



# Royal

## Environment Auditing & Consultancy Service

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

Ph. +91 281 2360695 Email : royalservice@live.com admin@royalconsultancy.com

Ref. No. : 781/10/2018-19

Date : 01/11/2018

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - OCTOBER : 2018

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 : STP								
			1	2	3	4	5				
01.	No. of Week	---									
02	Date & Time Starting of Monitoring	---	03/10/18 09 00	05/10/18 09 00	08/10/18 08 45	12/10/18 09 15	15/10/18 09 30	20/10/18 08 45	22/10/18 09 00	26/10/18 09 30	31/10/18 09 15
03	Date & Time Ending of Monitoring	---	04/10/18 09 00	06/10/18 09 00	09/10/18 08 45	13/10/18 09 15	16/10/18 09 30	21/10/18 08 45	23/10/18 09 00	27/10/18 09 30	01/11/18 09 15
04	Duration of Sampling	Min.	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00
05	Dominant Wind Direction (From)	---	SSE	SSSE	S	SSE	SSW	S	SSW	S	SSE
06.	Average Wind Speed	Km/Hr.	7.8	6.9	5.2	5.9	3.3	6.2	6.7	5.5	6.9
07.	Average flow rate for Dust Monitoring PM10	m <sup>3</sup> /min.	1.12	1.11	1.12	1.13	1.14	1.12	1.11	1.13	1.12
08.	Average flow rate for Dust Monitoring PM2.5	m <sup>3</sup> /hr.	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
10.	Permissible limits for PM10*	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m <sup>3</sup>	62	61	63	60	58	62	64	56	61
12.	Permissible limits for PM2.5*	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m <sup>3</sup>	36	39	40	46	42	39	42	45	40
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	6.2	8.1	7.6	8.3	8.8	7.6	7.9	8.3	8.2
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	15.2	15.3	16.3	14.8	15.2	17.6	14.8	15.2	17.1
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	B D L

Instrument used : (1) 4 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 : 05/05/2019

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

Royal Environment Auditing & Consultancy Service



Hitesh  
Analyst



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Ph : +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 782/10/2018-19

Date : 01/11/2018

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - OCTOBER : 2018

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)								
			1	2	3	4	5				
01.	No. of Week	---									
02.	Date & Time Starting of Monitoring	---	03/10/18 08.45	05/10/18 09.15	08/10/18 09.00	12/10/18 09.30	15/10/18 09.00	20/10/18 09.15	22/10/18 09.30	26/10/18 08.45	31/10/18 09.00
03.	Date & Time Ending of Monitoring	---	04/10/18 08.45	06/10/18 09.15	09/10/18 09.00	13/10/18 09.30	16/10/18 09.00	21/10/18 09.15	23/10/18 09.30	27/10/18 08.45	01/11/18 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
05.	Dominant Wind Direction (From)	---	SSE	SSSE	S	SSE	SSW	S	SSW	S	SSE
06.	Average Wind Speed	Km/Hr.	7.8	6.9	5.2	5.9	3.3	6.2	6.7	5.5	6.9
07.	Average flow rate for Dust Monitoring PM10	m <sup>3</sup> /min.	1.11	1.12	1.13	1.11	1.12	1.13	1.11	1.13	1.14
08.	Average flow rate for Dust Monitoring PM2.5	m <sup>3</sup> /hr.	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
10.	Permissible limits for PM10*	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m <sup>3</sup>	65	59	62	61	56	64	60	58	60
12.	Permissible limits for PM2.5*	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m <sup>3</sup>	39	42	38	44	40	42	43	39	44
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	8.6	8.1	7.9	8.3	7.9	8.2	8.4	7.6	7.2
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	16.8	15.2	15.4	15.0	16.3	17.5	16.9	16.4	17.2
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	BDL	BDL	BDL	BDL	BDL	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 05/05/2019

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



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*K. Tesh*  
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Ref. No. : 783/10/2018-19

Date : 01/11/2018

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - OCTOBER : 2018

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

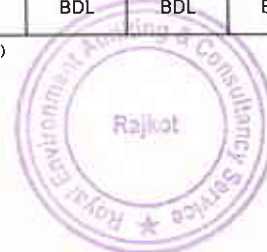
Test Method : As per IS Standards - 5182\_2/6/10/23

