



Royal

Environment Auditing & Consultancy Service

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

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Ref. No. : 671/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	05/11/2015	05/11/2015	05/11/2015
03.	Time of sampling	----	8.30	8.50	9.10
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	WSW	WSW	WSW
06.	Average Wind Speed	Km/Hr.	1.4	1.4	1.4
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	42	28
11.	Permissible limits for PM 2.5*	µg/m³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	22	16	13
13.	Permissible limits for SO₂*	µg/m³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	2.1	2.7	1.8
15.	Permissible limits for NO₂*	µg/m³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	12.5	10.3	8.4
17.	Permissible limit for CO **	µg/m³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (AFM - 217 BL). (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

*Permissible Limits are as per NAAQ Standard 16th November 2009. & ** Results are 8 hourly monitoring values.

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Ref. No. : 672/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	08/11/2015	08/11/2015	08/11/2015
03.	Time of sampling	----	8.40	9.00	9.20
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	N	N	N
06.	Average Wind Speed	Km/Hr.	2.4	2.4	2.4
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	47	38	30
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	19	14	11
13.	Permissible limits for SO ₂ *	µg/m3	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	1.9	3.4	1.7
15.	Permissible limits for NO ₂ *	µg/m3	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	11.6	9.7	8.1
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

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03/12/15



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Ref. No. : 673/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha.

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	11/11/2015	11/11/2015	11/11/2015
03.	Time of sampling	----	8 00	8 20	8 50
04.	Duration of Sampling	Min.	1440 00	1440 00	1440 00
05.	Dominant Wind Direction (From)	-----	NNE	NNE	NNE
06.	Average Wind Speed	Km/Hr.	2.0	2.0	2.0
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	37	47	31
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	16	23	10
13.	Permissible limits for SO₂*	µg/m3	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	2.4	3.2	2.1
15.	Permissible limits for NO₂*	µg/m3	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	16.5	14.7	13.2
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 B..), (2) 3 Nos. of Gaseous Sampler (AAS 109), (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

*Permissible Limits are as per NAAQ Standard 16th November 2009 & ** Results are 3 hourly monitoring values

Royal Environment Auditing & Consultancy Service

Analyst



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

Ref No. 674/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED
 Village: Samaghogha,
 Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	14/11/2015	14/11/2015	14/11/2015
03.	Time of sampling	----	8:10	8:30	10:00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	N	N	N
06.	Average Wind Speed	Km/Hr.	1.20	1.20	1.20
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	40	44	26
11.	Permissible limits for PM 2.5*	µg/m ³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	18	20	14
13.	Permissible limits for SO₂*	µg/m ³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	2.8	3.7	2.4
15.	Permissible limits for NO₂*	µg/m ³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	15.3	13.1	11.9
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL

Instrument used: (1) 3 Nos. RDS (APM - 217 BL); (2) 3 Nos. of Gaseous Sampler: AAS 109; (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on: 25/05/2016

BDL= Below Detectable Limit

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Royal Environment Auditing & Consultancy Service

Mamraj
Analyst



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Ref No. : 675/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	17/11/2015	17/11/2015	17/11/2015
03.	Time of sampling	----	8.15	8.35	8.50
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	NE	NE	NE
06.	Average Wind Speed	Km/Hr.	4.50	4.50	4.50
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	45	52	34
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	21	24	12
13.	Permissible limits for SO₂*	µg/m3	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	2.7	3.6	2.4
15.	Permissible limits for NO₂*	µg/m3	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	15.2	13.9	10.7
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

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Ref. No. : 676/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	20/11/2015	20/11/2015	20/11/2015
03.	Time of sampling	----	8.25	8.45	9.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	E	E	E
06.	Average Wind Speed	Km/Hr.	3.40	3.40	3.40
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	38	47	32
11.	Permissible limits for PM 2.5*	µg/m ³	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	19	16	14
13.	Permissible limits for SO ₂ *	µg/m ³	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	3.2	3.9	1.9
15.	Permissible limits for NO ₂ *	µg/m ³	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	14.5	13.2	10.4
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

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Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral II (W)
02.	Date of sampling	----	23/11/2015	23/11/2015	23/11/2015
03.	Time of sampling	-----	9.00	9.20	9.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	NNE	NNE	NNE
06.	Average Wind Speed	Km/Hr.	2.50	2.50	2.50
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	39	25
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	22	15	11
13.	Permissible limits for SO₂*	µg/m3	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	2.5	3.7	2.8
15.	Permissible limits for NO₂*	µg/m3	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	18.4	16.9	15.2
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 BL) (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

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Ref. No 678/11/2015-16

Date: 03/12/2015

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha.

