



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 436/01/2017-18

Date : 03/02/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 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 : Weigh Bridge (Nr.Gate No-2) (E)						
			1	2	3	4	5	6	7
01.	No. of Week	---							
02.	Date & Time Starting of Monitoring	---	09/01/18 09.15	12/01/18 09.00	15/01/18 08.45	19/01/18 09.00	22/01/18 09.15	27/01/18 08.45	30/01/18 09.15
03.	Date & Time Ending of Monitoring	---	10/01/18 09.15	13/01/18 09.00	16/01/18 08.45	20/01/18 09.00	23/01/18 09.15	28/01/18 08.45	31/01/18 09.15
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	SE	SE	NE	NE	W	W	SE
06.	Average Wind Speed	Km/Hr.	7.6	6.9	8.3	10.5	6.3	9.1	8.5
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.14	1.11	1.12	1.15	1.12	1.13
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /hr.	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
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	56	59	63	57	65	51	54
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	39	38	41	35	42	34	36
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.5	8.1	8.3	7.5	8.7	7.2	8.6
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.9	15.1	17.6	14.2	17.6	17.3	16.4
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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 : 05/05/2018

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



Hitesh

Bal Adalat



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 437/01/2017-18

Date : 03/02/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 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	6	7
01.	No. of Week	----							
02.	Date & Time Starting of Monitoring	----	09/01/18 09.00	12/01/18 09.15	15/01/18 09.00	19/01/18 08.45	22/01/18 09.00	27/01/18 09.00	30/01/18 09.30
03.	Date & Time Ending of Monitoring	----	10/01/18 09.00	13/01/18 09.15	16/01/18 09.00	20/01/18 08.45	23/01/18 09.00	28/01/18 09.00	31/01/18 09.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	SE	SE	NE	NE	W	W	SE
06.	Average Wind Speed	Km/Hr.	7.6	6.9	8.3	10.5	6.3	9.1	8.5
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.12	1.14	1.12	1.13	1.14	1.12
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /hr.	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
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	58	66	67	63	68	61	65
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	36	33	41	43	38	42	35
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.8	8.2	7.5	8.6	8.1	7.9	8.6
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.8	17.3	16.7	17.2	17.5	16.5	17.5
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	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 : 05/05/2018

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



Hitesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 438/01/2017-18

Date : 03/02/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 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. Work Shop Spiral-II (W)						
			1	2	3	4	5	6	7
01.	No. of Week	----							
02.	Date & Time Starting of Monitoring	----	09/01/18 09.30	12/01/18 08.45	15/01/18 09.15	19/01/18 09.30	22/01/18 09.30	27/01/18 09.15	30/01/18 09.00
03.	Date & Time Ending of Monitoring	----	10/01/18 09.30	13/01/18 08.45	16/01/18 09.15	20/01/18 09.30	23/01/18 09.30	28/01/18 09.15	31/01/18 09.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	SE	SE	NE	NE	W	W	SE
06.	Average Wind Speed	Km/Hr.	7.6	6.9	8.3	10.5	6.3	9.1	8.5
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.13	1.15	1.12	1.14	1.10	1.13
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /hr.	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
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	59	62	64	59	61	60	63
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	36	30	41	34	32	38	32
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.6	8.2	8.5	7.6	6.5	8.3	8.4
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.3	16.8	17.3	17.1	17.8	17.5	16.8
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	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 : 05/05/2018

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



Hitesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 439/01/2017-18

Date : 03/02/2018

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 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 : MAIN GATE (E)						
			1	2	3	4	5	6	7
01.	No. of Week	----							
02.	Date & Time Starting of Monitoring	----	09/01/18 08.45	12/01/18 09.30	15/01/18 09.30	19/01/18 09.15	22/01/18 08.45	27/01/18 09.30	30/01/18 08.45
03.	Date & Time Ending of Monitoring	----	10/01/18 08.45	13/01/18 09.30	16/01/18 09.30	20/01/18 09.15	23/01/18 08.45	28/01/18 09.30	31/01/18 08.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	----	SE	SE	NE	NE	W	W	SE
06.	Average Wind Speed	Km/Hr.	7.6	6.9	8.3	10.5	6.3	9.1	8.5
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.13	1.12	1.13	1.14	1.15	1.12
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /hr.	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
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	52	60	65	64	59	61	63
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5	µg/m ³	36	31	32	36	34	38	35
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.3	7.6	7.8	8.2	8.5	7.4	7.7
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.3	16.7	17.3	17.5	16.7	16.4	17.8
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO	µg/m ³	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 : 05/05/2018