Sr. No.	Particulars	Unit	Location No.3 : Nr. Spiral-II Pipe Storage Yard (W)								
			1	2	3	4	5				
01.	No. of Week	---									
02.	Date & Time Starting of Monitoring	---	03/10/18 09.15	05/10/18 08.45	08/10/18 09.15	12/10/18 08.45	15/10/18 09.15	20/10/18 09.00	22/10/18 09.15	26/10/18 09.00	31/10/18 09.30
03.	Date & Time Ending of Monitoring	---	04/10/18 09.15	06/10/18 08.45	09/10/18 09.15	13/10/18 08.45	16/10/18 09.15	21/10/18 09.00	23/10/18 09.15	27/10/18 09.00	01/11/18 09.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	SSE	SSSE	S	SSE	SSW	S	SSW	S	SSE
06.	Average Wind Speed	Km/Hr.	7.8	6.9	5.2	5.9	3.3	6.2	6.7	5.5	6.9
07.	Average flow rate for Dust Monitoring PM10	m <sup>3</sup> /min.	1.11	1.13	1.12	1.14	1.11	1.11	1.13	1.12	1.11
08.	Average flow rate for Dust Monitoring PM2.5	m <sup>3</sup> /hr.	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
10.	Permissible limits for PM10*	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m <sup>3</sup>	63	58	64	62	56	59	63	58	61
12.	Permissible limits for PM2.5*	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m <sup>3</sup>	46	42	39	44	43	42	39	41	44
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	7.8	7.2	8.3	8.5	7.6	8.4	8.6	7.5	7.9
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	16.2	18.2	18.6	17.9	17.2	17.3	18.3	17.5	18.1
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B D L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	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 : 05/05/2019

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



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Ref. No. : 784/10/2018-19

Date : 01/11/2018

### NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - OCTOBER : 2018

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.4 : Old Colony (E)								
			1	2	3	4	5				
01.	No. of Week	—									
02.	Date & Time Starting of Monitoring	—	03/10/18 09.30	05/10/18 09.30	08/10/18 09.30	12/10/18 09.00	15/10/18 08.45	20/10/18 09.30	22/10/18 08.45	26/10/18 09.15	31/10/18 08.45
03.	Date & Time Ending of Monitoring	—	04/10/18 09.30	06/10/18 09.30	09/10/18 09.30	13/10/18 09.00	16/10/18 08.45	21/10/18 09.30	23/10/18 08.45	27/10/18 09.15	01/11/18 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
05.	Dominant Wind Direction (From)	—	SSE	SSSE	S	SSE	SSW	S	SSW	S	SSE
06.	Average Wind Speed	Km/Hr.	7.8	6.9	5.2	5.9	3.3	6.2	6.7	5.5	6.9
07.	Average flow rate for Dust Monitoring PM10	m <sup>3</sup> /min.	1.12	1.13	1.12	1.11	1.12	1.13	1.11	1.12	1.14
08.	Average flow rate for Dust Monitoring PM2.5	m <sup>3</sup> /hr.	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
10.	Permissible limits for PM10*	µg/m <sup>3</sup>	100	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m <sup>3</sup>	58	62	61	59	60	62	63	59	57
12.	Permissible limits for PM2.5*	µg/m <sup>3</sup>	60	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m <sup>3</sup>	46	39	42	38	44	42	39	41	39
14.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	8.1	7.9	8.5	7.8	8.1	7.9	8.2	8.3	8.4
16.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	17.6	15.9	16.3	16.8	17.2	18.2	17.5	18.2	18.1
18.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m <sup>3</sup>	B.D.L.	BDL	BDL	BDL	BDL	BDL	BDL	BDL	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 : 05/05/2019