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	NAAQMS - 1	NAAQMS - 2	NAAQMS - 3
01.	Location of Ambient	----	Main Gate (S)	Sinter Plant - 1 (NNW)	Nr. Workshop Spiral - II (W)
02.	Date of sampling	----	26/11/2015	26/11/2015	26/11/2015
03.	Time of sampling	-----	9.10	9.30	9.55
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	N	N	N
06.	Average Wind Speed	Km/Hr.	2.40	2.40	2.40
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	46	43	30
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	17	14	13
13.	Permissible limits for SO ₂ *	µg/m3	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	2.3	3.9	1.9
15.	Permissible limits for NO ₂ *	µg/m3	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	17.6	16.1	13.8
17.	Permissible limit for CO **	µg/m3	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. of Gaseous Sampler (AAS 109) (3) 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

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AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr.No.	Particulars	Unit	AAQM - 1 (S)	AAQM - 2 (SSW)	AAQM - 3 (WSW)	AAQM - 4 (NW)
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	----	17/11/2015	17/11/2015	18/11/2015	18/11/2015
03.	Time of sampling	-----	8.30	8.55	9.00	9.25
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	-----	NE	NE	NE	NE
06.	Average Wind Speed	Km/Hr.	4.5	4.5	2.7	2.7
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/m ³	100	100	100	100
10.	Measured Concentration of PM 10	µg/m ³	29	38	44	48
11.	Permissible limits for PM 2.5*	µg/m ³	60	60	60	60
12.	Measured Concentration of PM 2.5	µg/m ³	13	16	23	15
13.	Permissible limits for SO₂*	µg/m ³	80	80	80	80
14.	Measured Concentration of SO ₂	µg/m ³	1.2	3.5	4.2	3.1
15.	Permissible limits for NO₂*	µg/m ³	80	80	80	80
16.	Measured Concentration of NO ₂	µg/m ³	7.5	10.8	9.4	8.9
17.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000
18.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL	BDL

Instrument used : (1) Ecotech make 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampling Kit (APM 109), & 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

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Ref. No. : 680/11/2015-16

Date: 03/12/2015

AMBIENT AIR QUALITY MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23

Sr. No.	Particulars	Unit	AAQM - 5 (NE)	AAQM - 6 (SE)	AAQM - 7 (ESE)	AAQM - 8 (E)
01.	Location of Ambient	----	Labour Colony	New Colony (Shopping Centre)	VIP Guest House	Weigh bridge
02.	Date of sampling	----	20/11/2015	20/11/2015	21/11/2015	21/11/2015
03.	Time of sampling	----	9.15	9.35	9.30	9.50
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	E	E	SE	SE
06.	Average Wind Speed	Km/Hr.	3.40	3.40	3.30	3.30
07.	Average flow rate during sampling	m3/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/m3	40	35	31	42
11.	Permissible limits for PM 2.5*	µg/m3	60	60	60	60
12.	Measured Concentration of PM 2.5	µg/m3	19	26	24	21
13.	Permissible limits for SO ₂ *	µg/m3	80	80	80	80
14.	Measured Concentration of SO ₂	µg/m3	4.8	2.9	3.7	5.5
15.	Permissible limits for NO ₂ *	µg/m3	80	80	80	80
16.	Measured Concentration of NO ₂	µg/m3	9.7	8.3	11.2	13.2
17.	Permissible limit for CO **	µg/m3	2000	2000	2000	2000
18.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL	BDL

Instrument used : (1) Ecotech make 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampling Kit (APM 109), & 3 Nos. PM 2.5 Sampler (AAS 127)

All Calibration due on : 25/05/2016

BDL= Below Detectable Limit

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Ref. No. :681/11/2015-16

Date: 03/12/2015

FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23/22

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	----	22/11/2015	22/11/2015	23/11/2015
03.	Time of sampling	----	8.05	8.25	8.15
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	NE	NE	NNE
06.	Average Wind Speed	Km/Hr.	2.1	2.1	2.5
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	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1121	1302	1024
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	11.5	10.7	12.6
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	26.8	27.4	25.6
15.	Permissible limit for CO **	µg/m ³	2000	2000	2000
16.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2	2
18.	Measured Concentration of Pb	µg/m ³	ND	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)
All Calibration due on : 25/05/2016

BDL= Below Detectable Limit
ND= Not Detectable



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Ref. No. :682/11/2015-16

Date: 03/12/2015

FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 4	A - 5	A - 6
01.	Location of Ambient	----	Sinter 2 Ground Hopper	DISP "CCM" Area	BF CAST HOUSE
02.	Date of sampling	----	23/11/2015	24/11/2015	24/11/2015
03.	Time of sampling	----	8.35	8.00	8.20
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	NNE	NE	NE
06.	Average Wind Speed	Km/Hr.	2.50	2.80	2.80
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	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	617	420	807
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	9.2	13.1	10.5
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	23.1	30.4	28.3
15.	Permissible limit for CO **	µg/m ³	2000	2000	2000
16.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2	2
18.	Measured Concentration of Pb	µg/m ³	ND	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)

All Calibration due on : 25/05/2016

BDL= Below Detectable Lim t

ND= Not Detectable



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Ref. No. : 683/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments Sinter Plant-1 (GPCB ID 35456)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 6
01	Date of Sampling	---	10/11/2015	Not in operation during visit	10/11/2015	10/11/2015
02	Attached to	---	Fuel & Flux crusher & screening building	Fuel & Flux crushing house	Sinter Furnace	Discharge end
03	Stack Height	Meter	32	27	50	32
04	Stack Diameter	Meter	1.4	1.4	2.0	1.3
05	Stack Temperature	°C	52	---	141	127
06	Ambient Temperature	°C	31	---	28	30
07	Average Velocity of Flue Gases	m/sec.	15.8	---	39.7	35.9
08	IsoKinetic Flowrate for Sampling	LPM	27	---	14	13
09	Inlet	mg/Nm ³	2869	---	3216	2994
10	Outlet	mg/Nm ³	25	---	46	33
11	Efficiency	%	99.13	---	98.57	98.90

