



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s. Bal Adalat, Gondal Road, RAJKOT - 360 002.

Ph.: +91 281 2360695 ■ E-mail : royaleenvironment@live.com ■ admin@royalconsultancy.com

Ref. No. : 231/122012-13

Date: 29/12/2012

AMBIENT AIR QUALITY MONITORING REPORT

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

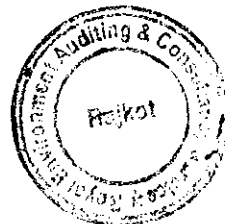
Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	---	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	---	03/12/2012	03/12/2012	03/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	5 to10	5 to10	5 to10
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	100	100	100
10.	Measured Concentration of PM 10	µg/m3	50	53	49
11.	Permissible limits for PM 2.5	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	29	34	30
13.	Permissible limits for SO2	µg/m3	80	80	80
14.	Measured Concentration of SO2	µg/m3	12.5	13.1	11.9
15.	Permissible limits for NO2	µg/m3	80	80	80
16.	Measured Concentration of NO2	µg/m3	20.9	22.6	20.3
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	217	259	232

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

2) 2 Nos. Ecotach make Respirable Dust Sampler Model No. AAS 217 BL, PM 2.5 & PM 10 Sampler AAS 127, Gaseous Sampling Attachment

Calibration is due on: 1) 22/04/2013 2) 03/07/2013

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Test Method : As per IS Standards - 5182_2/4/6

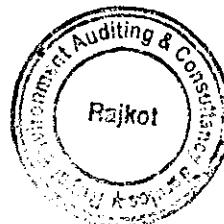
Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	---	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	---	06/12/2012	06/12/2012	06/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	3 to 9	3 to 9	3 to 9
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	100	100	100
10.	Measured Concentration of PM 10	µg/m3	53	55	47
11.	Permissible limits for PM 2.5	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	28	32	26
13.	Permissible limits for SO2	µg/m3	80	80	80
14.	Measured Concentration of SO2	µg/m3	12.1	12.7	11.1
15.	Permissible limits for NO2	µg/m3	80	80	80
16.	Measured Concentration of NO2	µg/m3	21.8	22.1	20.7
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	210	263	227

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	----	10/12/2012	10/12/2012	10/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	4 to 11	4 to 11	4 to 11
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m ³	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	49	53	43
11.	Permissible limits for PM 2.5	µg/m ³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	30	35	28
13.	Permissible limits for SO₂	µg/m ³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	12.5	12.9	11.2
15.	Permissible limits for NO₂	µg/m ³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	21.9	22.2	21.3
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	211	265	224

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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Name of company : Jindal Saw Limited,
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Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	---	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	---	13/12/2012	13/12/2012	13/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	3 to 10	3 to 10	3 to 10
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	100	100	100
10.	Measured Concentration of PM 10	µg/m3	51	55	45
11.	Permissible limits for PM 2.5	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	31	36	27
13.	Permissible limits for SO2	µg/m3	80	80	80
14.	Measured Concentration of SO2	µg/m3	12.1	13.2	11.3
15.	Permissible limits for NO2	µg/m3	80	80	80
16.	Measured Concentration of NO2	µg/m3	21.7	22.9	21.1
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	218	252	206

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	----	17/12/2012	17/12/2012	17/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	3 to 9	3 to 9	3 to 9
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m ³	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	50	57	47
11.	Permissible limits for PM 2.5	µg/m ³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	30	34	29
13.	Permissible limits for SO ₂	µg/m ³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	12.4	12.7	11.5
15.	Permissible limits for NO ₂	µg/m ³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	22.1	22.8	21.7
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	207	261	209

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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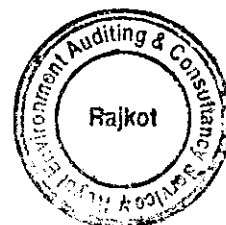
Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	----	20/12/2012	20/12/2012	20/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	5 to 11	5 to 11	5 to 11
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	100	100	100
10.	Measured Concentration of PM 10	µg/m3	53	59	46
11.	Permissible limits for PM 2.5	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	30	36	27
13.	Permissible limits for SO2	µg/m3	80	80	80
14.	Measured Concentration of SO2	µg/m3	12.2	13.3	11.3
15.	Permissible limits for NO2	µg/m3	80	80	80
16.	Measured Concentration of NO2	µg/m3	22.1	23.2	21.7
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	205	254	213.0