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



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Ref. No. :785/10/2018-19

Date : 01/11/2018

### FUGITIVE EMISSION MONITORING REPORT

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

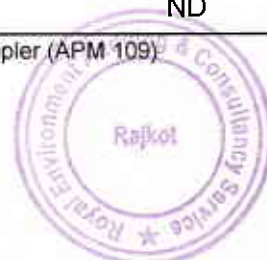
Test Method : As per IS Standards - 5182 Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 8	A - 9
01.	Location of Ambient	----	<b>BF-2 GROUND HOPPER</b>	<b>SDP-2 CCM AREA</b>
02.	Date of sampling	----	10/10/2018	11/10/2018
03.	Time of sampling	----	10.00	9.30
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	----	SSW	SSE
06.	Average Wind Speed	Km/Hr.	5.2	6.8
07.	Average flow rate during sampling	m <sup>3</sup> /Hr.	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2
09.	<b>Permissible limits for PM 10*</b>	<b>µg/m<sup>3</sup></b>	<b>3000</b>	<b>3000</b>
10.	Measured Concentration of PM 10	µg/m <sup>3</sup>	1615	1456
11.	<b>Permissible limits for SO<sub>2</sub>*</b>	<b>µg/m<sup>3</sup></b>	<b>150</b>	<b>150</b>
12.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	16.7	16.9
13.	<b>Permissible limits for NO<sub>2</sub>*</b>	<b>µg/m<sup>3</sup></b>	<b>120</b>	<b>120</b>
14.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	18.7	17.9
15.	<b>Permissible limit for CO **</b>	<b>µg/m<sup>3</sup></b>	<b>2000</b>	<b>2000</b>
16.	Measured Concentration of CO	µg/m <sup>3</sup>	BDL	BDL
17.	<b>Permissible limit for Pb*</b>	<b>µg/m<sup>3</sup></b>	<b>2</b>	<b>2</b>
18.	Measured Concentration of Pb	µg/m <sup>3</sup>	ND	ND

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

All Calibration due on : 05/05/2019

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Ref. No. :786/10/2018-19

Date : 01/11/2018

### FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

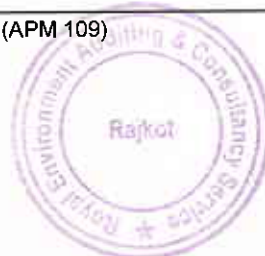
Test Method : As per IS Standards - 5182\_Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 2	A - 3
01.	Location of Ambient	---	BF-2 RMH Stock House Transfer Point	Sinter RMH Yard
02.	Date of sampling	---	09/10/2018	10/10/2018
03.	Time of sampling	---	9.30	9.00
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	---	SSW	S
06.	Average Wind Speed	Km/Hr.	6.3	7.2
07.	Average flow rate during sampling	m <sup>3</sup> /Hr.	1.0	1.0
08.	Average flow rate for Gas sampling	LPM	0.2	0.2
09.	Permissible limits for PM 10*	µg/m <sup>3</sup>	3000	3000
10.	Measured Concentration of PM 10	µg/m <sup>3</sup>	1162	1267
11.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	150	150
12.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	13.8	11.5
13.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	120	120
14.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	15.6	16.2
15.	Permissible limit for CO **	µg/m <sup>3</sup>	2000	2000
16.	Measured Concentration of CO	µg/m <sup>3</sup>	BDL	BDL
17.	Permissible limit for Pb*	µg/m <sup>3</sup>	2	2
18.	Measured Concentration of Pb	µg/m <sup>3</sup>	ND	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)  
All Calibration due on : 05/05/2019

BDL= Below Detectable Limit  
ND= Not Detectable

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Ref. No. :787/10/2018-19

Date : 01/11/2018

### FUGITIVE EMISSION MONITORING REPORT

Name of company : JINDAL SAW LIMITED

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

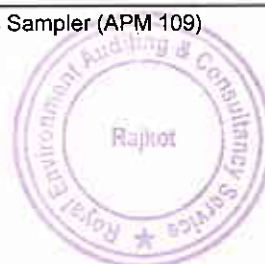
Test Method : As per IS Standards - 5182\_Part - 2/6/10/23/22

Sr. No.	Particulars	Unit	A - 6
01.	Location of Ambient	----	BF-1 CAST HOUSE
02.	Date of sampling	----	09/10/2018
03.	Time of sampling	----	10.00
04.	Duration of Sampling	Hr.	8.00
05.	Dominant Wind Direction (From)	----	S
06.	Average Wind Speed	Km/Hr.	6.8
07.	Average flow rate during sampling	m <sup>3</sup> /Hr.	1.0
08.	Average flow rate for Gas sampling	LPM	0.2
09.	Permissible limits for PM 10*	µg/m <sup>3</sup>	3000
10.	Measured Concentration of PM 10	µg/m <sup>3</sup>	1236
11.	Permissible limits for SO <sub>2</sub> *	µg/m <sup>3</sup>	150
12.	Measured Concentration of SO <sub>2</sub>	µg/m <sup>3</sup>	12.4
13.	Permissible limits for NO <sub>2</sub> *	µg/m <sup>3</sup>	120
14.	Measured Concentration of NO <sub>2</sub>	µg/m <sup>3</sup>	15.8
15.	Permissible limit for CO **	µg/m <sup>3</sup>	2000
16.	Measured Concentration of CO	µg/m <sup>3</sup>	BDL
17.	Permissible limit for Pb*	µg/m <sup>3</sup>	2
18.	Measured Concentration of Pb	µg/m <sup>3</sup>	ND

