



Royal

Environment Auditing & Consultancy Service

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

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Ref. No. : 198/03/2016-17

Date : 04/04/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - MARCH : 2017

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,
Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/6/10/23

Sr. No.	Particulars	Unit	Location No.1 : Weigh Bridge (Nr.Gate No-2) (E)									
			01	02	03	04	05					
01.	No. of Week	----										
02.	Date & Time Starting of Monitoring	----	28/02/2017; 08.00	03/03/2017; 08.10	06/03/2017; 08.15	9/03/2017; 08.20	13/03/2017; 08.10	16/03/2017; 08.05	20/03/2017; 08.10	23/03/2017; 08.05	27/03/2017; 08.10	30/03/2017; 08.05
03.	Date & Time Ending of Monitoring	----	01/03/2017; 08.00	04/03/2017; 08.10	07/03/2017; 08.15	10/03/2017; 08.20	14/03/2017; 08.10	17/03/2017; 08.05	21/03/2017; 08.10	24/03/2017; 08.20	28/03/2017; 08.10	31/03/2017; 08.05
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	NNE	NNE	NNE	NNE	NE	NNE	W	WNW	W	W
06.	Average Wind Speed	Km/Hr.	2.1	4.1	4.8	5.8	8.4	5.2	6.8	5.0	4.5	4.0
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.12	1.14	1.12	1.10	1.10	1.14	1.14	1.16	1.2	1.2
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	50	48	45	52	48	46	44	47	40	50
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	21	22	25	23	26	24	22	21	20	26
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	6.5	5.8	6.6	7.2	6.5	7.3	6.4	7.4	6.5	6.8
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.3	14.8	16.7	15.7	17.3	16.8	16.7	15.5	17.4	16.6
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

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 : 15/05/2017

*Permissible Limits are as per NAAQ Standard 16th November 2009. -

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Ref. No. : 199/03/2016-17

Date : 04/04/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - MARCH : 2017

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Test Method : As per IS Standards - 5182_2/6/10/23

Sr. No.	Particulars	Unit	Location No.2 : Sinter plant - 1 (NNW)											
			01	02	03	04	05	06	07	08	09	10		
01.	No. of Week	---												
02.	Date & Time Starting of Monitoring	---	28/02/2017; 08.20	03/03/2017; 08.30	06/03/2017; 08.35	9/03/2017; 08.40	13/03/2017; 08.30	16/03/2017; 08.25	20/03/2017; 08.30	23/03/2017; 08.25	27/03/2017; 08.25	30/03/2017; 08.30		
03.	Date & Time Ending of Monitoring	---	01/03/2017; 08.20	04/03/2017; 08.30	07/03/2017; 08.35	10/03/2017; 08.40	14/03/2017; 08.30	17/03/2017; 08.25	21/03/2017; 08.30	24/03/2017; 08.25	28/03/2017; 08.25	31/03/2017; 08.30		
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00		
05.	Dominant Wind Direction (From)	---	NNE	NNE	NNE	NNE	NE	NNE	W	WNW	W	W		
06.	Average Wind Speed	Km/Hr.	2.1	4.1	4.8	5.8	8.4	5.2	6.8	5.0	4.5	4.0		
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.14	1.16	1.20	1.16	1.18	1.20	1.16	1.14	1.14	1.16		
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100	100		
11.	Measured Concentration of PM ₁₀	µg/m ³	46	42	44	50	52	48	55	53	50	40		
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60	60		
13.	Measured Concentration of PM _{2.5}	µg/m ³	17	14	24	18	15	20	24	28	16	22		
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80		
15.	Measured Concentration of SO ₂	µg/m ³	7.2	6.5	5.5	4.3	6.7	5.8	6.2	5.8	6.4	4.3		
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80		
17.	Measured Concentration of NO ₂	µg/m ³	17.2	18.4	16.7	17.2	18.8	17.5	16.4	17.3	16.5	15.8		
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		
19.	Measured Concentration of CO	µg/m ³	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.		

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 : 15/05/2017

*Permissible Limits are as per NAAQ Standard 16th November 2009.