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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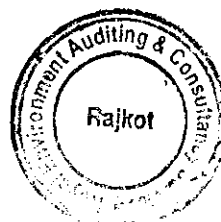
Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	----	24/12/2012	24/12/2012	24/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	5 to 12	5 to 12	5 to 12
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m³	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	51	56	49
11.	Permissible limits for PM 2.5	µg/m³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	31	34	28
13.	Permissible limits for SO₂	µg/m³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	12.8	13.5	12.3
15.	Permissible limits for NO₂	µg/m³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	22.2	23.6	21.6
17.	Permissible limit for CO **	µg/m³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	208	248	215.0

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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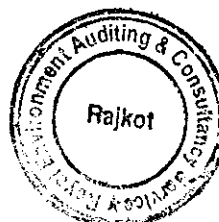
Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	---	Main Gate (SE)	Sinter Plant - 1 (NW)	Nr. Workshop Spiral - II (SW)
02.	Date of sampling	---	27/12/2012	27/12/2012	27/12/2012
03.	Time of sampling	Hr.	9.00	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	5 to 11	5 to 11	5 to 11
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m ³	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	50	54	46
11.	Permissible limits for PM 2.5	µg/m ³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	30	33	26
13.	Permissible limits for SO ₂	µg/m ³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	12.5	13.9	11.3
15.	Permissible limits for NO ₂	µg/m ³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	20.9	22.9	21.6
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	205	243	214.0

Instrument Used: 1) Combo Sampler AAS 271 & Gaseous Sampling Attachment AAS 109

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Date: 29/12/2012

AMBIENT AIR QUALITY MONITORING REPORT

UpWind Direction

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	AAQM - 1	AAQM - 2	AAQM - 3	AAQM - 4
01.	Location of Ambient	---	Old Colony (Nr. Environment Laboratory)	Nr. Rain Water Harvesting	LPG Yard (Nr. Water Reservoir)	Between Sinter - 2 & Spiral - 2
02.	Date of sampling	---	12/12/2012	13/12/2012	14/12/2012	15/12/2012
03.	Time of sampling	Hr.	9.00	11.00	9.00	9.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NW	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	4 to 11	3 to 10	5 to 12	3 to 9
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m³	100	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	29	32	29	37
11.	Permissible limits for PM 2.5	µg/m³	60	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	45	53	52	57
13.	Permissible limits for SO₂	µg/m³	80	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	11.9	12.6	11.6	11.3
15.	Permissible limits for NO₂	µg/m³	80	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	19.6	21.1	21.6	22.7
17.	Permissible limit for CO **	µg/m³	2000.0	2000.0	2000	2000
18.	Measured Concentration of CO	µg/m ³	209.0	215.0	278	259

Instrument used : 2 Nos of Envirotech make (RDS), and 2.5 Attachment Model No. APM - 460 BL, Gaseous Sampling Kit APM 411,
All are Calibration due on: 23/04/2013

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DownWind Direction

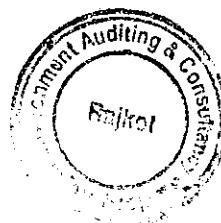
Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	AAQM - 5	AAQM - 6	AAQM - 7	AAQM - 8
01.	Location of Ambient	---	Labour Colony	New Colony (Shopping Centre)	ADMN Building	Weigh bridge
02.	Date of sampling	---	12/12/2012	13/12/2012	14/12/2012	15/12/2012
03.	Time of sampling	Hr.	9.30	11.30	9.30	10.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NW	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	4 to 11	3 to 10	5 to 12	3 to 9
07.	Average flow rate during sampling	m ³ /Hr.	1.0	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m³	100	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	31	29	34	33
11.	Permissible limits for PM 2.5	µg/m³	60	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	55	50	53	48
13.	Permissible limits for SOx	µg/m³	80	80	80	80
14.	Measured Concentration of SOx	µg/m ³	12.7	11.9	12.1	12.8
15.	Permissible limits for Nox	µg/m³	80	80	80	80
16.	Measured Concentration of NOx	µg/m ³	20.1	21.3	21.8	22.8
17.	Permissible limit for CO **	µg/m³	2000.0	2000.0	2000	2000
18.	Measured Concentration of	µg/m ³	218.0	173.0	229	206

Instrument used : 2 Nos of Envirotech make (RDS), and 2.5 Attachment Model No. APM - 460 BL, Gaseous Sampling Kit APM 411,
All are Calibration due on: 23/04/2013