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



Hitesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. :440/01/2017-18

Date: 03/02/2018

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 - 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	---	17/01/2018	17/01/2018	16/01/2018
03.	Time of sampling	---	9.00	9.15	9.20
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	---	SE	SE	NE
06.	Average Wind Speed	Km/Hr.	7.6	7.4	6.8
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	1268	1460	1526
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	12.4	11.2	11.9
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	17.2	16.9	17.8
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 : 05/05/2018

BDL= Below Detectable Limit
ND= Not Detectable



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. :441/01/2017-18

Date:..03/02/2018

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 - 4	A - 5	A - 6
01.	Location of Ambient	---	Sinter 2 Ground Hopper	DISP "CCM" Area	BF CAST HOUSE
02.	Date of sampling	---	16/01/2018	18/01/2018	18/01/2018
03.	Time of sampling	---	9.00	9.10	9.35
04.	Duration of Sampling	Hr.	8.00	8.00	8.00
05.	Dominant Wind Direction (From)	---	NE	W	W
06.	Average Wind Speed	Km/Hr.	7.1	7.2	7.5
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	1438	1382	1320
11.	Permissible limits for SO ₂ *	µg/m ³	150	150	150
12.	Measured Concentration of SO ₂	µg/m ³	12.5	11.5	12.7
13.	Permissible limits for NO ₂ *	µg/m ³	120	120	120
14.	Measured Concentration of NO ₂	µg/m ³	16.8	15.9	17.4
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 : 05/05/2018

BDL= Below Detectable Limit
ND= Not Detectable





Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 442/01/17-18

Date: 03/02/2018

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	---	11-01-2018
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	135
06	Ambient Temperature	°C	31
07	Average Velocity of Flue Gases	m/sec.	10
08	IsoKinetic Flowrate for Sampling	LPM	15
09	Inlet	mg/Nm ³	1421
10	Outlet	mg/Nm ³	14
11	Efficiency	%	99.01

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

Calibration due on 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 443/01/17-18

Date:..03/02/2018

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	---	15/01/2018
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	29
07	Average Velocity of Flue Gases	m/sec.	14.1
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm ³	1143
10	Outlet	mg/Nm ³	21
11	Efficiency	%	98.16

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

Calibration due on 14/09/2018



Hitesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 444/01/17-18

Date: 03/02/2018

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 - 2	S - 3	S-15	S - 7
01	Date of Sampling	---	23-01-2018	24-01-2018	24-01-2018	24-01-2018
02	Attached to	---	Fuel crushing de-duster system (Flux)	Fuel screening deduster system (Flux screening)	Discharging End of Sinter de-dusting system	Sinter Furnace
03	Stack Height	Meter	30	30	50	50
04	Stack Diameter	Meter	0.7	0.7	1.3	2.0
05	Stack Temperature	°C	47	43	127	145
06	Ambient Temperature	°C	29	29	30	31
07	Average Velocity of Flue Gases	m/sec.	8.74	8.18	18.58	17.3
08	IsoKinetic Flowrate for Sampling	LPM	16	15	27	24
09	Inlet	mg/Nm ³	431	587	785	1613
10	Outlet	mg/Nm ³	14	16	25	15
11	Efficiency	%	96.75	97.27	96.82	99.07

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

Calibration due on 14/09/2018

Royal Environment Auditing & Consultancy Service



Hi Tesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 445/01/17-18

Date: .03/02/2018

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	S - 22
01	Date of Sampling	---	19/01/2018	19/01/2018
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	58	52
06	Ambient Temperature	°C	29	29
07	Average Velocity of Flue Gases	m/sec.	8.43	8.73
08	IsoKinetic Flowrate for Sampling	LPM	15	16
09	Inlet	mg/Nm ³	771	697
10	Outlet	mg/Nm ³	11	15
11	Efficiency	%	98.57	97.85

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

Calibration due on 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 446/01/17-18