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Ref. No. : 200/03/2016-17

Date : 04/04/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - MARCH : 2017

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

Test Method : As per IS Standards - 5182_2/6/10/23

Sr. No.	Particulars	Unit	Location No.3 : Nr. Work Shop Spiral-II (W)											
			01	02	03	04	05	06	07	08	09	10		
01.	No. of Week	---												
02.	Date & Time Starting of Monitoring	---	28/02/2017; 08.40	03/03/2017; 08.45	06/03/2017; 08.50	9/03/2017; 08.55	13/03/2017; 08.50	16/03/2017; 08.45	20/03/2017; 08.50	23/03/2017; 08.45	27/03/2017; 08.40	30/03/2017; 08.45		
03.	Date & Time Ending of Monitoring	---	01/03/2017; 08.40	04/03/2017; 08.45	07/03/2017; 08.50	10/03/2017; 08.55	14/03/2017; 08.50	17/03/2017; 08.45	21/03/2017; 08.50	24/03/2017; 08.45	28/03/2017; 08.40	31/03/2017; 08.45		
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00		
05.	Dominant Wind Direction (From)	---	NNE	NNE	NNE	NNE	NE	NNE	W	WNW	W	W		
06.	Average Wind Speed	Km/Hr.	2.1	4.1	4.8	5.8	8.4	5.2	6.3	5.0	4.5	4.0		
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.18	1.16	1.14	1.12	1.14	1.16	1.18	1.2	1.18	1.18		
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100	100		
11.	Measured Concentration of PM ₁₀	µg/m ³	34	42	48	45	50	46	50	52	38	42		
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60	60		
13.	Measured Concentration of PM _{2.5}	µg/m ³	32	33	25	23	22	20	21	18	23	22		
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80		
15.	Measured Concentration of SO ₂	µg/m ³	4.2	3.8	4.5	5.5	6.2	5.5	4.8	5.3	4.9	5.9		
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80		
17.	Measured Concentration of NO ₂	µg/m ³	17.5	19.3	18.8	17.5	16.7	18.8	16.5	17.2	16.9	18.5		
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000		
19.	Measured Concentration of CO	µg/m ³	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.		

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 : 15/05/2017

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Ref. No. : 201/03/2016-17

Date : 04/04/2017

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - MARCH : 2017

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

Test Method : As per IS Standards - 5182_2/6/10/23

Sr. No.	Particulars	Unit	Location No.4 : MAIN GATE (E)									
			01		02		03		04		05	
01.	No. of Week	---										
02.	Date & Time Starting of Monitoring	---	28/02/2017; 09.00	03/03/2017; 09.00	06/03/2017; 09.10	9/03/2017; 09.15	13/03/2017; 09.15	16/03/2017; 09.00	20/03/2017; 09.10	23/03/2017; 08.55	27/03/2017; 09.05	30/03/2017; 09.00
03.	Date & Time Ending of Monitoring	---	01/03/2017; 09.00	04/03/2017; 09.00	07/03/2017; 09.10	10/03/2017; 09.15	14/03/2017; 09.15	17/03/2017; 09.00	21/03/2017; 09.10	24/03/2017; 08.55	28/03/2017; 09.05	31/03/2017; 09.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNE	NNE	NNE	NNE	NE	NNE	W	WNW	W	W
06.	Average Wind Speed	Km/Hr.	2.1	4.1	4.8	5.8	8.4	5.2	6.3	5.0	4.5	4.0
07.	Average flow rate for Dust Monitoring PM ₁₀	m ³ /min.	1.18	1.14	1.13	1.14	1.12	1.18	1.14	1.12	1.14	1.16
08.	Average flow rate for Dust Monitoring PM _{2.5}	m ³ /hr.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM ₁₀ *	µg/m ³	100	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM ₁₀	µg/m ³	48	45	44	50	42	44	40	38	35	42
12.	Permissible limits for PM _{2.5} *	µg/m ³	60	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM _{2.5}	µg/m ³	21	20	18	24	20	23	13	21	19	22
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	5.2	6.1	5.5	4.8	5.3	4.6	4.8	3.9	3.5	4.8
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	9.5	10.2	9.5	8.8	9.5	9.4	8.5	8.2	10.2	12.3
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.	B.D.L.