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Date: 29/12/2012

Ref. No. : 241/12/2012-13

FUGITIVE EMISSION MONITORING REPORT

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

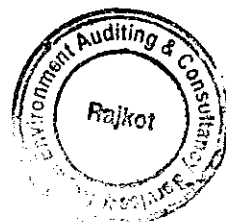
Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	A - 1	A - 2	A - 3
01.	Location of Ambient	---	RMH Junction House	RMH Stock House	Sinter RMH Yard
02.	Date of sampling	---	12/12/2012	12/12/2012	13/12/2012
03.	Time of sampling	Hr.	10.00	10.30	12.30
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	-----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	4 to 11	4 to 11	3 to 10
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m3	2175	2438	1662
11.	Permissible limits for SO2	µg/m3	150	150	150
12.	Measured Concentration of SO2	µg/m3	13.1	13.5	12.4
13.	Permissible limits for NO2	µg/m3	120	120	120
14.	Measured Concentration of NO2	µg/m3	23.0	23.9	22.6
15.	Permissible limit for CO **	µg/m3	5000.0	5000.0	5000
16.	Measured Concentration of CO	µg/m3	274.0	255.0	233.0

Instrument used : 2 Nos of Envirotech make (RDS), and 2.5 Attachment Model No. APM - 460 BL, Gaseous Sampling Kit APM 411,

All are Calibration due on: 23/04/2013

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Date: 29/12/2012

Ref. No. :242/12/2012-13

FUGITIVE EMISSION MONITORING REPORT

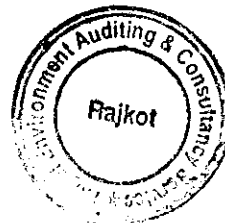
Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/4/6

Sr. No.	Particulars	Unit	A - 4	A - 5	A - 6
01.	Location of Ambient	----	Sinter 2 Ground Hopper	DISP	Sinter 1 Main to PMD
02.	Date of sampling	----	13/12/2012	14/12/2012	14/12/2012
03.	Time of sampling	Hr.	12.00	10.30	10.00
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	NW	NW	NW
06.	Average Wind Speed	Km/Hr.	3 to 10	5 to 12	5 to 12
07.	Average flow rate during sampling	m3/Hr.	1.0	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2
09.	Permissible limits for PM 10	µg/m3	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m3	961	1041	2263
11.	Permissible limits for SO2	µg/m3	150	150	150
12.	Measured Concentration of SO2	µg/m3	12.8	12.5	13.4
13.	Permissible limits for NO2	µg/m3	120	120	120
14.	Measured Concentration of NO2	µg/m3	22.8	22.5	23.5
15.	Permissible limit for CO **	µg/m3	5000.0	5000.0	5000
16.	Measured Concentration of CO	µg/m3	235.0	209.0	202.0

Instrument used : 2 Nos of Envirotech make (RDS), and 2.5 Attachment Model No. APM - 460 BL, Gaseous Sampling Kit APM 411,
All are Calibration due on: 23/04/2013

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Ref. No. :245/12/2012-13

Date: 29/12/2012

STACK EMISSION MONITORING RESULTS Sinter Plant-I

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

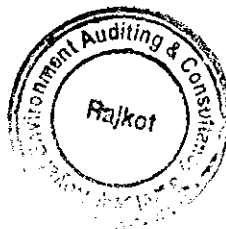
Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 4	Stack No. 5	Stack No. 6
01	Date of Sampling	—	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012	13/12/2012
02	Time of sampling	Hr.	9.00	10.15	11.00	12.00	15.00	16.00
03	Stack Attached to	---	Sinter Furnace	Discharge End	Fuel & Flux Crusher and Screening	Fuel & Flux Crushing House	Secondary Mixture House	Primary Mixture House
04	Air Pollution Control Measures	—	ESP	ESP	Bag Filter	Bag Filter	—	—
05	Stack Height	Meter	50	32.8	32.8	27.05	36.08	19.75
06	Stack Diameter	Meter	2.0	1.30	1.40	0.70	1.25	1.25
07	Stack Temperature	°C	121	125	44	52	66	87
08	Ambient Temperature	°C	31	32	32	31	31	30
09	Average Velocity of Flue Gases	M/Sec.	9.4	6.9	6.7	5.8	5.5	6.8
10	Isokinetic flow rate for P.M. Sampling	LPM	13	22	27	23	21	24
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	48	46	45	46	43	40
14	Permissible limits for SO ₂	ppm	100	NA	NA	NA	NA	NA
15	Measured Concentration of SO ₂	ppm	11.5	—	—	—	—	—
16	Permissible limits for NO _x	ppm	50	NA	NA	NA	NA	NA
17	Measured Concentration of NO _x	ppm	6.5	—	—	—	—	—