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

Calibration due on 25/09/2016

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Ref. No. : 684/11/2015-16

Date: 03/12/2015

Blast Furnace Plant-1(GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	21/11/2015
02	Attached to	---	De-dustingSystem
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	52
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	15.5
08	IsoKinetic Flowrate for Sampling	LPM	27
09	Inlet	mg/Nm ³	2164
10	Outlet	mg/Nm ³	11
11	Efficiency	%	99.49

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

Calibration due on 25/09/2016

T. Adani



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Ref. No.: 685/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments

Sinter Plant-2 (GPCB ID:29017)

Name of company: JINDAL SAW LIMITED,
Village: Samaghgha,
Tal: Mundra, Dist: Kutch

Test Method: As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 7	S - 9	S-10
01	Date of Sampling	---	12/11/2015	12/11/2015	12/11/2015	11/11/2015	11/11/2015	13/11/2015
02	Attached to	---	Fuel crushing de-duster system (Fuel)	Fuel crushing de-duster system (Flux)	Fuel screening deduster system (Flux screening)	Sinter Furnace	Discharging end of Sinter de-dusting System	Pulverised Coal Injection
03	Stack Height	Meter	30	30	30	50	50	32
04	Stack Diameter	Meter	0.7	0.7	0.7	2.0	1.3	1.0
05	Stack Temperature	°C	43	51	45	143	137	134
06	Ambient Temperature	°C	29	28	30	28	29	30
07	Average Velocity of Flue Gases	m/sec.	15.9	15.7	14.2	36.3	39.5	19.8
08	isokinetic Flowrate for Sampling	LPM	28	27	25	12	15	25
09	Inlet	mg/N.m ³	2306	2993	2637	3850	2601	2523
10	Outlet	mg/N.m ³	13	18	26	59	34	22
11	Efficiency	%	99.44	99.40	99.01	98.47	98.69	99.18

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

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

Calibration due on: 25/09/2016

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Ref. No : 686/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED.

Village: Samaghogha.

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 7	S - 8	S - 12	S - 18	S - 22
01	Date of Sampling	---	07/11/2015	17/11/2015	07/11/2015	07/11/2015	17/11/2015
02	Attached to		Sand Reclamation	Common stack Mg Converter - I & II	Core Cleaning & Dusting - I	Core Cleaning & Dusting - II	Mg Converter - II.
03	Stack Height	Meter	32	30	30	30	30
04	Stack Diameter	Meter	0.9	0.5	0.6	0.6	0.5
05	Stack Temperature	°C	109	66	53	56	97
06	Ambient Temperature	°C	33	32	32	33	32
07	Average Velocity of Flue Gases	m/sec	33.4	15.1	14.9	16.1	15.2
08	IsoKinetic Flowrate for Sampling	LPM	12	25	25	27	23
09	Inlet	mg/Nm ³	3666	4297	3267	3459	4597
10	Outlet	mg/Nm ³	31	46	43	32	33
11	Efficiency	%	99.15	98.88	98.68	99.07	99.28

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

Calibration due on 25/09/2016

Royal Environment Auditing & Consultancy Service

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Analyst



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Ref. No. 687/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments

Pipe Plant (GPCB ID:18036)

Name of company: JINDAL SAW LIMITED.
 Village: Samaghogha,
 Tal.: Mundra, Dist: Kutch

Test Method: As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 9	S - 10	S - 15	S - 16	S - 20	S - 21	S - 23
01	Date of Sampling	---	06/11/2015	Not in operation during visit	06/11/2015	Not in operation during visit	06/11/2015	Not in operation during visit	06/11/2015
02	Attached to	---	Zinc Coating - I	Barrel Grinding-I	Zinc Coating - II	Barrel Grinding-II	Zinc Coating - III	Barrel Grinding-III	Zinc Coating - IV & V
03	Stack Height	Meter	30	30	30	30	30	30	30
04	Stack Duct Diameter	Meter	0.6	0.6	0.6	0.6	0.6	0.6	0.6
05	Stack Temperature	°C	56	---	59	---	52	---	45
06	Ambient Temperature	°C	29	---	30	---	32	---	33
07	Average Velocity of Flue Gases	ms ⁻¹	16.1	---	16.6	---	32.7	---	14.4
08	Isokinetic Flowrate for Sampling	LPM	27	---	26	---	14	---	25
09	Inlet	mg-Nm ⁻³	1713	---	2145	---	1937	---	1341
10	Outlet	mg-Nm ⁻³	16	---	13	---	10	---	8
11	Efficiency	%	99.07	---	99.39	---	99.48	---	99.40

Note: Maximum Detectable Limit of SO₂ & NO_x is 0.1 and 0.21 ppm respectively.

Instrument Used: 12 Nos. of Stack Monitoring Kit - Vayubodhan make - VSS-I

Calibration done on: 25/09/2016

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Ref. No. : 688/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments

Pipe Plant (SDP-2) (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED.