Instrument used : (1) 3 Nos. RDS (APM - 217 BL), (2) 3 Nos. Gaseous Sampler (APM 109)  
All Calibration due on : 05/05/2019

BDL= Below Detectable Limit  
ND= Not Detectable

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Ref. No. : 788/10/18-19

Date : 01/11/2018

### 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
01	Date of Sampling	---	10-10-2018
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	139
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	15
08	IsoKinetic Flowrate for Sampling	LPM	22
09	Inlet	mg/Nm <sup>3</sup>	1248
10	Outlet	mg/Nm <sup>3</sup>	20
11	Efficiency	%	98.40

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

Calibration due on 12/09/2019



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Ref. No. : 789/10/18-19

Date : 01/11/2018

### 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	---	11-10-2018
02	Attached to	---	De-dustingSystem
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	39
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	14.2
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm <sup>3</sup>	871
10	Outlet	mg/Nm <sup>3</sup>	16
11	Efficiency	%	98.16

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

Calibration due on 12/09/2019



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Ref. No. : 790/10/18-19

Date : 01/11/2018

### 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-15	S - 7
01	Date of Sampling	---	05-10-2018	13-10-2018
02	Attached to	---	Discharging End of Sinter de-dusting system	Sinter Furnace
03	Stack Height	Meter	50	50
04	Stack Diameter	Meter	1.3	2.0
05	Stack Temperature	°C	131	143
06	Ambient Temperature	°C	35	33
07	Average Velocity of Flue Gases	m/sec.	18.8	17.4
08	IsoKinetic Flowrate for Sampling	LPM	27	24
09	Inlet	mg/Nm <sup>3</sup>	210	1429
10	Outlet	mg/Nm <sup>3</sup>	14	21
11	Efficiency	%	93.33	98.53

Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100  
Calibration due on 12/09/2019



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Ref. No. : 791/10/18-19

Date : 01/11/2018

### 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
01	Date of Sampling	---	13/10/2018
02	Attached to	---	<b>Common stack Mg Converter - I &amp; II</b>
03	Stack Height	Meter	30
04	Stack Diameter	Meter	0.5
05	Stack Temperature	°C	59
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	8.37
08	IsoKinetic Flowrate for Sampling	LPM	15
09	Inlet	mg/Nm <sup>3</sup>	846
10	Outlet	mg/Nm <sup>3</sup>	15
11	Efficiency	%	98.23

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

Calibration due on 12/09/2019

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Ref. No. : 792/10/18-19

Date : 01/11/2018

### 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 - 15
01	Date of Sampling	---	20/10/2018
02	Attached to	---	Zinc Coating - II
03	Stack Height	Meter	30
04	Stack Duct Diameter	Meter	0.6
05	Stack Temperature	°C	38
06	Ambient Temperature	°C	32
07	Average Velocity of Flue Gases	m/sec.	9.8
08	IsoKinetic Flowrate for Sampling	LPM	18
09	Inlet	mg/Nm <sup>3</sup>	442
10	Outlet	mg/Nm <sup>3</sup>	12
11	Efficiency	%	97.29

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

Calibration due on 12/09/2019

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Ref. No. : 793/10/18-19

Date : 01/11/2018

### 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-8
01	Date of Sampling	---	08/10/2018	08/10/2018	05/10/2018
02	Attached to	---	Mg Treatment	Zinc Coating	Zinc Coating machine(FL-7)
03	Stack Height	Meter	30	30	30
04	Stack Duct Diameter	Meter	1.00	1.00	0.8
05	Stack Temperature	°C	47	38	48
06	Ambient Temperature	°C	31	33	31
07	Average Velocity of Flue Gases	m/sec.	9.4	8.8	9.35
08	IsoKinetic Flowrate for Sampling	LPM	17	16	17
09	Inlet	mg/Nm <sup>3</sup>	1032	403	439
10	Outlet	mg/Nm <sup>3</sup>	16	11	14
11	Efficiency	%	98.45	97.27	96.81

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

Calibration due on 12/09/2019

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Ref. No. : 794/10/18-19

Date : 01/11/2018

### 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
01	Date of Sampling	---	06/10/2018
02	Attached to	---	Dedusting System
03	Stack Height	Meter	40
04	Stack Duct Diameter	Meter	1.5
05	Stack Temperature	°C	38
06	Ambient Temperature	°C	31
07	Average Velocity of Flue Gases	m/sec.	13.4
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm <sup>3</sup>	1139
10	Outlet	mg/Nm <sup>3</sup>	18
11	Efficiency	%	98.42