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

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Ref. No. : 246/12/2012-13

Date: 29/12/2012

STACK EMISSION MONITORING RESULTS Sinter Plant-II

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 4	Stack No. 5	Stack No. 6
01	Date of Sampling	---	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
02	Time of sampling	Hr.	12.00	11.15	13.00	9.45	9.00	10.30
03	Stack Attached to	---	Sinter Furnace	Tail End Stack	Flux	Primary Mixer De-duster system	Secondary Mixer De-duster system	Fuel Screening deduster System (Screening Flux Stack)
04	Air Pollution Control Measures	---	ESP	ESP	Bag Filter	---	---	Dust Collector
05	Stack Height	Meter	50	50	30	30	30	30
06	Stack Diameter	Meter	2	1.3	0.7	1.25	1.25	---
07	Stack Temperature	°C	141	146	50	53	55	46
08	Ambient Temperature	°C	30	30	30	29	28	29
09	Average Velocity of Flue Gases	M/Sec.	14.6	8.6	6.3	8.1	6.2	6.5
10	Isokinetic flow rate for P.M. Sampling	LPM	23	26	25	15	24	26
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	45	43	48	33	39	34
14	Permissible limits for SO ₂	ppm	100	NA	NA	NA	NA	NA
15	Measured Concentration of SO ₂	ppm	14.6	---	---	---	---	---
16	Permissible limits for NO _x	ppm	50	NA	NA	NA	NA	NA
17	Measured Concentration of NO _x	ppm	20.4	---	---	---	---	---

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

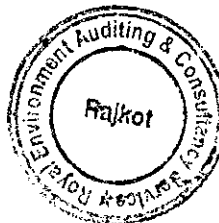
NA= Not Applicable

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make, VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

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[Handwritten Signature]
Analyst



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Ref. No.: 247/12/2012-13

Date: 29/12/2012

STACK EMISSION MONITORING RESULTS BLAST FURNCE & PCI

Name of company : Jindal Saw Limited,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 4	Stack No. 5
01	Date of Sampling	---	14/12/2012	14/12/2012	14/12/2012	14/12/2012	14/12/2012
02	Time of sampling	Hr.	16.00	17.00	12.00	10.00	9.00
03	Stack Attached to	---	Boiler - I	Boiler - II	Dedusting System	Stove Stack	Coal Pulverization
04	Air Pollution Control Measures	---	---	---	Bag Filter	-----	Bag Filter
05	Stack Height	Meter	45	45	35.0	50.0	32.00
06	Stack Diameter	Meter	1.380	1.380	1.484	2.250	---
07	Stack Temperature	°C	173	182	65	337	60
08	Ambient Temperature	°C	30	30	31	32	32
09	Average Velocity of Flue Gases	M/Sec.	7.2	7.5	7.6	8.2	8.3
10	Isokinetic flow rate for P.M. Sampling	LPM	20	21	28	17	32
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm3	150	150	150	150	150
13	Measured Concentration of PM.	mg/Nm3	3	4	45	4	48
14	Permissible limits for SO2	mg/Nm3	40	40	40	40	100 (ppm)
15	Measured Concentration of SO2	mg/Nm3	5.6	5.2	N.D.	N.D.	1.9 (ppm)
16	Permissible limits for NOx	mg/Nm3	25	25	25	25	50 (ppm)
17	Measured Concentration of Nox	mg/Nm3	7.5	7.7	6.3	5.5	0.9 (ppm)

Note : Minimum Detectable Limit of SO2 & Nox is 0.1 and 0.01 ppm respectively.
Instrument Used : Stack Monitoring Kit - Vayubodhan make - VSS I
Both Stack kit Recalibration is Due on : 21/04/2013