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1	S - 5	S - 6	S - 8
01	Date of Sampling	---	25/11/2015	25/11/2015	25/11/2015	26/11/2015
02	Attached to	---	Mg Treatment	Zinc Coating	Tri-Grinding	Zinc Coating machine
03	Stack Height	Meter	30	30	30	30
04	Stack Duct Diameter	Meter	1.00	1.00	1.00	0.8
05	Stack Temperature	°C	51	49	42	54
06	Ambient Temperature	°C	29	30	31	31
07	Average Velocity of Flue Gases	m/sec.	14.3	15.2	12.8	14.5
08	IsoKinetic Flowrate for Sampling	LPM	25	26	23	25
09	Inlet	mg/Nm ³	2966	3249	2569	1535
10	Outlet	mg/Nm ³	37	22	20	12
11	Efficiency	%	98.75	99.32	99.22	99.22

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

Calibration due on 25/09/2016

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Ref. No. : 689/11/2015-16

Date: 03/12/2015

Performance Evaluation of Air Pollution Control Equipments

Blast Furnace Plant-2 (GPCB ID:29026)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/3

Sr. No.	Particulars	Unit	S - 1	S - 4	S - 5
01	Date of Sampling	---	18/11/2015	18/11/2015	18/11/2015
02	Attached to	---	Dedusting System	Coke fine building dust collecting system	Iron Ore fine & Dust Collecting System
03	Stack Height	Meter	40	30	30
04	Stack Duct Diameter	Meter	1.5	0.85	0.65
05	Stack Temperature	°C	67	69	43
06	Ambient Temperature	°C	28	32	31
07	Average Velocity of Flue Gases	m/sec.	37.5	17.3	15.1
08	IsoKinetic Flowrate for Sampling	LPM	16	28	27
09	Inlet	mg/Nm ³	4319	2022	1734
10	Outlet	mg/Nm ³	42	7	4
11	Efficiency	%	99.03	99.65	99.77

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

Calibration due on 25/09/2016

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Ref No. :690/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Sinter Plant - 1(GPCB ID:35456)

Name of company : JINDAL SAW LIMITED,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 4	S - 5	S - 6
01	Date of Sampling	---	10/11/2015	Not in operation during visit	10/11/2015	NA	NA	10/11/2015
02	Time of sampling	---	14.30		9.20			10.50
03	Stack Attached to	---	Fuel & Flux Crusher and Screening building	Fuel & Flux Crushing House	Sinter Furnace	Primary Mixture House	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	ESP	---	---	ESP
05	Stack Height	Meter	32.0	27.00	50	19.75	36.08	32
06	Stack Diameter	Meter	1.40	1.40	2.0	1.25	1.25	1.30
07	Stack Temperature	°C	45	---	147	---	---	139
08	Ambient Temperature	°C	31	---	28	---	---	30
09	Average Velocity of Flue Gases	m/sec.	10.2	---	7.2	---	---	7.4
10	Isokinetic flow rate for P.M. Sampling	LPM	18	---	22	---	---	24
11	Gaseous Sampling Flow Rate	LPM	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	25	---	46	---	---	33
14	Permissible limits for SO ₂	ppm	NA	NA	100	NA	NA	NA
15	Measured Concentration of SO ₂	ppm	---	---	ND	---	---	---
16	Permissible limits for NO _x	ppm	NA	NA	50	NA	NA	NA
17	Measured Concentration of NO _x	ppm	---	---	8.7	---	---	---

Note : Minimum Detectable Limit of SO₂ & NO_x are 0.1 and 0.01 ppm respectively.

NA= Not Applicable

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

Calibration due on : 25/09/2016



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Ref No - 691/11/2016-16

Date - 03/12/2015

STACK EMISSION MONITORING RESULTS

Sinter Plant -2 (GPCB ID:29017)

Name of company - JINDAL SAW LIMITED,

Village - Samaghogha,

Tal - Mundra, Dist. Kutch

Test Method - As per IS Standards - 11255_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 4	S - 5	S - 6	S - 7	S - 8	S - 9	S - 10
01	Date of Sampling	---	12/11/2015	12/11/2015	12/11/2015	Not in operation during visit	NA	NA	11/11/2015	13/11/2015	11/11/2015	13/11/2015
02	Time of sampling	Hr.	9.15	10.30	11.40	---	---	---	9.00	9.45	10.20	11.55
03	Stack Attached to	---	Fuel crushing de-duster system (Flux)	Fuel crushing de-duster system(Fuel)	Fuel Screening deduster System (Flux Screening)	No. 1 Transfer Station De-duster System	Primary Mixer De-duster system	Secondary Mixer De-duster system	Sinter Furnace	Transfer station no. 4 & 5 dedusting system	Discharging End of sinter de-dusting system	Pulverized Coal Injection
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	Dust Collector	Dust Collector	Dust Collector	Dust Collector	ESP	Dust Collector	ESP	Bag filter
05	Stack height	Meter	30	30	30	30	20	30	50	30	50	32
06	Stack Diameter	Meter	0.7	0.7	0.7	0.7	---	---	2	0.7	1.3	1.00
07	Stack Temperature	°C	42	35	38	---	---	---	152	36	118	143
08	Ambient Temperature	°C	28	29	30	---	---	---	28	29	29	31
09	Average Velocity of Flue Gases	m/sec.	14.2	11.7	8.2	---	---	---	11.2	4.8	27.8	11.8
10	isokinetic flow rate for P.M. Sampling	LPM	25	21	15	---	---	---	15	20	10	18
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---	---	---	2.0	---	---	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	18	13	25	---	---	---	59	11	34	22
14	Permissible limits for SO ₂	ppm	NA	NA	NA	NA	NA	NA	100	NA	NA	100 (ppm)
15	Measured Concentration of SO ₂	ppm	---	---	---	---	---	---	ND	---	---	---
16	Permissible limits for NO _x	ppm	NA	NA	NA	NA	NA	NA	50	NA	NA	50 (ppm)
17	Measured Concentration of NO _x	ppm	---	---	---	---	---	---	10.6	---	---	6.57

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.