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 : 15/05/2017

*Permissible Limits are as per NAAQ Standard 16th November 2009.

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Ref. No. :202/03/2016-17

Date : 04/04/2017

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	----	BF-1 RMH Stock House	BF-2 RMH Stock House	Sinter RMH Yard
02.	Date of sampling	----	08/03/2017	08/03/2017	15/03/2017
03.	Time of sampling	----	8.15	8.30	8.20
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	----	W	NNE	NNW
06.	Average Wind Speed	Km/Hr.	8.5	6.5	4.4
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	3000	3000	3000
10.	Measured Concentration of PM 10	µg/m3	1215	1305	1388
11.	Permissible limits for SO2*	µg/m3	150	150	150
12.	Measured Concentration of SO2	µg/m3	10.5	11.5	12.3
13.	Permissible limits for NO2*	µg/m3	120	120	120
14.	Measured Concentration of NO2	µg/m3	20.4	18.3	17.3
15.	Permissible limit for CO **	µg/m3	2000	2000	2000
16.	Measured Concentration of CO	µg/m3	BDL	BDL	BDL
17.	Permissible limit for Pb*	µg/m3	2	2	2
18.	Measured Concentration of Pb	µg/m3	ND	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)
All Calibration due on : 15/05/2017

BDL= Below Detectable Limit
ND= Not Detectable

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Ref. No. :203/03/2016-17

Date : 04/04/2017

FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

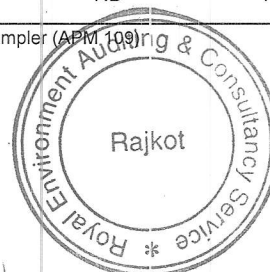
Test Method : As per IS Standards - 5182_Part - 2/6/10/23/22

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	---	15/03/2017	22/03/2017	22/03/2017
03.	Time of sampling	---	8.40	8.30	8.45
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	---	W	NNE	NNW
06.	Average Wind Speed	Km/Hr.	6.5	4.8	5.5
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	1088	715	1325
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	11.5	12.3	15.5
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	18.5	20.5	21.3
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 : 15/05/2017

BDL= Below Detectable Limit
ND= Not Detectable

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Ref. No. : 204/03/16-17

Date : 04/04/2017

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 - 3	S - 6
01	Date of Sampling	---	10/03/2017	10/03/2017
02	Attached to	---	Sinter Furnace	Discharge end
03	Stack Height	Meter	50	32
04	Stack Diameter	Meter	2.0	1.3
05	Stack Temperature	°C	168	144
06	Ambient Temperature	°C	35	37
07	Average Velocity of Flue Gases	m/sec.	30	25
08	IsoKinetic Flowrate for Sampling	LPM	19	22
09	Inlet	mg/Nm ³	3925	3635
10	Outlet	mg/Nm ³	36	19
11	Efficiency	%	99.08	99.48

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 205/03/2016-17

Date : 04/04/2017

Performance Evaluation of Air Pollution Control Equipments

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	---	05/03/2017
02	Attached to	---	De-dustingSystem
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	48
06	Ambient Temperature	°C	28
07	Average Velocity of Flue Gases	m/sec.	14.3
08	IsoKinetic Flowrate for Sampling	LPM	25
09	Inlet	mg/Nm ³	172
10	Outlet	mg/Nm ³	N.D.
11	Efficiency	%	100 %

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2017

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Ref. No. : 206/03/2016-17

Date : 04/04/2017

Performance Evaluation of Air Pollution Control Equipments

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 - 1/3

Sr. No.	Particulars	Unit	S - 7	S - 9
01	Date of Sampling	---	10/03/2017	10/03/2017
02	Attached to	---	Sinter Furnace	Discharging end of Sinter de-dusting System
03	Stack Height	Meter	50	50
04	Stack Diameter	Meter	2.0	1.3
05	Stack Temperature	°C	144	123
06	Ambient Temperature	°C	37	37
07	Average Velocity of Flue Gases	m/sec.	22.5	25.3
08	IsoKinetic Flowrate for Sampling	LPM	8	9
09	Inlet	mg/Nm ³	3125	3345
10	Outlet	mg/Nm ³	52	38
11	Efficiency	%	98.34	98.86