Date:03/02/2018

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 - 9	S - 15	S - 20	S - 21
01	Date of Sampling	---	22/01/2018	20/01/2018	20/01/2018	22/01/2018
02	Attached to	---	Zinc Coating - I	Zinc Coating - II	Zinc Coating - III	Zinc Coating - V
03	Stack Height	Meter	30	30	30	30
04	Stack Duct Diameter	Meter	0.6	0.6	0.6	0.5
05	Stack Temperature	°C	37	36	38	47
06	Ambient Temperature	°C	29	29	30	30
07	Average Velocity of Flue Gases	m/sec.	9.66	9.7	11.9	11.9
08	IsoKinetic Flowrate for Sampling	LPM	18	18	22	21
09	Inlet	mg/Nm ³	332	318	435	973
10	Outlet	mg/Nm ³	12	11	10	13
11	Efficiency	%	96.39	96.54	97.70	98.66

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

Calibration due on 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 447/01/17-18

Date: .03/02/2018

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	---	17/01/2018	16/01/2018	17/01/2018
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	43	38	44
06	Ambient Temperature	°C	30	29	29
07	Average Velocity of Flue Gases	m/sec.	6.9	8.45	9.1
08	IsoKinetic Flowrate for Sampling	LPM	18	16	17
09	Inlet	mg/Nm ³	1328	371	362
10	Outlet	mg/Nm ³	14	13	10
11	Efficiency	%	98.95	96.50	97.24

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

Calibration due on 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 448/01/17-18

Date: .03/02/2018

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	---	12/01/2018
02	Attached to	---	Dedusting System
03	Stack Height	Meter	40
04	Stack Duct Diameter	Meter	1.5
05	Stack Temperature	°C	36
06	Ambient Temperature	°C	29
07	Average Velocity of Flue Gases	m/sec.	12.73
08	IsoKinetic Flowrate for Sampling	LPM	24
09	Inlet	mg/Nm ³	1382
10	Outlet	mg/Nm ³	10
11	Efficiency	%	99.28

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

Calibration due on 14/09/2018



M. Hesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 449/01/17-18

Date: 03/02/2018

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 - 3	S - 5	S - 6
01	Date of Sampling	---	11-01-2018	11-01-2018	10-01-2018
02	Time of sampling	---	10.45	12.20	3.50
03	Stack Attached to	---	Sinter Furnace	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	ESP	ESP
05	Stack Height	Meter	50	36.08	32
06	Stack Diameter	Meter	2.0	1.25	1.30
07	Stack Temperature	°C	136	34	123
08	Ambient Temperature	°C	31	29	31
09	Average Velocity of Flue Gases	m/sec.	10.4	0.4	8.2
10	Isokinetic flow rate for P.M. Sampling	LPM	15	9	12
11	Gaseous Sampling Flow Rate	LPM	2.0	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM	mg/Nm ³	14	9	21
14	Permissible limits for SO ₂	ppm	100	NA	NA
15	Measured Concentration of SO ₂	ppm	9.4
16	Permissible limits for NO _x	ppm	50	NA	NA
17	Measured Concentration of NO _x	ppm	19.4

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 : 14/09/2018

NA= Not Applicable

ND=Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 450/01/17-18

Date: 03/02/2018

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 - 7	S - 9
01	Date of Sampling	---	11/01/2018	23/01/2018	24-01-2018	12/01/2018	12/01/2018
02	Time of sampling	Hr.	10.50	11.45	11.50	12.00	15.45
03	Stack Attached to	---	Secondary Mixer House	Fuel crushing de-duster system (Flux)	Fuel Screening deduster System (Flux Screening)	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	30	30	50	50
06	Stack Diameter	Meter	0.7	0.7	0.7	2	1.3
07	Stack Temperature	°C	37	37	36	137	124
08	Ambient Temperature	°C	29	29	29	30	30
09	Average Velocity of Flue Gases	m/sec.	2.19	7.14	6.92	11.7	11.5
10	Isokinetic flow rate for P.M. Sampling	LPM	10	29	28	16	17
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	10	14	16	15	25
14	Permissible limits for SO ₂	ppm	NA	NA	NA	100	NA
15	Measured Concentration of SO ₂	ppm	---	---	---	8.2	---
16	Permissible limits for NO _x	ppm	NA	NA	NA	50	NA
17	Measured Concentration of NO _x	ppm	---	---	---	19.4	---

