



HINTON PULP
A DIVISION OF WEST FRASER MILLS LIMITED
Continuous Ambient Air Quality
Monitoring Program
Annual Summary for 2012

Operations and Data Collection by:
West Central Airshed Society
Drayton Valley, Alberta

QA/QC, Data Validation and Reporting by:
West Central Airshed Society
Drayton Valley, Alberta



January 14th, 2013

Hinton Pulp
A Division of West Fraser Mills Ltd.
Mr. Phil Whitney
760 Switzer Drive
Hinton, Alberta
T7V 1V7

Dear Mr. Whitney:

Re: Annual Ambient Air Quality Monitoring Report. January – December 2012.
For Hinton Pulp – A Division of West Fraser Mills Ltd.

The West Central Airshed Society (WCAS) presents the 2012 Annual Report containing ambient air quality and meteorological information from the following site:

Network Station is AMS 906 Hinton
Identified as:

WCAS data collection and validation began January 1, 2004. The following is a list of the reported ambient air and meteorological parameters measured at the site location:

AMS 906 (Hinton)

TRS, Particulate Matter (2.5 microns), Wind Speed and Direction, Relative Humidity, and External Temperature.

If additional information is required please contact Patrick Andersen at (780) 514-3533 or (403) 505-1041.

Sincerely,

A handwritten signature in black ink, appearing to read 'Patrick Andersen', is written over a light blue horizontal line.

Patrick Andersen
Environmental Specialist

Hinton Pulp
A Division of West Fraser Mills Limited
Frequency Distribution Charts
Wind Speed and Direction
Year 2012

West Central Airshed Society - Hinton (AMS 906)
 Annual Summary for 2012
 Percentage Frequency Distribution of Wind

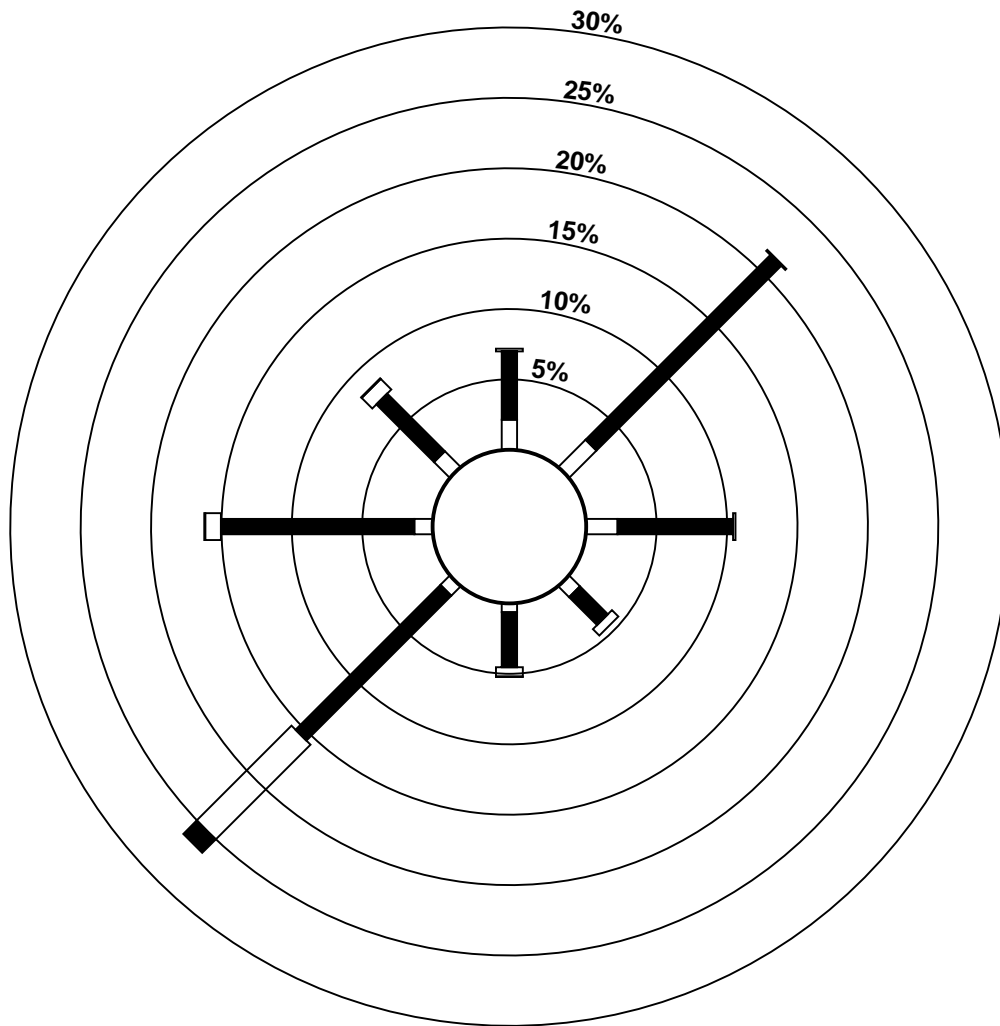
Speed (kph)							
Direction	>1 to 5	>5 to 11	>11 to 19	>19 to 28	>28 to 38	>38	Totals
North	4.86	0.19	0.00	0.00	0.00	0.00	6.40
NorthEast	18.55	0.11	0.00	0.00	0.00	0.00	19.33
East	8.21	0.17	0.00	0.00	0.00	0.00	9.61
SouthEast	2.81	0.64	0.00	0.00	0.00	0.00	4.13
South	3.91	0.66	0.03	0.00	0.00	0.00	6.62
SouthWest	14.55	9.53	1.34	0.00	0.00	0.00	30.38
West	13.74	1.11	0.07	0.00	0.00	0.00	16.00
NorthWest	5.79	1.06	0.06	0.00	0.00	0.00	7.53
Totals	72.42	13.47	1.50	0.00	0.00	0.00	87.39