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

Calibration due on 12/09/2019



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Ref. No. : 795/10/18-19

Date : 01/11/2018

### 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 - 4	S - 5	S - 6
01	Date of Sampling	---	10-10-2018	10-10-2018	18-10-2018	18-10-2018	10-10-2018
02	Time of sampling	---	10.00	9.30	10.30	11.25	14.20
03	Stack Attached to	---	Fuel & Flux Crusher and Screening building	Sinter Furnace	Primary Mixture House	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	Bag Filter	ESP	.....	---	ESP
05	Stack Height	Meter	32.0	50	19.75	36.08	32
06	Stack Diameter	Meter	1.40	2.0	1.25	1.25	1.30
07	Stack Temperature	°C	33	135	36	33	126
08	Ambient Temperature	°C	30	32	30	30	30
09	Average Velocity of Flue Gases	m/sec.	7.06	10.2	3.3	2.6	9.5
10	Isokinetic flow rate for P.M. Sampling	LPM	13	15	14	11	14
11	Gaseous Sampling Flow Rate	LPM	NA	2.0	NA	NA	NA
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	12	20	12	11	23
14	Permissible limits for SO <sub>2</sub>	ppm	NA	100	NA	NA	NA
15	Measured Concentration of SO <sub>2</sub>	ppm	...	7.6	.....	....	....
16	Permissible limits for NO <sub>x</sub>	ppm	NA	50	NA	NA	NA
17	Measured Concentration of NO <sub>x</sub>	ppm	.....	16.2	.....	.....	.....

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019

NA= Not Applicable

ND=Not Detectable

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Ref. No. : 796/10/18-19

Date : 01/11/2018

### 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 - 5	S - 7	S - 9
01	Date of Sampling	---	04-10-2018	13-10-2018	18-10-2018	18-10-2018	04-10-2018	05-10-2018
02	Time of sampling	Hr.	9.45	11.15	12.10	10.30	12.25	15.45
03	Stack Attached to	---	Secondary Mixer House	Fuel crushing de-duster system (Flux)	Fuel Screening deduster System (Flux Screening)	Primary Mixer De-duster system	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	Dust Collector	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	30	30	20	50	50
06	Stack Diameter	Meter	0.7	0.7	0.7	0.7	2	1.3
07	Stack Temperature	°C	38	38	44	34	136	126
08	Ambient Temperature	°C	34	33	30	30	38	35
09	Average Velocity of Flue Gases	m/sec.	2.52	6.69	6.97	3.23	11.8	11.9
10	Isokinetic flow rate for P.M. Sampling	LPM	11	13	13	13	17	17
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA	NA	2.0	NA
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	10	14	13	11	21	14
14	Permissible limits for SO <sub>2</sub>	ppm	NA	NA	NA	NA	100	NA
15	Measured Concentration of SO <sub>2</sub>	ppm	---	---	---	---	7.5	---
16	Permissible limits for NO <sub>x</sub>	ppm	NA	NA	NA	NA	50	NA
17	Measured Concentration of NO <sub>x</sub>	ppm	---	---	---	---	18.2	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 14/09/2018

NA= Not Applicable

ND= Not Detectable

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Ref. No. : 797/10/18-19

Date : 01/11/2018

### 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 - 5
01	Date of Sampling	---	11/10/2018	11/10/2018	11/10/2018	22/10/2018
02	Time of sampling	Hr.	15.00	11.00	12.00	15.00
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	34	156	154	170
08	Ambient Temperature	°C	32	32	32	31
09	Average Velocity of Flue Gases	m/sec.	8.9	6.1	5.9	7.5
10	Isokinetic flow rate for P.M. Sampling	LPM	17	19	18	22
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	50	50	50
13	Measured Concentration of PM.	mg/Nm <sup>3</sup>	16	9	10	6
14	Permissible limits for SO <sub>2</sub>	ppm	100	250	250	250
15	Measured Concentration of SO <sub>2</sub>	ppm	ND	8.2	7.5	ND
16	Permissible limits for NO <sub>x</sub>	ppm	50	150	150	150
17	Measured Concentration of NO <sub>x</sub>	ppm	ND	11.3	11.8	ND
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol	%	N.A.	0.3	0.3	0.2

Note : Minimum Detectable Limit of SO<sub>2</sub> & NO<sub>x</sub> is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019