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 : 14/09/2018

NA= Not Applicable

ND= Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 451/01/17-18

Date.: 03/02/2018

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
01	Date of Sampling	---	15/01/2018	15/01/2018	15/01/2018
02	Time of sampling	Hr.	10.20	11.20	15.25
03	Stack Attached to	---	Dedusting System	Boiler - I	Boiler - II
04	Air Pollution Control Measures	---	Bag Filter	---	---
05	Stack Height	Meter	35.0	45	45
06	Stack Diameter	Meter	1.5	1.4	1.4
07	Stack Temperature	°C	36	157	153
08	Ambient Temperature	°C	29	30	30
09	Average Velocity of Flue Gases	m/sec.	6.8	5.9	5.8
10	Isokinetic flow rate for P.M. Sampling	LPM	16	18	18
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	50	50
13	Measured Concentration of PM.	mg/Nm ³	21	13	15
14	Permissible limits for SO ₂	ppm	100	250	250
15	Measured Concentration of SO ₂	ppm	ND	8.2	7.6
16	Permissible limits for NO _x	ppm	50	150	150
17	Measured Concentration of NO _x	ppm	ND	11.8	14.2
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol	%	N.A.	0.3	0.3

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

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

Calibration due on : 14/09/2018



Litesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 452/01/17-18

Date: 03/02/2018

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
01	Date of Sampling	---	12/01/2018
02	Time of sampling	Hr.	10.30
03	Stack Attached to	---	Dedusting System
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	40.0
06	Stack Diameter	Meter	1.5
07	Stack Temperature	°C	35
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/sec.	9.5
10	Isokinetic flow rate for P.M. Sampling	LPM	18
11	Gaseous Sampling Flow Rate	LPM	NA
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	11
14	Permissible limits for SO ₂	mg/Nm ³	NA
15	Measured Concentration of SO ₂	mg/Nm ³	---
16	Permissible limits for No _x	mg/Nm ³	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.

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

Calibration due on : 14/09/2018



Hitesh



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 453/01/2017-18

Date: 03/02/2018

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	S - 20	S - 22	S - 23
01	Date of Sampling	---	19/01/2018	22/01/2018	20/01/2018	20/01/2018	19/01/2018	22/01/2018
02	Time of sampling	Hr.	10.30	10.45	15.10	11.15	11.55	15.50
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	52	31	35	35	53	42
08	Ambient Temperature	°C	29	29	30	29	29	30
09	Average Velocity of Flue Gases	m/sec.	8.73	6.0	6.2	8.5	10.2	8.37
10	Isokinetic flow rate for P.M. Sampling	LPM	16	26	26	16	18	15
11	Gaseous Sampling Flow Rate	LPM	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	11	14 (Zn)	11 (Zn)	10 (Zn)	15	13 (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 NO _x	mg/Nm ³	25	NA	NA	NA	25	NA
17	Measured Concentration of NO _x	mg/Nm ³	5.1	---	---	---	4.20	---

Note : Minimum Detectable Limit of SO₂ & NO_x 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

Royal Environment Auditing & Consultancy Service



Hirtekh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 454/01/2017-18

Date: .03/02/2018

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 - 3	S - 4	S - 12	S - 18
01	Date of Sampling	---	18/01/2018	18/01/2018	18/01/2018	18/01/2018	23/01/2018	23/01/2018
02	Time of sampling	Hr.	10.10	11.00	11.50	15.20	10.30	11.30
03	Stack Attached to	---	Core Shop-I	Core Shop-II	Core Shop-III	Core Shop-IV	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
06	Stack Diameter	Meter	0.584	0.58	0.584	0.584	0.6	0.6
07	Stack Temperature	°C	34	33	35	42	37	36
08	Ambient Temperature	°C	29	29	30	29	30	29
09	Average Velocity of Flue Gases	m/sec.	2.2	2.2	2.3	2.3	8.1	6.8
10	Isokinetic flow rate for P.M. Sampling	LPM	9	9	10	9	13	28
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	11	8	13	9	18	20
14	Permissible limits for SO ₂	mg/Nm ³	40	40	40	40	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	3.5	4.1	4.6	4.8	ND	ND
16	Permissible limits for Nox	mg/Nm ³	25	25	25	25	25	25
17	Measured Concentration of Nox	mg/Nm ³	5.4	6.2	5.4	3.9	4.2	5.4