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100
Calibration due on 12/09/2017

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Analyst



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Ref. No. : 207/03/2016-17

Date : 04/04/2017

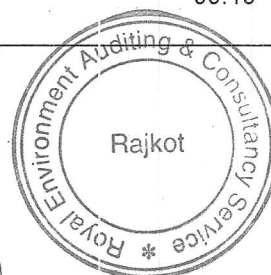
Performance Evaluation of Air Pollution Control Equipments Pipe Plant (GPCB ID:18036)

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 - 8	S - 22
01	Date of Sampling	---	13/03/2017	14/03/2017
02	Attached to	---	Common stack Mg Converter - I & II	Mg Converter - III
03	Stack Height	Meter	30	30
04	Stack Diameter	Meter	0.5	0.5
05	Stack Temperature	°C	44	94
06	Ambient Temperature	°C	34	33
07	Average Velocity of Flue Gases	m/sec.	15.5	6.5
08	IsoKinetic Flowrate for Sampling	LPM	27	22
09	Inlet	mg/Nm ³	3954	2635
10	Outlet	mg/Nm ³	32	12
11	Efficiency	%	99.19	99.54

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100
Calibration due on 12/09/2017



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Ref. No. : 208/03/2016-17

Date : 04/04/2017

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 - 15	S - 20	S - 23
01	Date of Sampling	---	13/03/2017	14/03/2017	14/03/2017	14/03/2017
02	Attached to	---	Zinc Coating - I	Zinc Coating - II	Zinc Coating - III	Zinc Coating - IV & V
03	Stack Height	Meter	30	30	30	30
04	Stack Duct Diameter	Meter	0.6	0.6	0.6	0.9
05	Stack Temperature	°C	48	45	43	44
06	Ambient Temperature	°C	34	35	34	34
07	Average Velocity of Flue Gases	m/sec.	12.8	11	13	12
08	IsoKinetic Flowrate for Sampling	LPM	22	20	22	21
09	Inlet	mg/Nm ³	1425	1025	1174	1247
10	Outlet	mg/Nm ³	10	8	6	9
11	Efficiency	%	99.30	99.22	99.49	99.27

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100
Calibration due on 12/09/2017

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Ref. No. :211/03/2016-17

Date : 04/04/2017

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 - 3	S - 6
01	Date of Sampling	---	10-03-2017	10-03-2017	10-03-2017
02	Time of sampling	---	17.00	10.00	12.00
03	Stack Attached to	---	Fuel & Flux Crusher and Screening building	Sinter Furnace	Discharge End
04	Air Pollution Control Measures	---	Bag Filter	ESP	ESP
05	Stack Height	Meter	32.0	50	32
06	Stack Diameter	Meter	1.40	2.0	1.30
07	Stack Temperature	°C	42	131	121
08	Ambient Temperature	°C	37	35	37
09	Average Velocity of Flue Gases	m/sec.	6.2	5.2	12.6
10	Isokinetic flow rate for P.M. Sampling	LPM	19	17	20
11	Gaseous Sampling Flow Rate	LPM	NA	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	10	36	19
14	Permissible limits for SO ₂	ppm	NA	100	NA
15	Measured Concentration of SO ₂	ppm	...	ND
16	Permissible limits for NO _x	ppm	NA	50	NA
17	Measured Concentration of NO _x	ppm	10.5

