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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 2015-16**

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

DSC/L Lab/ 155

DATED: 5.05.2016

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 2015-16 for your kind information and necessary record please.

Yours faithfully,

(MANMOHAN SINGH)  
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).

(MANMOHAN SINGH)  
P.C.S  
EXECUTIVE DIRECTOR



**FORM – R.T. 8 (C)**

Central Excise Series No. 76

**(FOR CENTRAL SUGAR FACTORIES)  
FINAL MANUFACTURING REPORT FOR THE SEASON 2015-16**

**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 2015-16	Last Year 2014-15
<b>1-</b>	<b>TIME ACCOUNT</b>		
	Date of Start	02.12.2015 at 11 P.M	03.12.2014 at 10 A.M.
	Date of Finish	01.04.2016 at 11 P.M	24.04.2015 at 2 A.M
	Duration of Season (Days)	122	142
	Total Days actual crushing	110	140
	Total hours actual crushing	2413-00	3075-30
	Total hours lost	491-00	324-30
	i) Cane Shortage	200-20	35-35
	ii) Mechanical+Electrical	152-35	82-25
	iii) General Cleaning	97-35	143-45
	iv) Process	4-00	-
	v) Bad Weather	19-10	38-30
	vi) Misc.	17-20	24-15
<b>2-</b>	<b>CANE CRUSHED</b>		
	i) Own Estate Cane (Qtls)	Nil	NIL
	ii) Gate Cane	1120201.66	1263781.73
	iii) Out Station Cane	1311830.47	1792554.65
	iv) Rail Cane	NIL	NIL
	v) Total	2432032.13	3056336.38
<b>3-</b>	<b>JUICE &amp; ADDED WATER:</b>		
	Total net mixed juice obtained (Qtls)	2586016.97	3216054
	Average gross mixed juice% cane	106.70	105.60
	Correction% mixed juice	0.35	0.35
	Avg. net mixed juice % cane	106.33	105.23
	Avg. added water percent cane	38.65	38.87
<b>4-</b>	<b>SUGAR:</b>		
	Quantity of Sugar (Qtls)	*229905	**274135
	Sugar in process if any (Qtls)	(+) 319	(+) 330
	Total Sugar made (Qtls)	230224	274465
	Sugar recovered from previous season's process (Qtls)	(-) 286.00	(-) 201
	Sugar recovered from previous season's Brown Sugar (Qtls)	(-) 1898	(-) 1835
	Sugar recovered from previous season's BISS or Sugar from other sources (Qtls)	(-) 1224	(-) 3288
	Total net Sugar made (Qtls)	226816	269141

\* This included 2890 Qtls of Brown Sugar of above 90° Pol

\*\* This included 2680 Qtls of Brown Sugar of above 90° Pol

Contd....2..

S.N.	Particulars	This Year 2015-16	Last Year 2014-15
<b>5-</b>	<b>MOLASSES:</b>		
	Total Molasses sent out (Qtls)	114872	136100
	Molasses in process if any (Qtls)	(+) 380	(+) 147
	Total Molasses produced (Qtls)	115252	136247
	Mol. recovered from Previous season's process (Qtls)	(-) 214	(-) 420
	Molasses recovered from previous season's Brown Sugar or from Remelting (Qtls)	(-) 938	(-) 869
	Molasses recovered from Remelted sugar or other sources (BISS) (Qtls)	(-) 64	(-) 193
	Total net molasses produced (Qtls)	114036	134765
<b>6-</b>	<b>RECOVERY:</b>		
	Average recovery of sugar Percent cane	<b>9.33</b>	<b>8.81</b>
<b>7-</b>	<b>AVERAGE PRODUCTION</b>		
	Final molasses percent cane	4.69	4.41
	Bagasse percent cane	31.95	33.27
	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	0.0069
	ii) Season	-	-
	Other Fuel % cane	-	-
	i) Trial ( Loose Bagasse)	0.27	0.23
	ii) Season	-	-
	For Previous of Season coal	-	-
	Firewood	0.01	-
	Other Fuel	-	-
	Lime % Cane	* 0.208	* 0.216
	Lime Stone (b) % Cane	-	-
	Coke % Cane	-	-
	Sulphur % Cane	0.058	0.06
	Lubricant (Oil & Grease) % Cane	0.54	0.58
	Filter Cloth Sq.	-	-
	Filter Bags No. % Cane	-	-
	Gunny Bags for sugar No. per 100 Qtls, Cane	9.55	8.97
	Washing soda Kg. per 100 Qtls Cane	0.0555	0.0489
	Caustic soda Kg. per 100 Qtls Cane	0.586	0.54
	Hcl	-	-
	Per 100 Qtls. Cane)- mention variety	-	-
	Single, double or triple Hyd. Kg.	-	-
	Per 100 Qtls. Cane	-	-
	E.C. Kg. -do-	-	-
	Blu Kg. -do-	-	-