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

ND= Not Detectable

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

Calibration due on : 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 455/01/2017-18

DATE: 03/02/2018

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
01	Date of Sampling	---	18/01/2018
02	Time of sampling	Hr.	16.10
03	Stack Attached to	---	Sand Reclamation
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	30
06	Stack Diameter	Meter	0.9
07	Stack Temperature	°C	92
08	Ambient Temperature	°C	29
09	Average Velocity of Flue Gases	m/sec.	8.12
10	Isokinetic flow rate for P.M. Sampling	LPM	28
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM	mg/Nm ³	32
14	Permissible limits for SO₂	mg/Nm ³	40
15	Measured Concentration of SO ₂	mg/Nm ³	4.3
16	Permissible limits for NO_x	mg/Nm ³	25
17	Measured Concentration of NO _x	mg/Nm ³	15.6

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

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

Calibration due on : 14/09/2018



4/1/18



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 456/01/2017-18

Date: 03/02/2018

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 - 5	S - 6	S - 8
01	Date of Sampling	---	17/01/2018	16/01/2018	16/01/2018	16/01/2018	17/01/2018
02	Time of sampling	Hr.	10.20	10.15	11.20	15.25	16.10
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Zinc Coating	Tri- Grinding Section	Zinc Coating Machine(FL-7)
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Bag Filter	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30	30
06	Stack Diameter	Meter	1.00	0.50	1.00	1.00	1.20
07	Stack Temperature	°C	43	36	38	35	32
08	Ambient Temperature	°C	30	29	29	30	29
09	Average Velocity of Flue Gases	m/sec	6.9	4.5	8.5	3.87	4.2
10	Isokinetic flow rate for PM Sampling	LPM	18	19	16	16.27	18
11	Gaseous Sampling Flow Rate	LPM	---	---	---	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50	50	50
13	Measured Concentration of PM	mg/Nm ³	14	11	13 (Zn)	16	10 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	NA	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	---	---	---
16	Permissible limits for NO _x	PPM	NA	NA	NA	NA	NA
17	Measured Concentration of NO _x	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 : 14/09/2018

ND= Not Detectable

N.A= Not Applicable

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 462/01/2017-18

Date: .03/02/2018

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 : 11th January, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	42.9	57.4	50.1
2	Inside Mechanical Room	42.2	61.5	53.0
3	Inside Electrical Room	42.6	60.1	53.4
4	Inside Plant Office	44.7	60.8	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 : 14/09/2018



Royal Environment Auditing & Consultancy Service

Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 463/01/2017-18

Date: 03/02/2018

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 : 15th January, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Nr. Stock House	62.4	78.3	70.2
02.	Inside Control Room	48.5	57.6	53.4
03.	Inside Control room of Cast House	45.9	64.1	56.2
04.	Inside Laboratory	41.2	54.2	46.9
05.	Inside Control Room of Blower House	51.6	59.3	55.7
06.	Inside Control Room of CPP	48.3	55.9	52.4

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 : 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 464/01/2017-18

Date: 03/02/2018

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 : 13th, 16th, 19th & 24th January, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP / SDP	42.8	55.9	50.2
02	Inside Control Room – Mill Area of Spiral Plant	55.3	64.1	60.7
03	Nr. Pipe Cutting Area of Spiral Plant	59.8	77.3	68.5
04	Inside DISP / SDP Plant	52.1	63.4	58.7
05	Nr. CCM SDP-2	51.9	70.5	61.8
06	Inside Control Room of Annealing Furnace of SDP-2	42.7	60.5	51.0
07	Nr. Zinc Coating SDP-2	63.8	73.5	69.1
08	Insie Coating Plant	72.4	80.9	76.7
09	Near Mould Shop	62.5	78.1	71.9

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 : 14/09/2018



Royal Environment Auditing & Consultancy Service

Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 466/01/2017-18

Date: .03/02/2018

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 : 24th January, 2018

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	47.3	63.5	56.2
02.	Nr. Stock House	49.8	65.2	57.3
03.	C/R Blower House	58.2	66.5	62.8

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 : 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 467/01/2017-18

Date: 03/02/2018

WORK ZONE NOISE LEVEL MEASUREMENT

SINTER PLANT - 2 (29017)