Calibration due on - 25/09/2016

NA= Not Applicable

Signature

11/12/15
Analyst



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Ref. No. :692/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

BLAST FURNACE - 2 (GPCB ID:29026)

Name of company : JINDAL SAW LIMITED.

Village: Samaghogha.

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 4	S - 5
01	Date of Sampling	---	18/11/2015	18/11/2015	Monitoring Not Possible	18/11/2015	18/11/2015
02	Time of sampling	Hr	9:00	10:15		14:20	15:50
03	Stack Attached to	---	Dedusting System	Stove Stack	Flare Stack	Coke fine building dust collecting system	Iron Ore fine & Dust Collecting System
04	Air Pollution Control Measures	---	Bag Filter	---	---	Bag Filter	Bag Filter
05	Stack Height	Meter	40.0	65.0	45	30.0	30.0
06	Stack Diameter	Meter	1.5	2.250	---	---	0.85
07	Stack Temperature	°C	49	234	---	58	37
08	Ambient Temperature	°C	29	30	---	32	31
09	Average Velocity of Flue Gases	m/sec.	35.8	2.8	---	13.2	10.9
10	Isokinetic flow rate for P.M. Sampling	LPM	16	7	---	22	20
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	42	2	---	7	4
14	Permissible limits for SO ₂	mg/Nm ³	NA	NA	NA	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	---	---	---	---	---
16	Permissible limits for NO _x	mg/Nm ³	NA	NA	NA	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	---	---	---	---	---

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

NA=Not Applicable

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

Calibration due on 25/09/2016

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Analyst



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Ref. No. 693/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

BLAST FURNACE-1 (GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 4	S - 5
01	Date of Sampling	---	21/11/2015	21/11/2015	21/11/2015	21/11/2015	Monitoring Not Possible
02	Time of sampling	Hr.	14.25	9.05	10.20	15.30	
03	Stack Attached to	---	Dedusting System	Boiler - I	Boiler - II	Stove Stack	Flare Stack
04	Air Pollution Control Measures	---	Bag Filter	---	---	---	---
05	Stack Height	Meter	35.0	45	45	50.0	30
06	Stack Diameter	Meter	1.5	1.4	1.4	2.25	---
07	Stack Temperature	°C	41	171	178	223	---
08	Ambient Temperature	°C	32	29	30	32	---
09	Average Velocity of Flue Gases	m/sec.	10.3	4.2	4.5	3.1	---
10	Isokinetic flow rate for P.M. Sampling	LPM	18	12	13	8	---
11	Gaseous 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
13	Measured Concentration of PM.	mg/Nm ³	11	8	6	3	---
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	ND	ND	ND	ND	---
16	Permissible limits for NO _x	mg/Nm ³	25	25	25	25	25
17	Measured Concentration of NO _x	mg/Nm ³	ND	ND	ND	ND	---

Note - Minimum Detectable Limit of SO₂ & NO_x is 0.1 and 0.01 ppm respectively.
Instrument Used : Stack Monitoring Kit - Vayubodhan make - VSS I
Calibration due on 25/09/2016

N.D=Not Detectable

Analyst



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Ref No. 694/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Captive Power Plant (GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2	S - 3	S - 4
01	Date of Sampling	---	Not In Operation During The Visit	Not In Operation During The Visit	Not In Operation During The Visit	Not In Operation During The Visit
02	Time of sampling	Hr.				
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	---	---	---	---
08	Ambient Temperature	°C	---	---	---	---
09	Average Velocity of Flue Gases	m/sec	---	---	---	---
10	Isokinetic flow rate for P.M. Sampling	LPM	---	---	---	---
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	---	---	---	---
14	Permissible limits for SO ₂	ppm	100	100	100	100
15	Measured Concentration of SO ₂	ppm	---	---	---	---
16	Permissible limits for Nox	ppm	50	50	50	50
17	Measured Concentration of Nox	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

Calibration due on 25/09/2016

(Signature)

(Signature)
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Ref. No. : 695/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Pipe Plant (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,
Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 11255_Part - 1/2/3/7

Sr No.	Particulars	Unit	S - 11	S - 17	S - 25	S - 26	S - 27
01	Date of Sampling	---	Not In Operation During The Visit	16/11/2015	23/11/2015	23/11/2015	Not In Operation: During The Visit
02	Time of sampling	Hr.		14.25	11.30	12.45	
03	Stack Attached to	---	Bitumin Drying Oven - I	Common stack Bitumin Drying Oven - II & Boiler	Shot Blasing - I	Shot Blasing - II	Shot Blasing - III
04	Air Pollution Control Measures	---	---	---	Bag Filter	Bag Filter	Bag Filter
05	Stack Height	Meter	32.8	32.8	10.0	10.0	10.0
06	Stack Diameter	Meter	1.375	1.375	0.41	0.41	1.125
07	Stack Temperature	°C	---	155	42	40	---
08	Ambient Temperature	°C	---	33	32	32	---
09	Average Velocity of Flue Gases	m/sec.	---	5.5	13.8	12.5	---
10	Isokinetic flow rate for P.M. Sampling	LPM	---	16	24	22	---
11	Gaseous Sampling Flow Rate	LPM	---	2.0	2.0	2.0	---
12	Permissible limits for PM	mg/Nm³	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	---	68	21	18	---
14	Permissible limits for SO₂	mg/Nm³	100 ppm	100 ppm	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	---	21.8	ND	ND	---
16	Permissible limits for Nox	mg/Nm³	50 ppm	50 ppm	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	---	19.6	ND	ND	---