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Ref. No. :248/12/2012-13

Date: 29/12/2012

STACK EMISSION MONITORING RESULTS Captive Power Plant

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 6	Stack No. 7	Stack No. 8	Stack No. 9
01	Date of Sampling	→	14/12/2017	Standby	Standby	Standby
02	Time of sampling	Hr.	15.00			
03	Stack Attached to	---	6000 KVA D.G.	3240 KVA D.G.	3240 KVA D.G.	1180 KVA D.G.
04	Air Pollution Control Measures	---	---	---	---	---
05	Stack Height	Meter	57.0	35	35	35
06	Stack Diameter	Meter	1.984	1.484	1.484	0.980
07	Stack Temperature	°C	125	---	---	---
08	Ambient Temperature	°C	31	---	---	---
09	Average Velocity of Flue Gases	M/Sec.	10.9	---	---	---
10	Isokinetic flow rate for P.M. Sampling	LPM	8.20	---	---	---
11	Gaseous Sampling Flow Rate	LPM	2.00	---	---	---
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	48.00	---	---	---
14	Permissible limits for SO ₂	ppm	100	100	100	100
15	Measured Concentration of SO ₂	ppm	18.50	---	---	---
16	Permissible limits for Nox	ppm	50	50	50	50
17	Measured Concentration of Nox	ppm	14.60	---	---	---

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Vayubodhan make - VSS I

Recalibration is Due on : 06/05/2012

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Ref. No. : 249/12/2012-13

Date: 29/12/2012

STACK EMISSION MONITORING RESULTS Pipe Complex

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

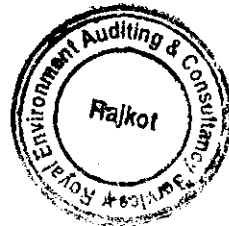
Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 4	Stack No. 5	Stack No. 6
01	Date of Sampling	---	15/12/2012	15/12/2012	15/12/2012	15/12/2012	15/12/2012	15/12/2012
02	Time of sampling	Hr.	12.00	13.00	Not Running During Visit	16.30	15.45	Not Running During Visit
03	Stack Attached to	---	Core Shop-II	Bitumin Drying Oven - II	Bitumin Drying Oven - I	Barrel Grinding - I	Barrel Grinding - II	Core Cleaning & Dusting-II
04	Air Pollution Control Measures	---	---	---	---	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	30	32.8	32.8	30	30	30
06	Stack Diameter	Meter	0.584	1.375	1.375	0.584	0.584	0.588
07	Stack Temperature	°C	58	144	---	40	45	---
08	Ambient Temperature	°C	33	33	---	32	33	---
09	Average Velocity of Flue Gases	M/Sec.	14.8	8.2	---	11.1	12.8	---
10	Isokinetic flow rate for P.M. Sampling	LPM	10	26	---	8	9	---
11	Gasgous Sampling Flow Rate	LPM	2.0	2.0	---	2.0	2.0	---
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	31	42	---	46	48	---
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	4.2	7.9	---	1.6	1.7	---
16	Permissible limits for Nox	mg/Nm ³	25	25	25	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	4.4	9.9	---	4.6	5.8	---

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

Royal Environment Auditing & Consultancy Service



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Ref. No. : 250/12/2012-13

Date: 28/12/2012

STACK EMISSION MONITORING RESULTS Pipe Copmplex

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 7	Stack No. 8	Stack No. 9	Stack No. 10	Stack No. 11	Stack No. 12
01	Date of Sampling	---	16/12/2012	16/12/2012	16/12/2012	16/12/2012	16/12/2012	16/12/2012
02	Time of sampling	Hr.	9.00	10.00	11.00	12.00	13.00	Not Running During Visit
03	Stack Attached to	---	Mg Converter-I	Zn Coating - I	Zn Coating - II	Annealing Furnace - I	Annealing Furnace - II	Barrel Grinding - IV&V
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	---	---	Bag Filter
05	Stack Height	Meter	30	30	30	32	32	25
06	Stack Diameter	Meter	0.488	0.584	0.584	1.375	1.375	0.488
07	Stack Temperature	°C	48	45	49	164	163	---
08	Ambient Temperature	°C	32	33	34	32	32	---
09	Average Velocity of Flue Gases	M/Sec.	6.5	4.6	9.2	7.9	6.4	---
10	Isokinetic flow rate for P.M. Sampling	LPM	11	8	16	23	19	---
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0	2.0	---
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)	150	150	150
13	Measured Concentration of PM	mg/Nm ³	42	16(Zn)	15 (Zn)	27	35	---
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA	100 (PPM)	100 (ppm)	40
15	Measured Concentration of SO ₂	mg/Nm ³	N.D.	---	---	3.3(PPM)	3.4(PPM)	---
16	Permissible limits for Nox	mg/Nm ³	25	NA	NA	50 (PPM)	50 (PPM)	25
17	Measured Concentration of Nox	mg/Nm ³	5	---	---	5.4 (PPM)	5.7 (PPM)	---

Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

N.D.= Not Detectable

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

Royal Environment Auditing & Consultancy Service



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Ref. No. : 251/12/2012-13

Date: 29/12/2012

MONITORING RESULTS

Complex

Name of company : Jindal Saw Limited,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 13	Stack No. 14	Stack No. 15	Stack No. 16	Stack No. 17
01	Date of Sampling	---	16/12/2012	16/12/2012	16/12/2012	16/12/2012	16/12/2012
02	Time of sampling	Hr.	14.30	Not Running During Visit	Not Running During Visit	15.00	Not Running During Visit
03	Stack Attached to	---	Core Cleaning & Dusting-I	Core Shop-IV	Core Shop-III	Core Shop-I	Shot Blasing (Coating Plant)
04	Air Pollution Control Measures	---	Bag Filter	---	---	---	Cyclone Seprater & Bag Filter
05	Stack Height	Meter	30	30	30	30	---
06	Stack Diameter	Meter	0.588	0.584	0.584	0.584	41
07	Stack Temperature	°C	52	---	---	40	---
08	Ambient Temperature	°C	33	---	---	33	---
09	Average Velocity of Flue Gases	M/Sec.	10.3	---	---	12.2	---
10	Isokinetic flow rate for P.M. Samplin	LPM	18	---	---	22	---
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	2.0	---
12	Permissible limits for PM	mg/Nm3	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm3	43	---	---	26	---
14	Permissible limits for SO2	mg/Nm3	40	40	40	40	40
15	Measured Concentration of SO2	mg/Nm3	N.D.	---	---	N.D.	---
16	Permissible limits for Nox	mg/Nm3	25	25	26	25	26
17	Measured Concentration of Nox	mg/Nm3	N.D.	---	---	2.6	---

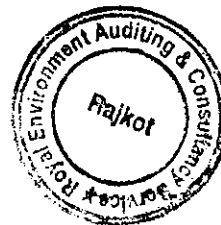
Note : Minimum Detectable Limit of SO2 & Nox is 0.1 and 0.01 ppm respectively.

N.D= Not Detectable

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

Royal Environment Auditing & Consultancy Service



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Date: 29/12/2012

Ref. No. : 252/12/2012-13

STACK EMISSION MONITORING RESULTS Pipe Complex

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 19	Stack No. 20	Stack No. 21	Stack No. 22	Stack No. 23	Stack No. 24
01	Date of Sampling	—	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012
02	Time of sampling	Hr.	Not Running During Visit	9.00	17.00	14.00	11.45	10.30
03	Stack Attached to	—	Shot Blasting (Coating Plant)	Mg Converter -II	Zinc Coating - III	Zn Coating - IV & V	Barrel Grinding- III	Sand Reclamation
04	Air Pollution Control Measures	—	Bag Filter	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	—	30	30	30	30	32
06	Stack Diameter	Meter	—	0.488	—	—	—	—
07	Stack Temperature	°C	—	52	48	51	39	41
08	Ambient Temperature	°C	—	31	31	32	32	33
09	Average Velocity of Flue Gases	M/Sec.	—	4.3	11.3	12.8	11.9	12.9
10	Isokinetic flow rate for P.M. Sampling	LPM	—	8	20	23	22	24
11	Gaseous Sampling Flow Rate	LPM	—	2.0	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	—	150	20 (Zn)	20 (Zn)	150	150
13	Measured Concentration of PM.	mg/Nm ³	—	36	15 (Zn)	14 (Zn)	43	45
14	Permissible limits for SO ₂	mg/Nm ³	—	40	NA	NA	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	—	N.D.	—	—	1.3	N.D.
16	Permissible limits for Nox	mg/Nm ³	—	25	NA	NA	25	25
17	Measured Concentration of Nox	mg/Nm ³	—	2.7	—	—	4.6	N.D.