ND=Not Detectable

N.A.=Not Applicable

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Ref. No. : 798/10/18-19

Date : 01/11/2018

### 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 - 3	S - 5
01	Date of Sampling	---	06/10/2018	06/10/2018	22/10/2018
02	Time of sampling	Hr.	10.45	12.30	12.30
03	Stack Attached to	---	Dedusting System	Stove Stack	Iron Ore fine & Dust Collecting System
04	Air Pollution Control Measures	---	Bag Filter	---	Bag Filter
05	Stack Height	Meter	40.0	65.0	30.0
06	Stack Diameter	Meter	1.5	2.250	0.35
07	Stack Temperature	°C	34	175	38
08	Ambient Temperature	°C	31	33	33
09	Average Velocity of Flue Gases	m/sec.	9.5	8.1	4.3
10	Isokinetic flow rate for P.M. Sampling	LPM	18	24	28
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150
13	Measured Concentration of PM.	mg/Nm <sup>3</sup>	18	5	17
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	NA	NA	NA
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	---	---	---
16	Permissible limits for No <sub>x</sub>	mg/Nm <sup>3</sup>	NA	NA	NA
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	---	---	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

NA=Not Applicable

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

Calibration due on : 12/09/2019

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Ref. No. : 799/10/2018-19

Date : 01/11/2018

### 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
01	Date of Sampling	---	13/10/2018	12/10/2018	20/10/2018
02	Time of sampling	Hr.	9.30	9.45	15.10
03	Stack Attached to	---	Common stack Mg Converter-I&II	Zn Coating - I	Zn Coating - II
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Seprater & Bag Filter	Cyclone Seprater & Bag Filter
05	Stack Height	Meter	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.6
07	Stack Temperature	°C	53	35	36
08	Ambient Temperature	°C	32	32	32
09	Average Velocity of Flue Gases	m/sec.	10.37	6.5	6.1
10	Isokinetic flow rate for P.M. Sampling	LPM	19	10	12
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	20 (Zn)	20 (Zn)
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	15	10	12(Zn)
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	NA	NA
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	ND	---	---
16	Permissible limits for NO <sub>x</sub>	mg/Nm <sup>3</sup>	25	NA	NA
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	4.4	---	---

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019

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Ref. No. : 800/10/2018-19

Date : 01/11/2018

### 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 - 12
01	Date of Sampling	---	12/10/2018	12/10/2018	20/10/2018
02	Time of sampling	Hr.	9.30	10.15	10.30
03	Stack Attached to	---	Core Shop-I	Core Shop-II	Core Cleaning & Dusting-I
04	Air Pollution Control Measures	---	---	---	Bag Filter
05	Stack Height	Meter	30	30	30
06	Stack Diameter	Meter	0.584	0.58	0.6
07	Stack Temperature	°C	35	36	35
08	Ambient Temperature	°C	33	33	31
09	Average Velocity of Flue Gases	m/sec.	2.3	2.5	6.7
10	Isokinetic flow rate for P.M. Sampling	LPM	10	11	13
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	11	9	13
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	40	40
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	4.8	4.8	ND
16	Permissible limits for NO <sub>x</sub>	mg/Nm <sup>3</sup>	25	25	25
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	6.2	5.2	5.2

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019



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Ref. No. : 801/10/2018-19

Date : 01/11/2018

### 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
01	Date of Sampling	---	12/10/2018	20/10/2018
02	Time of sampling	Hr.	16.30	11.00
03	Stack Attached to	---	Sand Reclamation	Annealing Furnace
04	Air Pollution Control Measures	---	Bag Filter	---
05	Stack Height	Meter	30	32
06	Stack Diameter	Meter	0.9	1.375
07	Stack Temperature	°C	95	126
08	Ambient Temperature	°C	33	31
09	Average Velocity of Flue Gases	m/sec.	8.14	5.7
10	Isokinetic flow rate for P.M. Sampling	LPM	13	19
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm <sup>3</sup>	150	150
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	23	6
14	Permissible limits for SO <sub>2</sub>	mg/Nm <sup>3</sup>	40	100 (PPM)
15	Measured Concentration of SO <sub>2</sub>	mg/Nm <sup>3</sup>	6.2	2.4
16	Permissible limits for NO <sub>x</sub>	mg/Nm <sup>3</sup>	25	50 (PPM)
17	Measured Concentration of NO <sub>x</sub>	mg/Nm <sup>3</sup>	12.4	9.2 (PPM)