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

NA= Not Applicable

ND=Not Detectable





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Ref. No. : 212/03/2016-17

Date : 04/04/2017

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

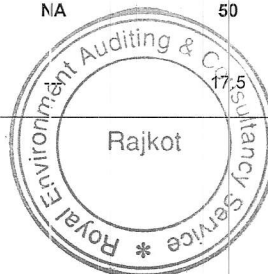
Sr. No.	Particulars	Unit	S - 1	S - 4	S - 7	S - 9
01	Date of Sampling	---	14-03-2017	14-03-2017	10-03-2017	10-03-2017
02	Time of sampling	Hr.	10.00	12.00	14.30	15.45
03	Stack Attached to	---	Fuel crushing de-duster system (Flux)	No. 1 Transfer Station De-duster System	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	30	50	50
06	Stack Diameter	Meter	0.7	0.7	2	1.3
07	Stack Temperature	°C	45	44	141	114
08	Ambient Temperature	°C	35	37	37	37
09	Average Velocity of Flue Gases	m/sec.	8.50	10.20	11.5	18.5
10	isokinetic flow rate for P.M. Sampling	LPM	16	20	18	15
11	Gaseous Sampling Flow Rate	LPM	NA	NA	20	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	12	22	52	38
14	Permissible limits for SO ₂	ppm	NA	NA	100	NA
15	Measured Concentration of SO ₂	ppm	---	---	1.8	---
16	Permissible limits for NO _x	ppm	NA	NA	50	NA
17	Measured Concentration of NO _x	ppm	---	---	17.5	---

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

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NA= Not Applicable

ND= Not Detectable

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Ref. No. :213/03/2016-17

Date : 04/04/2017

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 - 4	S - 5
01	Date of Sampling	---	11/03/2017	11/03/2017	11/03/2017	11/03/2017
02	Time of sampling	Hr.	10.15	12.15	14.30	16.15
03	Stack Attached to	---	Dedusting System	Stove 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	30.0	30.0
06	Stack Diameter	Meter	1.5	2.250	0.45	0.35
07	Stack Temperature	°C	47	223	52	42
08	Ambient Temperature	°C	34	36	37	37
09	Average Velocity of Flue Gases	m/sec.	22.7	3.7	10.4	9.5
10	Isokinetic flow rate for P.M. Sampling	LPM	10	10	18	17
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA	NA
12	Permissible limits for PM	mg/Nm3	150	150	150	150
13	Measured Concentration of PM.	mg/Nm3	6	ND	9	11
14	Permissible limits for SO2	mg/Nm3	NA	NA	NA	NA
15	Measured Concentration of SO2	mg/Nm3	---	---	---	---
16	Permissible limits for NOx	mg/Nm3	NA	NA	NA	NA
17	Measured Concentration of NOx	mg/Nm3	---	---	---	---

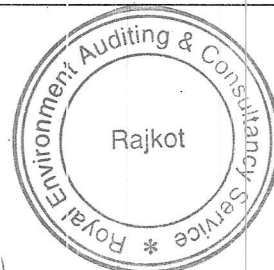
Note : Minimum Detectable Limit of SO2 & Nox is 0.1 and 0.01 ppm respectively.

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

NA=Not Applicable

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Ref. No. : 214/03/2016-17

Date : 04/04/2017

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
01 Date of Sampling	---	13/03/2017	13/03/2017	13/03/2017	13/03/2017
02 Time of sampling	Hr.	10.00	14.30	16.00	11.45
03 Stack Attached to	---	Dedusting System	Boiler - I	Boiler - II	Stove Stack
04 Air Pollution Control Measures	---	Bag Filter	---	---	---
05 Stack Height	Meter	35.0	45	45	50.0
06 Stack Diameter	Meter	1.5	1.4	1.4	2.25
07 Stack Temperature	°C	42	138	141	209
08 Ambient Temperature	°C	34	37	37	36
09 Average Velocity of Flue Gases	m/sec.	10.2	3.5	4.4	3.5
10 Isokinetic flow rate for P.M. Sampling	LPM	18	11	13	9
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
13 Measured Concentration of PM.	mg/Nm ³	ND	ND	ND	ND
14 Permissible limits for SO ₂	mg/Nm ³	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
17 Measured Concentration of NO _x	mg/Nm ³	ND	10.2	9.8	ND

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

N.D=Not Detectable

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Ref. No. : 217/03/2016-17

Date : 04/04/2017

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	--	15/03/2017	15/03/2017	14/03/2017	14/03/2017	15/03/2017	15/03/2017
02	Time of sampling	Hr.	10.00	11.30	13.00	15.00	14.00	17.20
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	0.6	0.6	0.5	0.9
07	Stack Temperature	°C	46	48	46	48	53	55
08	Ambient Temperature	°C	34	36	37	37	37	37
09	Average Velocity of Flue Gases	m/sec.	12.5	11.8	10.5	11.2	10.5	10.1
10	Isokinetic flow rate for P.M. Sampling	LPM	6	20	18	19	19	18
11	Gaseous Sampling Flow Rate	LPM	2.0	--	--	--	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	32	10 (Zn)	8(Zn)	6(Zn)	12	9 (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	2.8	--	--	--	1.5	--