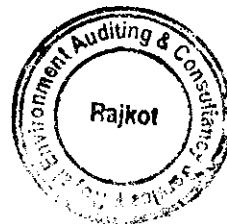
Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

N.D.= Not Detectable

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

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Shivpal
Analyst



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Ref. No. :255/12/2012-13

Date: 29/12/2012

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Date of Sampling : 16th & 17th December, 2012

Sr. No.	Location of Sampling	Results in dB(A) (Day Time)	Results in dB(A) (Night Time)
	Permissible Limits	75.0	70.0
01.	Nr. Admin. Building	68.3	66.9
02.	Nr. Old Colony	66.5	65.1
03.	Nr. LPG Yard	67.3	65.5
04.	Nr. Sinter Plant	70.1	68.2
05.	Nr. R. O. Plant	68.8	66.9
06.	Nr. Gate No. 2	67.8	66.3
07.	Nr. New Colony	69.2	67.5

Instruments used : Sound level meter, Model : SL - 4001 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 dB.

Recalibration is due on : 05/10/2013

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Ref. No. : 254/12/2012-13

Date: 29/12/2012

WORK ZONE NOISE LEVEL MEASUREMENT

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Date of Sampling : 16th & 17th December, 2012

Sr. No.	Location of Sampling	Results Avg. in dB(A)
01.	Inside Control Room of Sinter Plant	66.9
02.	Nr. Stock House of BF	67.9
03.	Inside Control Room of BF	67.7
04.	Inside Control Room of Blower House	70.2
05.	Inside Control of Cast House	68.2
06.	Inside Control Room of CPP	70.6
07.	Inside Control Room of Annealing Furnace of DISP	68.5
08.	Inside Laboratory of BF	69.8
09.	Inside Laboratory of DISP	67.6
10.	Inside ID & OD Control Room of JCO Plant	69.5
11.	Inside Control Room – Mill area of Spiral Plant	72.4
12.	Inside Spiral – 1	71.5
13.	Nr. Pipe cutting Area of Spiral Plant	72.9
14.	Inside JCO Plant	69.5
15.	Nr. JCO Press	71.4
16.	Inside DISP Plant	71.6
17.	Inside Coating Plant	69.9

Instruments used : Sound level meter, Model : SL - 4001 (Lutron Make)

Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 05/10/2013

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Form No. 37
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

1 Name of the Department/Plant.: Sinter, BF, DISP, JCO & Coating Units at Jindal Saw Limited, Samaghogha.

2 Raw materials, by products and finished products involved in the process. TOTAL DUST

3 Particulars of sampling

Date of Sampling:- 16th & 17th December, 2012

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	Spiral Plant Nr. ID/OD	Total Dust	Personal Respirable Dust sampler APM 800	02	2-3	2.5	10	Gravimetric	8	---	<i>Shivpal</i>	MR. SHIVPAL SINGH
2	JCO Plant Nr. JCO Press	Total Dust		02	3-5	4.0	10	Gravimetric	6	---		
3	Sinter Plant At First Floor	Total Dust		02	2-4	3	10	Gravimetric	5	---		
4	BF Plant* (Cast House)	CO		02	0.2-0.4	0.3	2	Gravimetric	9	---		
		Total Dust			2-4	3	10					
5	Coating Plant (Blasting Area)	Total Dust		02	2-4	3.0	10	Gravimetric	4	---		
6	DISP Plant Main Entrance	Total Dust	02	3-5	4.0	10	Gravimetric	10	---			

Instruments used : Envirotech make personal sampler, Model No. APM 800

Calibration Date Due on : 11/12/2013



For. Royal Environment Auditing & Consultancy Service

Shivpal
Authorized Sign



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Ref. No. : 256/12/2012-13

Date: 29/12/2012

WATER SAMPLES ANALYSIS REPORT

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Date of Sample Collection : 17/12/2012

Source of Sample : Borewell Water Sample From Nr, Mess

Sr. No.	Parameters	Unit	Acceptable Limit(*)	Permissible Limits(*)	Results
01.	Colour	Pt.Co.Scale	5	15	Colourless
02	Odour	--	Agreable	Agreable	Odourless
03	pH	pH Unit	6.5 to 8.5	No Relaxation	7.61
04.	T.D.S.	mg/l	500	2000	1311
05.	Total Hardness	mg/l	200	600	421
06.	Turbidity	NTU	1	5	1.0
07.	Chloride	mg/l	250	1000	528
08.	Alkalinity	mg/l	200	600	305
09.	Phenolic Compound	mg/l	0.001	0.002	NIL
10.	Residual Chlorine	mg/l	0.2	1.0	NIL
11.	Fluoride	mg/l	1.0	1.5	0.34
12.	Ca as Ca	mg/l	75	200	212
13.	Mg as Mg	mg/l	30	100	185
14.	Copper	mg/l	0.05	1.5	NIL
15.	Iron	mg/l	0.3	No Relaxation	0.29
16.	Manganese	mg/l	0.1	0.3	0.43
17.	Sulphate	mg/l	200	400	0.10
18.	Nitrate	mg/l	45	No Relaxation	11