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

Calibration due on 25/09/2016

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Ref. No. : 696/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Pipe Plant (GPCB ID:18036)

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	S - 8	S - 9	S - 15	S - 20	S - 22	S - 23
01	Date of Sampling	---	17/11/2015	06/11/2015	06/11/2015	06/11/2015	17/11/2015	06/11/2015
02	Time of sampling	Hr.	15.10	9.00	10.30	14.20	10.00	15.45
03	Stack Attached to	---	Common stack Mg Converter-I&II	Zn Coating - I	Zn Coating - II	Zn Coating - III	Mg Converter - III	Zn Coating - IV & V
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.5	0.6	0.5	0.9
07	Stack Temperature	°C	47	45	44	41	60	38
08	Ambient Temperature	°C	32	29	30	32	32	33
09	Average Velocity of Flue Gases	m/sec.	24.9	14.6	14.2	15.7	11.3	5.8
10	Isokinetic flow rate for P.M. Sampling	LPM	11	26	25	28	19	24
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	---	2.0	---
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)	20 (Zn)	150	20 (Zn)
13	Measured Concentration of PM	mg/Nm ³	48	16 (Zn)	13 (Zn)	10 (Zn)	33	06 (Zn)
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA	NA	40	NA
15	Measured Concentration of SO ₂	mg/Nm ³	ND	---	---	---	ND	---
16	Permissible limits for Nox	mg/Nm ³	25	NA	NA	NA	25	NA
17	Measured Concentration of Nox	mg/Nm ³	2.9	---	---	---	2.2	---

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

Calibration due on 25/09/2016

N/A=Not Applicable

Signature

Signature
Analyst



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Ref. No. : 697/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Pipe Plant (GPCB ID:18036)

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	S - 1	S - 2	S - 3	S - 4	S - 5	S - 6	S - 12	S - 18
01	Date of Sampling	---	05/11/2015	05/11/2015	05/11/2015	05/11/2015	05/11/2015	05/11/2015	07/11/2015	07/11/2015
02	Time of sampling	Hr.	8.50	9.45	10.55	12.05	14.10	15.20	10.15	11.30
03	Stack Attached to	---	Core Shop-I	Core Shop-II	Core Shop-III	Core Shop-IV	Core Shop-V	Core Shop-VI	Core Cleaning & Dusting-I	Core Cleaning & Dusting-II
04	Air Pollution Control Measures	---	---	---	---	---	---	---	Bag Filter	Bag Filter
05	Stack Height	Meter	30	30	30	30	30	30	30	30
06	Stack Diameter	Meter	0.584	0.584	0.584	0.584	0.584	0.584	0.6	0.6
07	Stack Temperature	°C	36	37	38	39	40	42	48	45
08	Ambient Temperature	°C	29	29	30	31	32	32	32	33
09	Average Velocity of Flue Gases	m/sec	4.7	4.5	4.2	5.5	5.1	4.9	14.3	14.8
10	Isokinetic flow rate for P.M. Sampling	LPM	19	18	17	22	21	20	25	26
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	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	150	150
13	Measured Concentration of PM	mg/Nm ³	19	25	31	29	38	16	43	32
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	2.8	2.1	2.6	1.8	3.3	2.4	ND	ND
16	Permissible limits for Nox	mg/Nm ³	25	25	25	25	25	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	1.9	1.5	2.1	1.8	2.3	2.6	3.8	4.2

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

ND= Not Detectable

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

Calibration due on 25/09/2016

Royal Environment Auditing & Consultancy Service

Analyst



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Ref No: 698/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS

Pipe Plant (GPCB ID:18036)

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	S - 7	S - 10	S - 13	S - 14	S - 16	S - 19	S - 21	S - 24
01	Date of Sampling	---	07/11/2015	Not in operation during visit	24/11/2015	24/11/2015	Not in operation during visit	24/11/2015	Not in operation during visit	Not in operation during visit
02	Time of sampling	hr	15:15		9:30	10:50		14:05		
03	Stack Attached to	---	Sand Reclamation	Barrel Grinding - I	Annealing Furnace - I	Annealing Furnace - II	Barrel Grinding - II	Annealing Furnace - III	Barrel Grinding-III	Barrel Grinding -IV&V
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	---	---	Bag Filter	---	Bag Filter	Bag Filter
05	Stack Height	Meter	30	30	32	32	30	32	30	30
06	Stack Diameter	Meter	0.9	0.6	1.375	1.375	0.6	1.375	0.5	0.5
07	Stack Temperature	°C	34		164	167		169		
08	Ambient Temperature	°C	33		28	29		31		
09	Average Velocity of Flue Gases	m/sec	14.6		5.6	5.8		6.2		
10	Isokinetic flow rate for P.M. Sampling	LPM	23		16	17		18		
11	Gaseous 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	150	150
13	Measured Concentration of PM	mg/Nm ³	31		12	16		19		
14	Permissible limits for SO ₂	mg/Nm ³	40	40	100 (PPM)	100 (PPM)	40	100 (ppm)	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	5.3		2.2	2.7		1.9		
16	Permissible limits for Nox	mg/Nm ³	25	25	50 (PPM)	50 (PPM)	25	50 (PPM)	25	25
17	Measured Concentration of Nox	mg/Nm ³	11.5		6.9 (PPM)	6.2 (PPM)		5.8 (PPM)		