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

NA=Not Applicable

ND=Not Detectable

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Ref. No. : 218/03/2016-17

Date : 04/04/2017

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	---	15/03/2017	15/03/2017	18/03/2017	18/03/2017	18/03/2017	18/03/2017	15/03/2017	15/03/2017
02	Time of sampling	Hr.	15.15	10.00	10.00	11.15	13.30	15.45	14.25	16.15
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	0.58	0.584	0.584	0.584	0.584	0.6	0.6
07	Stack Temperature	°C	35	32.0	35.0	36.0	38.0	44.0	44	43
08	Ambient Temperature	°C	34	34.0	32.0	34.0	36.0	37.0	39	37
09	Average Velocity of Flue Gases	m/sec.	3.7	4.0	3.8	3.9	4.0	4.1	12	11.8
10	Isokinetic flow rate for P.M. Sampling	LPM	15	16.0	15	14	14	15	25	21
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	16	11	12	15	14	18	25	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	1.0	1.2	1.3	1.1	1.4	1.5	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	3.5	3.1	2.8	3.1	2.2	3.5	5.8	4.2

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

ND= Not Detectable.

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Analyst



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Ref. No. : 219/03/2016-17

Date : 04/04/2017

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

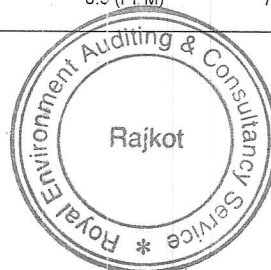
Sr. No.	Particulars	Unit	S - 7	S - 13	S - 14	S - 19
01	Date of Sampling	---	16/03/2017	16/03/2017	16/03/2017	16/03/2017
02	Time of sampling	Hr.	10.05	11.35	13.30	14.30
03	Stack Attached to	---	Sand Reclamation	Annealing Furnace - I	Annealing Furnace - II	Annealing Furnace - III
04	Air Pollution Control Measures	---	Bag Filter	---	---	---
05	Stack Height	Meter	30	32	32	32
06	Stack Diameter	Meter	0.9	1.375	1.375	1.375
07	Stack Temperature	°C	67	133	140	145
08	Ambient Temperature	°C	34	36	35	37
09	Average Velocity of Flue Gases	m/sec.	9.3	4.8	4.5	4.6
10	Isokinetic flow rate for P.M. Sampling	LPM	16	15	12	14
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm3	150	150	150	150
13	Measured Concentration of PM	mg/Nm3	40	14	10	11
14	Permissible limits for SO ₂	mg/Nm3	40	100 (PPM)	100 (PPM)	100 (ppm)
15	Measured Concentration of SO ₂	mg/Nm3	3.2	1.4	2.2	1.7
16	Permissible limits for NO _x	mg/Nm3	25	50 (PPM)	50 (PPM)	50 (PPM)
17	Measured Concentration of NO _x	mg/Nm3	12.7	8.5 (PPM)	7.5 (PPM)	6.9 (PPM)

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

N.D= Not Detectable



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Ref. No. : 220/03/2016-17

Date : 04/04/2017

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 - 8
01	Date of Sampling	---	17/03/2017	17/03/2017	17/03/2017	17/03/2017	17/03/2017	16/03/2017
02	Time of sampling	Hr.	16.30	17.30	11.15	12.30	10.00	15.30
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Annealing Furnace - I	Annealing Furnace - II	Zinc Coating	Zinc Coating Machine
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	---	---	Bag Filter	---
05	Stack Height	Meter	30	30	45	45	30	30
06	Stack Diameter	Meter	1.00	0.50	0.85	0.85	1.00	1.20
07	Stack Temperature	°C	58.00	---	130	135	38	42
08	Ambient Temperature	°C	35.00	35.00	34	35	35	34
09	Average Velocity of Flue Gases	m/sec	3.50	4.20	4.5	4.2	4.1	3.8
10	Isokinetic flow rate for PM Sampling	LPM	11	12	12	10	17	15
11	Gaseous Sampling Flow Rate	LPM	---	---	2.0	2.0	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50	50	50	50
13	Measured Concentration of PM	mg/Nm ³	15	13	18	14	20 (Zn)	15 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	100	100	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	1.60	2.40	---	---
16	Permissible limits for NO _x	PPM	NA	NA	50	50	NA	NA
17	Measured Concentration of NO _x	PPM	---	---	6.5 (PPM)	6.6 (PPM)	---	---