\* This includes Lime used in injection channel and E.T.P.


Contd...3....

S.N.	Particulars	This Year 2015-16	Last Year 2014-15
9-	<b>ANALYSIS:</b>		
	Cane		
	Sugar %	11.39	10.92
	Fibre %	14.84	15.43
	Primary Juice		
	Sugar %	14.00	13.48
	Brix %	17.75	17.34
	Purity	78.87	77.74
	Mixed		
	Sugar %	10.03	9.65
	Brix %	12.98	12.68
	Purity	77.27	76.10
	Last Mill Juice		
	Sugar %	1.59	1.57
	Brix %	2.27	2.30
	Purity	70.04	68.26
	Clarified Juice		
	Sugar %	10.07	9.81
	Brix %	12.94	12.77
	Purity	77.82	76.82
	Filter Press Juice		
	Sugar %	-	-
	Brix %	-	-
	Purity	-	-
	Unsulphured Syrup		
	Sugar %	37.58	36.23
	Brix %	48.25	47.10
	Purity	77.89	76.92
	Sulphured Syrup		
	Sugar %	-	-
	Brix %	-	-
	Purity	-	-
	MASSECUITE A		
	Brix %	94.32	94.62
	Purity	84.33	83.39
	MASSECUITE B		
	Brix %	96.22	96.28
	Purity	69.69	67.16
	MASSECUITE C		
	Brix %	101.59	102.07
	Purity	49.61	48.77
	MASSECUITE D		
	Brix %	-	-
	Purity	-	-
	<b>MOLASSES</b>		
	A- HEAVY		
	Brix %	84.73	86.65
	Purity	69.00	66.22
	A- LIGHT		
	Brix %	72.91	73.35
	Purity	91.62	92.43
	B- HEAVY		
	Brix %	82.34	85.34
	Purity	44.70	42.42
	B- LIGHT		
	Brix %	-	-
	Purity	-	-
	C- LIGHT		
	Brix %	77.77	79.27
	Purity	60.72	57.89
	D- LIGHT		
	Brix %	-	-
	Purity	-	-

Contd..4..

S.N.	Particulars	This Year 2015-16	Last Year 2014-15
	<b>SUGAR (Average):</b>		
	Sugar (Average Sugar %(d) white	99.78	99.83
	Moisture %	0.02	0.02
	Final Molasses Sugar %	24.69	25.52
	Brix %	89.02	91.95
	Purity	27.74	27.75
	Bagasse Sugar %	2.29	2.30
	Water %	50.28	50.27
	Fibre %	46.45	46.36
	Filter Cake Sugar %	1.64	1.82
	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	93.59	92.95
	Reduced Mill Extraction	94.75	94.48
	Boiling House Extraction	87.34	86.70
	Reduced Boiling House Extraction	92.41	92.53
	Overall Extraction	81.74	80.59
	Reduced Overall Extraction	87.56	87.42
<b>11-</b>	<b>SUGAR BALANCE</b>		
	Sugar in cane	11.39	10.92
	Sugar in mixed juice	10.66	10.15
	Sugar in Bagasse	0.73	0.77
	Sugar in filter cake	0.07	0.07
	Sugar in final molasses	1.16	1.13
	Sugar in Sugars	9.31	8.80
	Sugar in undetermined	0.12	0.15
	Total losses (in bagasse, filter cake, molasses and undetermined)	2.08	2.12
<b>12-</b>	<b>AREA AND YIELD OF CANE IN FACTORY FARM</b>		
	Total area of farm	Hectare	NIL
	Area under Cane	Hectare	NIL
	<b>Average yield per hectare</b>		
	Average Variety	a) Plant	NIL
		b) Adsal	NIL
		c) Ratoon	NIL