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
Calibration due on 25/09/2016

N.D. = Not Detectable

[Handwritten Signature]

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Analyst:



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Ref. No : 599/11/2015-16

Date: 03/12/2015

STACK EMISSION MONITORING RESULTS Pipe Plant (SDP-2) (GPCB ID:18036)

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	S - 1	S - 2	S - 3	S - 4	S - 5	S - 6	S - 7	S - 8
01	Date of Sampling	---	25/11/2015	26/11/2015	26/11/2015	26/11/2015	25/11/2015	25/11/2015	Not in operation during visit	26/11/2015
02	Time of sampling	Hr	9:40	15:30	9:10	10:25	14:30	15:50		14:10
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Annealing Furnace - I	Annealing Furnace - II	Zinc Coating	Tri-Grinding Section	Pre & Post Heating	Zinc Coating Machine
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	---	---	Bag Filter	Bag Filter	---	---
05	Stack Height	Meter	30	30	45	45	30	30	30	30
06	Stack Diameter	Meter	1.00	0.50	0.85	0.85	1.00	1.00	0.85	1.20
07	Stack Temperature	°C	43	37	145	140	40	38	---	42
08	Ambient Temperature	°C	29	31	28	29	30	31	---	31
09	Average Velocity of Flue Gases	m/sec	3.7	3.1	4.3	4.6	4.5	3.8	---	4.2
10	Isokinetic flow rate for P.M. Sampling	LPM	15	13	13	14	19	16	---	17
11	Gaseous Sampling Flow Rate	LPM	---	---	2.0	2.0	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50	50	50	50	50	50
13	Measured Concentration of PM	mg/Nm ³	37	16	14	18	22 (Zn)	20	---	12
14	Permissible limits for SO ₂	PPM	NA	NA	100	100	NA	NA	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	1.8	2.4	---	---	---	---
16	Permissible limits for Nox	PPM	NA	NA	50	50	NA	NA	NA	NA
17	Measured Concentration of Nox	PPM	---	---	4.2	4.7	---	---	---	---

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
Calibration due on 25.09.2016

ND= Not Detectable
NA= Not Applicable

Royal Environment Auditing & Consultancy Service

manoj
Analyst

Ref. No. : 700/11/2015-16


Date: 03/12/2015

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 Plant-2 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID:29017)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST**
- 3 Particulars of sampling

Date of Sampling : 13th November, 2015

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	Remarks	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	Sinter Plant At First Floor	Total Dust	Personal Respirable Dust sampler APM 800	02	4-6	5.0	10	Gravimetric	4	---		Mr. MANOJ SONRAT

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

For. Royal Environment Auditing & Consultancy Service



Authorized Sign

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 Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 35456)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST**
- 3 Particulars of sampling

Date of Sampling : 13th November, 2015

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 of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m3					
1	Sinter Plant At First Floor	Total Dust	Personal Respirable Dust sampler APM 800	02	5-6	5.5	10	Gravimetric	5	---		Mr MANOJ SONRAT

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

For: Royal Environment Auditing & Consultancy Service


Authorized Sign

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 : **BF Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18037)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 13th November, 2015

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	BF Plant (Cast House)	CO	Personal Respirable Dust sampler APM 800	02	14-16	15.0	55	Gravimetric	5	---	<i>Manoj</i>	Mr. MANOJ SONRAT
		Total Dust			5-7	6.0	10					

Instruments used : Envirotech make personal sampler, Model No. APM 300

For: Royal Environment Auditing & Consultancy Service


Manoj
Authorized Sign

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.: **BF Plant-2 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 29026)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 13th November, 2015

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						
1	BF Plant Cast House)	CO	Persona Respirable Dust sampler APM 800	02	13-15	14.0	55	Gravimetric	4	---		Mr MANOJ SONRAT
		Total Dust:			5-6	5.5	10					

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

For: Royal Environment Auditing & Consultancy Service


Authorized Sign

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 : **DISP,JCO & Coating Units at JINDAL SAW LIMITED, Samaghogha.(GPCB ID: 18036)**

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

3 Particulars of sampling

Date of Sampling : 14th & 15th November, 2015

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 of 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	1-2	1.5	10	Gravimetric	2	----	<i>Manoj</i>	Mr. MANOJ SONRAT
2	JCO Plant (Nr. JCO Press)	Total Dust		02	1-3	2.0	10	Gravimetric	3	----		
3	Coating Plant-1 (Shot Blasting Area)	Total Dust		02	4-5	4.5	10	Gravimetric	5	----		
4	CCM Area (SDP / DISP)	Total Dust		02	5-6	5.5	10	Gravimetric	4	----		
5	Coating Plant-2 (Shot Blasting Area)	Total Dust		02	2-4	3.0	10	Gravimetric	3	----		
6	CCM Area (SDP-2)	Total Dust		02	4-6	5.0	10	Gravimetric	4	----		