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

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2017

⊖ Not Detectable

= Not Applicable



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

Ref. No. : 226/03/2016-17

Date : 04/04/2017

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 March, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	40.2	42.5	41.3
2	Inside Mechanical Room	42.8	44.8	43.8
3	Inside Electrical Room	38.5	45.3	44.1
4	Inside Plant Office	44.1	54.8	48.7

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 : 12/09/2017

Royal Environment Auditing & Consultancy Service



Ajesh
Analyst



Royal

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Ref. No. : 227/03/2016-17

Date : 04/04/2017

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 March, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Nr. Stock House	60.5	71.3	64.2
02.	Inside Control Room	44.3	50.5	45.5
03.	Inside Control room of Cast House	42.5	47.2	44.6
04.	Inside Laboratory	37.3	44.3	41.2
05.	Inside Control Room of Blower House	50.5	56.7	53.7
06.	Inside Control Room of CPP	47.4	57.5	51.5

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 : 12/09/2017

Royal Environment Auditing & Consultancy Service



Analyst



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Ref. No. : 228/03/2016-17

Date : 04/04/2017

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 March, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	42.8	47.3	45.7
02	Inside Control Room – Mill Area of Spiral Plant	55.1	58.2	54.3
03	Nr. Pipe Cutting Area of Spiral Plant	59.5	71.2	65.5
04	Inside JCO Plant	61.1	70.5	64.2
05	Inside DISP / SDP Plant	65.4	70.2	65.3
06	Inside Coating Plant	60.7	65.5	63.2
07	Nr. CCM SDP-2	59.3	64.3	61.2
08	Inside Control Room of Annealing Furnace of SDP-2	44.5	51.3	47.3
09	Nr. Zinc Coating SDP-2	54.3	56.4	56.7
10	Near Mould Shop	65.7	80.5	72.5

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 : 12/09/2017



Royal Environment Auditing & Consultancy Service

Asmi
Analyst



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Ref. No. : 229/03/2016-17

Date : 04/04/2017

AMBIENT NOISE LEVEL MEASUREMENT

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

Date of sampling : 15th March, 2017

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	44.2	58.2	47.2	42.5	57.4	49.2
02.	Old Colony	41.3	54.3	46.5	39.8	52.5	48.3
03.	Nr. LPG Yard	46.7	56.3	55.2	48.5	59.5	53.2
04.	New Colony (School)	42.5	53.4	47.3	41.3	52.3	48.5
05.	Nr. SDP-2	51.3	55.5	54.2	50.5	56.4	53.3
06.	Nr. Coating Plant	47.6	57.3	53.5	47.5	58.8	54.4
07.	Nr. Gate No. 2	48.8	55.6	55.1	51.3	54.3	54.1
08.	Nr. Sinter Plant-1	55.3	69.2	64.3	55.4	67.6	63.7
09.	Nr. Sinter Plant-2	56.4	70.2	65.7	54.3	69.2	64.5
10.	Nr. Blast Furnace-1	52.2	64.4	57.3	48.6	59.3	58.3
11.	Nr. Blast Furnace-2	54.3	58.3	55.1	45.3	54.7	51.3
12.	Nr. Main Gate (Security Office)	46.5	56.7	51.3	46.7	57.6	52.7

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 : 12/09/2017

Royal Environment Auditing & Consultancy Service



A. J. J.
Analyst



Royal

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Ref. No. : 230/03/2016-17

Date : 04/04/2017

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 March, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	51.3	58.1	56.9
02.	Nr. Stock House	57.5	60.2	57.2
03.	C/R Blower House	56.5	64.3	60.5