I here by 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. NEGI)  
CHIEF CHEMIST

  
(MANMOHAN SINGH)  
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 2015-16			Last Season 2014-15	
		Grade	Qtls.	%	Qtls.	%
1.	Grade Wise Sugar Production	M-30	194260	84.50	226280	82.54
		S-30	32755	14.24	45175	16.48
		B.S.	2890	1.26	2680	0.98
		<b>Total</b>	<b>229905</b>	<b>100</b>	<b>274135</b>	<b>100</b>
2.	Mill extraction	93.59			92.95	
3.	Boiling House Extraction	87.34			86.70	
4.	Overall extraction	81.74			80.59	
5.	<b>Reduced Mill extraction</b>					
	(a) Mittal	95.08			95.01	
	(b) Noel Deer	94.75			94.48	
6.	<b>Reduced boiling house extraction :</b>					
	(a) Gundu Rao	91.70			91.74	
	(b) Noel Deer	92.41			92.53	
7.	<b>Reduced overall extraction</b>					
	(a) Gundu Rao	87.19			87.16	
	(b) Noel Deer	87.56			87.42	
8.	Un-diluted juice lost % fibre	39.66			41.92	
9.	Virtual Purity of final Molasses	29.93			29.75	
10.	Java Ratio	81.36			81.01	
11.	Added water % fibre	260.44			251.91	
12.	Added water extraction in mixed juice % added water	74.19			72.70	
13.	Purity drop PJ-MJ	1.60			1.64	
14.	Clarification Efficiency	3.82			4.70	
15.	<b>Rate of crushing (In tons)</b>					
	(a) Including stoppages on 24 Hrs.	2009.94			2157.41	
	(b) Excluding stoppages on 24 Hrs.	2418.93			2385.05	
	(c) Excluding stoppages on 22 Hrs.	2217.35			2186.29	
	(d) Sanctioned capacity	2500.00			2500.00	
16.	(a) Capacity Utilization % Gross on 24 Hrs.	80.40			86.30	
	(b) Capacity utilization % Net on 24 Hrs.	96.76			95.40	
	(c) Capacity Utilization % Net on 22 Hrs.	88.69			87.45	
17.	<b>E.R.Q.V.</b>					
	(a) M.J./P.J.	95.88			95.65	
	(b) L.M.J./P.J.	77.28			74.88	

18.

**Name of Officers.**

**Designation**

**Call No.**

SHRI VINOD SHARMA (I.A.S.)  
 SHRI PRADEEP SINGH RAWAT  
 SHRI MANMOHAN SINGH (P.C.S.)  
 SHRI R. K. SHARMA  
 SHRI S.S. NEGI  
 SHRI VIJAY GOEL,  
 SHRI MANOJ TOMAR  
 SHRI J. P. SINGH

SECRETARY (SUGAR).....RESI. No - 0135-2711881  
 MANAGING DIRECTOR.....RESI. No - 0135-2733153  
 EXECUTIVE DIRECTOR.....RESI. No - 0135-2695006  
 CHIEF ENGINEER 09837288536  
 CHIEF CHEMIST 08449716850  
 CHIEF ACCOUNTANT 08477895777  
 CANE MANAGER 08755461951  
 LAB INCHARGE 09412854289/07088104341

  
**LAB INCHARGE**

  
**CHIEF CHEMIST**