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

For: Royal Environment Auditing & Consultancy Service

Manoj
Authorized Sign



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Ref. No. : 705/11/2015-16

Date: 03/12/2015

WORK ZONE NOISE LEVEL MEASUREMENT

SINTER PLANT- 1 (GPCB ID:35456)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th November, 2015

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	39.5	45.6	41.6
2	Inside Mechanical Room	45.7	51.8	47.5
3	Inside Electrical Room	46.9	52.5	48.1
4	Inside Plant Office	48.7	55.9	50.8

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016

Royal Environment Auditing & Consultancy Service

M. M. M. J.
Analyst



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Environment Auditing & Consultancy Service

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Ref. No.: 706/11/2015-16

Date: 03/12/2015

WORK ZONE NOISE LEVEL MEASUREMENT BLAST FURNACE- 1 (GPCB ID:18037)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th November, 2015

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01	Nr. Stock House	62.5	73.6	65.6
02	Inside Control Room	44.6	52.4	46.2
03	Inside Control room of Cast House	45.8	50.7	47.8
04	Inside Laboratory	41.2	46.4	42.9
05	Inside Control Room of Blower House	54.2	61.7	57.5
06	Inside Control Room of CPP	51.6	60.2	53.7

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016

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M. M. M. M.
Analyst



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Ref. No. : 707/11/2015-16

Date: 03/12/2015

WORK ZONE NOISE LEVEL MEASUREMENT PIPE PLANT (GPCB ID:18036)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th November, 2015

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	47.6	52.8	50.9
02	Inside Control Room – Mill Area of Spiral Plant	59.5	63.7	60.1
03	Nr. Pipe Cutting Area of Spiral Plant	66.8	76.5	70.4
04	Inside JCO Plant	63.6	74.3	66.7
05	Inside DISP / SDP Plant	67.5	78.6	72.8
06	Inside Coating Plant	64.8	73.5	69.5
07	Nr. CCM SDP-2	63.7	71.3	65.6
08	Inside Control Room of Annealing Furnace of SDP-2	49.6	53.2	50.9
09	Nr. Zinc Coating SDP-2	65.9	76.4	70.2
10	Near Mould Shop	75.1	86.7	77.3

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016



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Ref. No. : 708/11/2015-16

Date: 03/12/2015

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 14th November, 2015

Sr. No.	Location of Sampling	Value in dB(A) Day Time			Value in dB(A) Night Time		
		Min.	Max.	Leq	Min.	Max.	Leq
01.	Admin. Building	41.2	49.4	42.7	36.8	42.1	38.6
02.	Old Colony	35.4	40.5	37.1	32.1	38.3	33.5
03.	Nr. LPG Yard	51.4	59.2	52.8	47.9	53.8	49.1
04.	New Colony (School)	36.4	42.1	38.1	33.4	37.9	34.3
05.	Nr. SDP-2	55.2	63.1	56.8	52.1	58.2	54.1
06.	Nr. Coating Plant	53.8	62.5	57.9	50.2	60.1	53.7
07.	Nr. Gate No. 2	53.1	61.8	54.2	48.5	56.3	49.1
08.	Nr. Sinter Plant-1	59.1	64.3	60.3	52.8	58.5	54.5
09.	Nr. Sinter Plant-2	56.7	65.4	58.9	53.9	59.8	55.4
10.	Nr. Blast Furnace-1	55.6	59.2	56.4	50.8	57.6	52.3
11.	Nr. Blast Furnace-2	54.7	60.1	55.6	44.3	50.2	47.8
12.	Nr. Main Gate (Security Office)	42.6	51.5	44.8	38.2	43.9	40.3

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016



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Ref. No. : 709/11/2015-16

Date: 03/12/2015

WORK ZONE NOISE LEVEL MEASUREMENT BLAST FURNACE - 2 (GPCB ID:29026)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th November, 2015

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	56.4	61.9	57.8
02.	Nr. Stock House	63.8	68.1	65.1
03.	C/R Blower House	64.9	72.3	66.7

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016

Royal Environment Auditing & Consultancy Service

M. K. Mehta
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Ref. No. : 710/11/2015-16

Date: 03/12/2015

WORK ZONE NOISE LEVEL MEASUREMENT

SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th November, 2015

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	49.7	51.9	50.5
02.	Inside Operator Room	58.6	63.2	59.9
03.	Near Proportioning Bulding	62.1	64.7	63.2
04.	Near Crusher House	66.9	74.8	69.4

Instruments used : Sound level meter, Model : SL - 4030 (Lutron Make)

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

Recalibration is due on : 25/09/2016

Royal Environment Auditing & Consultancy Service

11/11/15
Analyst



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Ref. No. : 711/11/2015-16

Date: 03/12/2015

REPORT OF DOMESTIC WASTE WATER ANALYSIS

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Source of Sample Collection : Sewage Treatment Plant (Inlet & Outlet)

Date of Sampling : 28/11/2015

Test Method : As per IS Standards - 3024

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	----	7.55	7.25
02.	BOD (3 Days at 27°C)	mg/l	<20	169	12
03	Total Dissolve Solid	mg/l	...	1524	1655
03	COD	mg/l	...	267	48
04	Total Suspended Solid	mg/l	<30	251	17
05	Oil & Grease	mg/l	...	ND	ND
06	Residual Chlorine	mg/l	Min. 0.5	----	0.60

ND=Not Detectable

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M. K. Singh
Analyst