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 : 12/09/2017

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Analyst



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Ref. No. : 231/03/2016-17

Date : 04/04/2017

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 March, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	45.1	54.5	48.2
02.	Inside Operator Room	54.3	60.3	55.3
03.	Near Proportioning Bulding	55.2	64.5	59.4
04.	Near Crusher House	60.4	65.4	64.2

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 : 12/09/2017

Royal Environment Auditing & Consultancy Service



Aswini
Analyst



Royal

Environment Auditing & Consultancy Service

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Ref. No. : 232/03/2016-17

Date : 04/04/2017

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 : 15/03/2017

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	---	8.15	7.45
02.	BOD (3 Days at 27°C)	mg/l	<20	144	7
03.	Total Dissolve Solid	mg/l	...	720	820
04.	COD	mg/l	...	151	34
05.	Total Suspended Solid	mg/l	<30	185	12
06.	Oil & Grease	mg/l	...	ND	ND
07.	Residual Chlorine	mg/l	Min. 0.5	---	0.80

ND=Not Detectable

Royal Environment Auditing & Consultancy Service



Arjun
Analyst

Ref. No. : 221/03/2016-17

Date : 04/04/2017

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 : 16th March, 2017

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 IAS 001	02	1.5-2.5	2.0	10	Gravimetric	6	---	<i>Arashi</i>	Mr. ARASHI GOJIYA

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 02/11/2017

For. Royal Environment Auditing & Consultancy Service



Arashi
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 : 16th March, 2017

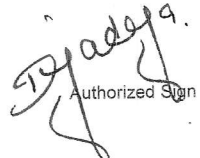
Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m ³					
1	Sinter Plant At First Floor	Total Dust	Personal Respirable Dust sampler IAS 001	02	2-3	2.5	10	Gravimetric	5	---		Mr. ARASHI GOJIYA

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 02/11/2017

For. Royal Environment Auditing & Consultancy Service




Authorized Sign

Ref. No. : 223/03/2016-17


Date : 04/04/2017

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

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

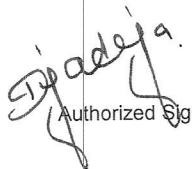
- 1 Name of the Department/Plant.: **BF Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18037)**
- 2 Raw materials; by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 16th March, 2017

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 IAS 001	02	10-12	11.0 (ppm)	50 (ppm)	Gravimetric	6	---		Mr. ARASHI GOJIYA
		Total Dust			3-4	3.5	10					

Instruments used : Envirotech make personal sampler, Model No. IAS 001
Calibration Due on. : 02/11/2017

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-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 : 16th March, 2017

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Refrance 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 IAS 001	02	7-8	7.5 (ppm)	50 (ppm)	Gravimetric	5	---	<i>Arashi</i>	Mr. ARASHI GOJIYA
		Total Dust			2-4	3.0	10					

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 02/11/2017

For. Royal Environment Auditing & Consultancy Service



Arashi
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 : 17th & 18th March, 2017

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/m ³					
1	Spiral Plant (Nr. ID/OD)	Total Dust	Personal Respirable Dust sampler IAS 001	02	1-2	1.5	10	Gravimetric	4	----	<i>Arashi</i>	Mr. ARASHI GOJIYA
2	JCO Plant (Nr. JCO Press)	Total Dust		02	2-3	2.5	10	Gravimetric	4	----		
3	Coating Plant-1 (Shot Blasting Area)	Total Dust		02	1-3	2.0	10	Gravimetric	5	----		
4	CCM Area (SDP / DISP)	Total Dust		02	4-6	5.0	10	Gravimetric	4	----		
5	Coating Plant-2 (Shot Blasting Area)	Total Dust		02	3-5	4.0	10	Gravimetric	2	----		
6	CCM Area (SDP-2)	Total Dust		02	1-3	2.0	10	Gravimetric	3	----		

Instruments used : Envirotech make personal sampler, Model No. IAS 001

Calibration Due on. : 02/11/2017

For. Royal Environment Auditing & Consultancy Service



Arashi
Authorized Sign