Percent Calm	12.61
Number of Data Values	8749
Hours in Time Period	8784

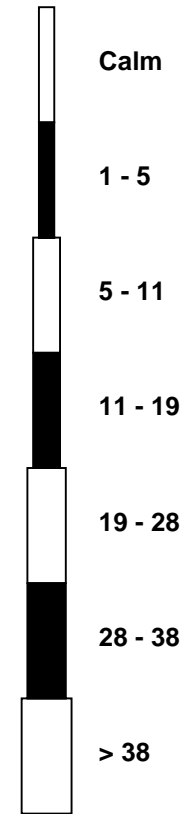
WCAS - Hinton
Wind Speed Rose



Wind Speed (WS) - kph
2012



Wind Frequency (kph)



Hinton Pulp
A Division of West Fraser Mills Limited
Frequency Distribution Charts
Total Reduced Sulfur Monthly Averages
Year 2012

West Central Airshed Society - Hinton (AMS 906)
 Annual Summary for 2012
 TRS (ppb)

Month	Number of Data	Mean	Maximum 24-Hour Value	Maximum 1-Hour Value	Operational Time (%)	Number 24-Hour Exceedances**	Number 1-Hour Exceedances*	Percent of Data in each Concentration Range			
								<=3	>3-10	>10-50	>50
January	709	1.3	3.5	9.6	100.0	0	0	89.4	10.6	0.0	0.0
February	662	1.8	8.7	31.0	100.0	2	24	83.7	12.5	3.8	0.0
March	679	1.4	3.2	18.3	95.7	0	2	83.4	16.2	0.4	0.0
April	685	1.1	3.2	21.8	100.0	0	11	90.5	7.7	1.8	0.0
May	709	0.7	2.1	11.4	100.0	0	1	95.2	4.5	0.3	0.0
June	685	0.9	2.4	16.0	99.9	0	3	94.2	5.4	0.4	0.0
July	706	1.7	4.8	21.7	99.9	1	18	82.0	15.0	3.0	0.0
August	709	1.3	6.0	36.5	100.0	1	10	89.3	8.9	1.8	0.0
September	685	2.9	7.7	38.1	99.9	7	50	73.0	18.8	8.2	0.0
October	709	1.4	8.0	56.2	100.0	2	12	88.7	9.5	1.7	0.1
November	686	1.4	6.0	20.3	100.0	1	13	86.0	12.0	2.0	0.0
December	692	1.3	6.7	24.8	98.4	2	8	89.2	9.5	1.3	0.0
Annual	8316	1.4	8.7	56.2	99.5	16	152	87.0	10.9	2.1	0.0

* Hours of TRS above 10 ppb H₂S Hourly Average Guideline.

**Hours of TRS above 4 ppm H₂S Daily Average Guideline.

Hinton Pulp
A Division of West Fraser Mills Limited
Frequency Distribution Charts
PM Monthly Averages
Year 2012

West Central Airshed Society - Hinton (AMS 906)
 Annual Summary for 2012
 PM_{2.5} (µg/m³)

Month	Number of Data	Mean	Maximum 24-Hour Value	Maximum 1-Hour Value	Operational Time (%)	Number 24-Hour Violations	Number 1-Hour Violations
January	741	8.4	15.3	83.4	99.6	0	1
February	694	11.2	26.9	119.1	99.7	0	1
March	712	7.3	10.3	25.2	95.7	0	0
April	720	6.3	11.3	40.8	100.0	0	0
May	743	7.8	12.2	31.0	99.9	0	0
June	719	7.3	14.6	38.5	99.9	0	0
July	736	12.1	44.8	102.5	99.1	3	5
August	736	9.5	15.9	46.0	98.9	0	0
September	717	9.2	18.2	90.1	99.6	0	1
October	742	5.9	8.2	21.3	99.7	0	0
November	714	8.5	16.0	27.0	99.2	0	0
December	741	9.0	20.9	57.4	99.6	0	0
Annual	8715	8.5	44.8	119.1	99.23	3	8

Hinton Pulp
A Division of West Fraser Mills Limited
Frequency Distribution Charts
Meteorological Measurements
Year 2012

Summary Report

Continuous air quality/meteorological monitoring measurements

West Central Airshed Society

Hinton Pulp / Hinton Station 906		January to December 2012									
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Min	Max	P10	Q1	Percentile Median	Q3	P90
TRS (ppb)	421	8317	99.5	1.4	0.0	56.0	0.1	0.2	0.5	1.5	3.8
Particulate Matter 2.5 microns (μm^3)	1	8716	99.2	8.5	0.0	119.1	3.4	4.8	6.9	10.5	15.2
Wind Speed (kph)	0	8750	99.6	2.9	0.0	16.8	0.4	1.0	2.1	4.1	6.7
Temperature ($^{\circ}\text{C}$)	0	8750	99.6	3.2	-36.6	32.2	-5.8	-2.0	2.9	8.4	12.4
Relative Humidity (%)	0	8750	99.6	59.8	5.8	91.6	28.5	42.2	63.4	78.8	84.8
Std Dev Wind Direction (deg)	0	8750	99.6	53.2	7.8	121.4	31.2	38.8	48.9	64.6	83.9
Std Dev Wind Speed (kph)	0	8750	99.6	2.4	0.0	10.5	0.9	1.3	2.0	3.2	4.6