Note : Minimum Detectable Limit of SO<sub>2</sub> & No<sub>x</sub> is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019



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Hitesh  
Analyst



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Ref. No. : 802/10/2018-19

Date : 01/11/2018

### 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 - 4	S - 5	S - 6	S - 8
01	Date of Sampling	—	08/10/2018	09/10/2018	09/10/2018	08/10/2018	09/10/2018	05/10/2018
02	Time of sampling	Hr.	9.50	9.3	15.30	10.25	10.30	16.30
03	Stack Attached to	—	Magnesium Treatment	Socket Cleaning	Annealing Furnace	Zinc Coating	Tri- Grinding Section	Zinc Coating Machine(FL-7)
04	Air Pollution Control Measures	—	Bag Filter	Bag Filter	—	Bag Filler	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	45	30	30	30
06	Stack Diameter	Meter	1.00	0.50	0.85	1.00	1.00	1.20
07	Stack Temperature	°C	45	37	125	35	39	34
08	Ambient Temperature	°C	31	34	34	33	33	31
09	Average Velocity of Flue Gases	m/sec	7.3	5.1	7.1	5.2	4.44	4.7
10	Isokinetic flow rate for PM Sampling	LPM	13	22	23	22	19	20
11	Gaseous Sampling Flow Rate	LPM	—	—	2.00	—	—	—
12	Permissible limits for PM	mg/Nm <sup>3</sup>	50	50	150	50	50	50
13	Measured Concentration of PM	mg/Nm <sup>3</sup>	16	14	6	11 (Zn)	13	14 (Zn)
14	Permissible limits for SO <sub>2</sub>	PPM	NA	NA	100 (PPM)	NA	NA	NA
15	Measured Concentration of SO <sub>2</sub>	PPM	—	—	2.1	—	—	—
16	Permissible limits for NO <sub>x</sub>	PPM	NA	NA	50 (PPM)	NA	NA	NA
17	Measured Concentration of NO <sub>x</sub>	PPM	—	—	7.8 (PPM)	—	—	—

Note : Minimum Detectable Limit of SO<sub>2</sub> & Nox is 0.1 and 0.01 ppm respectively.

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

Calibration due on : 12/09/2019

ND= Not Detectable

N.A= Not Applicable

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Ref. No. : 808/10/2018-19

Date : 01/11/2018

### AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15<sup>th</sup> October, 2018

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	41.8	64.5	54.5	40.2	57.5	52.4
02.	OHC	44.3	54.2	50.7	44.1	52.4	50.3
03.	Nr. LPG Yard	43.2	56.4	53.4	44.2	58.2	52.2
04.	New Colony (School)	42.1	51.2	49.2	41.8	52.3	47.2
05.	Behid FL-7	53.4	67.5	57.2	52.8	59.6	56.4
06.	Nr. Coating-1	57.2	66.3	64.2	51.1	61.8	54.5
07.	Nr. Coating-2	52.8	64.5	59.2	45.7	65.2	54.2
08.	Nr. Sinter Plant-1 Canteen	51.8	76.4	64.4	54.2	70.1	62.5
9.	Blast Furnace RMHS	58.9	67.2	63.1	53.1	68.2	62.5
10.	Spiral-2-Behind work shop	55.2	64.3	61.2	46.3	66.5	57.2
11.	Chairman Bungalow	41.2	57.2	50.2	39.1	56.2	47.9
12.	301 Yard	57.2	69.3	64.2	53.2	66.7	62.2
13.	Guest House	41.2	59.3	52.2	41.5	58.7	47.3
14.	Harvesting pond	54.3	65.7	59.2	44.7	66.3	56.2

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 : 12/09/2019



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Ref. No. : 809/10/2018-19

Date : 01/11/2018

### 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 : 10<sup>th</sup> October, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	42.1	58.9	53.4
2	Inside Mechanical Room	43.8	64.5	52.8
3	Near Crusher	51.3	68.7	61.2
4	Sinter Machine area	43.7	62.5	57.2

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 : 12/09/2019



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Ref. No. : 810/10/2018-19

Date : 01/11/2018

### 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 : 11<sup>th</sup> October, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Stock House	62.5	76.9	72.4
02.	Inside BF Control Room	51.3	57.6	54.3
03.	Near Cast House	46.5	65.7	57.3
04.	Inside Laboratory	42.1	55.4	48.6
05.	Inside Control Room of Blower House	50.2	61.7	58.2
06.	Inside Control Room of CPP	48.3	56.9	54.2

