 82.18             | 81.74             |
|            | Reduced Overall Extraction  | 87.83             | 87.56             |
| <b>11-</b> | <b>SUGAR BALANCE</b>  |                   |                   |
|            | Sugar in cane   | 11.39             | 11.39             |
|            | Sugar in mixed juice  | 10.67             | 10.66             |
|            | Sugar in Bagasse  | 0.72              | 0.73              |
|            | Sugar in filter cake  | 0.07              | 0.07              |
|            | Sugar in final molasses   | 1.15              | 1.16              |
|            | Sugar in Sugars   | 9.36              | 9.31              |
|            | Sugar in undetermined   | 0.09              | 0.12              |
|            | Total losses (in bagasse, filter cake, molasses and undetermined)         | 2.03              | 2.08              |
| <b>12-</b> | <b>AREA AND YIELD OF CANE IN FACTORY FARM</b>                             |                   |                   |
|            | Total area of farm Hectare  | NIL               | NIL               |
|            | Area under Cane Hectare   | NIL               | NIL               |
|            | <b>Average yield per hectare</b>  |                   |                   |
|            | Average Variety a) Plant  | NIL               | NIL               |
|            | b) Adsal  | NIL               | NIL               |
|            | c) Ratoon   | NIL               | NIL               |

I hereby declare that the figures given in this return are complete and true to the best of my knowledge and belief.

(J. P. SINGH)  
LAB INCHARGE

(R.K. SHARMA)  
CHIEF ENGINEER

(S.S. NEGI)  
CHIEF CHEMIST

(BHAGWAT KISHORE MISHRA)  
P.C.S.  
EXECUTIVE DIRECTOR

**NOTE:**

- a. Outstation cane means the cane weighed and purchased at centre other than at the factory gate.
- b. In case 3 massecuite system brix and purities of C Heavy and D Light molasses not to be given.
- c. for carbonation factories only.
- d. Sugar Means= direct Pol.
- e. Bagasse percent cane =100 plus added water percent cane-mixed juice (gross) percent cane.
- f. Gross season means the total number of days from the days of close both days inclusive.
- g. Duration of season. This is calculated by dividing the total hours of actual crushing by 22.

Returns in this form must be prepared for the entire working season of the factory and must be submitted so as to not later than 30 days after the date of which working season closes to the following authorities:

- 1- Central Excise Authorities Concerned.
- 2- Directorate of Sugar.
- 3- National Institute, Kanpur.

**DOIWALA SUGAR COMPANY LTD. DOIWALA D. DUN. UTTARAKHAND**

Additional information required by the Sugar Technologists' Association of India, New Delhi.

| S.N. | Particulars   | This Season 2016-17 |        |       | Last Season 2015-16 |       |
|------|---|---------------------|--------|-------|---------------------|-------|
|      |   | Grade               | Qtls.  | %     | Qtls.               | %     |
| 1.   | <b>Grade Wise Sugar Production</b>                  | <b>M-30</b>         | 214225 | 85.61 | 194260              | 84.50 |
|      |   | <b>S-30</b>         | 33215  | 13.27 | 32755               | 14.24 |
|      |   | <b>B.S.</b>         | 2810   | 1.12  | 2890                | 1.26  |
|      |   | <b>Total</b>        | 250250 | 100   | 229905              | 100   |
| 2.   | Mill extraction                                     | 93.68               |        |       | 93.59               |       |
| 3.   | Boiling House Extraction                            | 87.72               |        |       | 87.34               |       |
| 4.   | Overall extraction                                  | 82.18               |        |       | 81.74               |       |
| 5.   | <b>Reduced Mill extraction</b>                      |                     |        |       |                     |       |
|      | (a) Mittal  | 95.15               |        |       | 95.08               |       |
|      | (b) Noel Deer                                       | 94.81               |        |       | 94.75               |       |
| 6.   | <b>Reduced boiling house extraction :</b>           |                     |        |       |                     |       |
|      | (a) Gundu Rao                                       | 92.00               |        |       | 91.70               |       |
|      | (b) Noel Deer                                       | 92.64               |        |       | 92.41               |       |
| 7.   | <b>Reduced overall extraction</b>                   |                     |        |       |                     |       |
|      | (a) Gundu Rao                                       | 87.54               |        |       | 87.19               |       |
|      | (b) Noel Deer                                       | 87.83               |        |       | 87.56               |       |
| 8.   | Un-diluted juice lost % fibre                       | 39.50               |        |       | 39.66               |       |
| 9.   | Virtual Purity of final Molasses                    | 29.44               |        |       | 29.93               |       |
| 10.  | Java Ratio  | 80.89               |        |       | 81.36               |       |
| 11.  | Added water % fibre                                 | 267.09              |        |       | 260.44              |       |
| 12.  | Added water extraction in mixed juice % added water | 75.66               |        |       | 74.19               |       |
| 13.  | Purity drop PJ-MJ                                   | 1.63                |        |       | 1.60                |       |
| 14.  | Clarification Efficiency                            | 4.44                |        |       | 3.82                |       |
| 15.  | <b>Rate of crushing (In tons)</b>                   |                     |        |       |                     |       |
|      | (a) Including stoppages on 24 Hrs.                  | 2156.86             |        |       | 2009.94             |       |
|      | (b) Excluding stoppages on 24 Hrs.                  | 2396.78             |        |       | 2418.93             |       |
|      | (c) Excluding stoppages on 22 Hrs.                  | 2197.05             |        |       | 2217.35             |       |
|      | (d) Sanctioned capacity                             | 2500.00             |        |       | 2500.00             |       |
| 16.  | (a) Capacity Utilization % Gross on 24 Hrs.         | 86.28               |        |       | 80.40               |       |
|      | (b) Capacity utilization % Net on 24 Hrs.           | 95.87               |        |       | 96.76               |       |
|      | (c) Capacity Utilization % Net on 22 Hrs.           | 87.88               |        |       | 88.69               |       |
| 17.  | <b>E.R.Q.V.</b>                                     |                     |        |       |                     |       |
|      | (a) M.J./P.J  | 95.81               |        |       | 95.88               |       |
|      | (b) L.M.J./P.J.                                     | 75.00               |        |       | 77.28               |       |

18.

**Name of Officers.**

**Designation**

**Call No.**

SHRI VINOD SHARMA (I.A.S.)

SECRETARY (SUGAR).....RESI. No -

0135-2711881

SHRI PRADEEP SINGH RAWAT

MANAGING DIRECTOR.....RESI. No -

0135-2733153

SHRI BHAGWAT KISHORE MISHRA (P.C.S.)

EXECUTIVE DIRECTOR.....RESI. No -

0135-2695006

SHRI R. K. SHARMA

CHIEF ENGINEER

09837288536

SHRI S.S. NEGI

CHIEF CHEMIST

08755552161

SHRI VIJAY GOEL,

CHIEF ACCOUNTANT

08755552153

SHRI VIJAY GOEL,


I/c CANE MANAGER

08755552153

SHRI J. P. SINGH

LAB INCHARGE

09412854289

  
**LAB INCHARGE**

  
**CHIEF CHEMIST**