(*) Acceptable Limit & Permissible Limits as per IS 10500 : 2012, Drinking Water Specification

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Ref. No. : 257/12/2012-13

Date: 29/12/2012

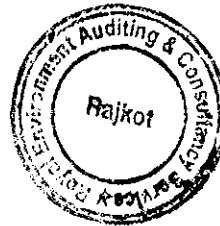
REPORT OF DOMESTIC WASTEWATER ANALYSIS

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Source Of Sample Collection : Domestic Effluent After Treatment
Date of Sample Collection : 17/12/2012

Sr. No. Parameters	Unit	GPCB limits	STP Inlet	STP Outlet
01. pH	pH Unit	----	7.85	7.59
02. BOD (3 Days at 27°C)	mg/l	<20	183	16
03. Suspended Solids	mg/l	<30	90	18
04. Residual Chlorine	mg/l	Min. 0.5	---	0.59

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Ref. No. : 243/12/2012-13

Date: 29/12/2012

Bag Filter Efficiency Report APCM Inlet

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 1	Stack No. 2	Stack No. 3	Stack No. 4	Stack No. 5	Stack No. 6
01	Date of Sampling	---	16/12/2012	16/12/2013	16/12/2014	15/12/2012	15/12/2013	17/12/2012
02	Attached to		Zinc Coating	Mg Converter	Core Cleaning & Dusting-I	Barrel Grinding - I	Barrel Grinding - II	Sand Reclamation
03	Stack Height	Meter	30	30	30	30	30	32
04	Stack Diameter	Meter	0.488	0.584	0.588	0.584	0.584	---
05	Stack Temperature	°C	47	51	55	39	46	44
06	Ambient Temperature	°C	27	27	26	28	28	28
07	Average Velocity of Flue Gase	M/Sec.	4.9	6.4	10.2	11.9	12.4	13.5
08	Inlet	mg	1533	985	762	1618	1596	1093
09	Outlet	mg	16	42	43	46	48	45
10	Efficiency	%	98.96	95.74	94.36	97.16	96.99	95.88

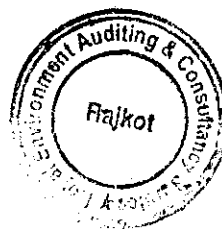
Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

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Ref. No.: 244/12/2012-13

Date: 29/12/2012

Bag Filter Efficiency Report APCM Inlet

Name of company : Jindal Saw Limited,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack No. 7	Stack No. 8	Stack No. 9	Stack No. 10	Stack No. 11	Stack No. 12	Stack No. 13
01	Date of Sampling	---	15/12/2012	16/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012	17/12/2012
02	Attached to	---	Core Cleaning & Dusting-II	Zinc Coating - II	Mg Converter - II	Barrel Grinding-III	Zn Coating-III	Barrel Grinding-IV & V	Zn Coating - IV & V
03	Stack Height	Meter	30	30	30	30	30	25	30
04	Stack Diameter	Meter	0.588	---	0.488	0.584	---	0.488	---
05	Stack Temperature	°C	Not running during visit	50	52	46	53	Not running during visit	51
06	Ambient Temperature	°C	---	28	28	28	27	---	27
07	Average Velocity of Flue Gas	M/Sec.	---	9.6	4.8	12.4	11.7	---	12.9
08	Inlet	mg	---	1673	1135	1596	1623	---	1521
09	Outlet	mg	---	15	36	43	15	---	14
10	Efficiency	%	---	99.10	96.83	97.31	99.08	---	99.08

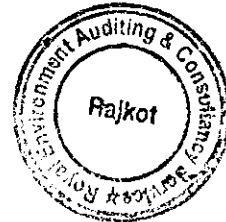
Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : 2 Nos of Stack Monitoring Kit - Vayubodhan make - VSS I

Both Stack kit Recalibration is Due on : 21/04/2013

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Signature



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Analyst