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 : 12/09/2019

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Ref. No. : 811/10/2018-19

Date : 01/11/2018

### 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 8<sup>th</sup>, 12<sup>th</sup> ,& 15<sup>th</sup> October, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP	42.5	58.3	52.5
02	Inside Control Room – Mill Area of Spiral Plant	54.3	65.3	61.2
03	Nr. Pipe Cutting Area of Spiral Plant	61.3	79.2	69.3
01.	Nr. Induction Furnace area of DISP Plant	54.3	72.5	63.4
06	Nr. Induction Furnace of SDP-2	58.5	72.4	65.6
07	Inside Control Room of Annealing Furnace of SDP-2	73.9	83.5	78.2
08	Nr. Zinc Coating of FL-7	62.5	76.2	73.4
09	Nr. Shot Blasting area of Coating Plant- 1	71.5	82.6	77.2
10	Near Mould Shop	64.3	77.2	74.5

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 : 12/09/2019



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Ref. No. : 812/10/2018-19

Date : 01/11/2018

### 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 : 6<sup>th</sup> October, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside BF Control Room	44.3	64.5	57.9
02.	Stock House	50.1	68.3	57.2
03.	Inside control room of blower house	47.5	58.7	55.2
03.	Nr. Cast House	56.3	69.4	66.5

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 : 12/09/2019



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Ref. No. : 813/10/2018-19

Date : 01/11/2018

### WORK ZONE NOISE LEVEL MEASUREMENT

#### SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 5<sup>th</sup> October, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	44.1	65.3	56.2
02.	Sinter Machine area	46.7	66.5	57.4
03.	Near Proportioning Building	52.9	71.2	62.5
04.	Near Crusher House	59.2	74.5	66.2

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 : 12/09/2019



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Ref. No. : 814/10/2018-19

Date : 01/11/2018

### 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 : 24/10/2018

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	----	7.6	7.80
02.	BOD (3 Days at 27°C)	mg/l	<20	144	6
03.	Total Dissolve Solid	mg/l	...	1983	1588
04.	COD	mg/l	...	124	8
05.	Total Suspended Solid	mg/l	<30	125	3
06.	Oil & Grease	mg/l	...	ND	ND
07.	Fecal Coliform	MPN/100ml	1000	NA	Absent
08.	Residual Chlorine	mg/l	Min. 0.5		0.61

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**Form No. 37**

(Prescribed under Rule 12-B)

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

- 1 Name of the Department/Plant: **Sinter 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 : 5<sup>th</sup> October, 2018


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						
1	Sinter Plant-2 ( Sinter Machine area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.5-3.3	2.40	10	Gravimetric	6	---		Mr. Hitesh Umletiya

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing &amp; 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 : 10<sup>th</sup> October, 2018

0	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in 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						
1	Sinter Plant-1 ( Sinter Machine area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-3.6	2.4	10	Gravimetric	8	----		Mr. Hitesh Umlatiya

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing &amp; 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 : 6<sup>th</sup> October, 2018

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						
1	BF Plant-2 (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	6-14	10 (ppm)	50 (ppm)	Gravimetric	5	----		Mr. Hitesh Umletiya
		Total Dust			1.1-2.6	1.9	10					

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service

  
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**Form No. 37**

(Prescribed under Rule 12-B)

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

1 Name of the Department/Plant.: **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 : 1<sup>th</sup> October, 2018

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						
1	BF Plant-1 (Cast House)	CO Total Dust	Personal Respirable Dust sampler VPDS 203	02	4.1-11.7	8.1	50 (ppm)	Gravimetric	6	---	<i>Mr. Hitesh Umliya</i>	Mr. Hitesh Umliya

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203  
Calibration Due on. : 12/03/2019

For. Royal Environment Auditing &amp; Consultancy Service


*Vaibhav*  
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.,CO & 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 : 8<sup>th</sup> & 15<sup>th</sup> October, 2018

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						
1	Spiral Plant-2 (Nr. ID/OD)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.1-3.3	2.2	10	Gravimetric	5	---		Mr. Hitesh Umletiya
2	DISP Plant (Induction Furnace Area)	Total Dust		02	1.5-3.6	2.6	10	Gravimetric	8	---		
3	Coating Plant-1 (Shot Blasting)	Total Dust		02	1.2-3.2	2.2	10	Gravimetric	6	---		
4	SDP-2 (CCM Area)	Total Dust		02	1.5-3.2	2.4	10	Gravimetric	4	---		

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203

Calibration Due on. : 12/03/2019



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