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 12th December, 2017

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	44.7	61.2	52.8
02.	Inside Operator Room	47.3	63.7	55.1
03.	Near Proportioning Building	51.2	68.2	60.7
04.	Near Crusher House	58.7	72.9	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 : 14/09/2018

Royal Environment Auditing & Consultancy Service



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 465/01/2017-18

Date: .03/02/2018

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 13th January, 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	43.8	62.9	53.2	41.7	56.8	51.2
02.	Old Colony	42.6	57.7	51.1	41.0	56.3	49.2
03.	Nr. LPG Yard	44.7	55.8	51.9	42.5	56.8	51.2
04.	New Colony (School)	42.5	49.2	46.9	44.1	56.2	51.0
05.	Nr. SDP-2	51.5	650.2	57.7	52.6	61.0	57.2
06.	Nr. Coating Plant	56.7	64.1	61.3	50.2	58.3	55.1
07.	Nr. Gate No. 2	54.3	63.1	58.9	45.2	62.1	53.8
08.	Nr. Sinter Plant-1	55.2	73.4	63.1	52.1	64.9	59.4
09.	Nr. Sinter Plant-2	52.3	73.8	64.3	52.8	67.5	61.4
10.	Nr. Blast Furnace-1	57.4	65	61.2	52.6	66.1	59.7
11.	Nr. Blast Furnace-2	54.2	64.1	60.2	45.6	64.2	56.2
12.	Nr. Main Gate (Security Office)	51.6	63.4	56.4	44.2	61.3	53.2

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 : 14/09/2018



Hitesh

Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 468/01/2017-18

Date: .03/02/2018

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 : 30/01/2018

Test Method : As per IS Standards - 3025

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	----	7.66	7.10
02.	BOD (3 Days at 27°C)	mg/l	<20	154	10
03.	Total Dissolve Solid	mg/l	...	1286	1334
04.	COD	mg/l	...	138	8
05.	Total Suspended Solid	mg/l	<30	151	7
06.	Oil & Grease	mg/l	...	ND	ND
07.	Residual Chlorine	mg/l	Min. 0.5	----	0.63

ND=Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst

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 : 12th January, 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 at First Floor	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.3-2.5	1.85	10	Gravimetric	6	---	<i>Hitesh</i>	Mr. Hitesh Umletiya

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

Calibration Due on. : 13/03/2018



For. Royal Environment Auditing & Consultancy Service

Hitesh
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 : 11th January, 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	Sinter Plant-1 at First Floor	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-2.4	1.8	10	Gravimetric	5	---	Hitesh	Mr. Hitesh Umletiya

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

Calibration Due on. : 13/03/2018



For. Royal Environment Auditing & Consultancy Service

Hitesh Umletiya
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 : 15th January, 2018

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination		TWA concentration 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						
1	BF Plant (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	7-16	12.0	50 (ppm)				Mr. Hitesh Umletiya
		Total Dust			1.4-2.6	2.10					

Instruments used : Vaibhav make personal sampler, Model No. VPDS 203
Calibration Due on. : 13/03/2018

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 : 24th January, 2017

Sr. No	Location Operation monitored	Identified Contaminante	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 (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	6-13	7.5 (ppm)	50 (ppm)	Gravimetric	5	----	Hitesh	Mr. Hitesh Umletiya
		Total Dust			1.4-2.7	2.2	10					

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

Calibration Due on. : 13/03/2018



For. Royal Environment Auditing & Consultancy Service

Hitesh
Authorized Sign

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

er 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

of Sampling : 13th, 16th, 19th & 24th January, 2018

Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration 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						
Spiral Plant (Nr. ID/OD)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-2.1	1.6	10	Gravimetric	6	---	Hitesh	Mr. Hitesh Umletiya
Coating Plant-1 (Application Area)	Total Dust		02	1.1-1.6	1.40	10	Gravimetric	7	---		
CCM Area (DISP)	Total Dust		02	2.3-3.4	3.0	10	Gravimetric	4	---		
CCM Area (SDP-2)	Total Dust		02	1.1-2.3	1.9	10	Gravimetric	5	---		

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

dition Due on. : 13/03/2018



For: Royal Environment Auditing & Consultancy Service


 Authorized Sign