



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 201 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 01/01/2018-19

Date : 04/02/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 2019

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

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	Location No.1 : STP					
			3	4	5	6	7	8
01.	No. of Week	---						
02.	Date & Time Starting of Monitoring	---	15/01/19 08.45	18/01/19 09.00	21/01/19 09.30	25/01/19 09.15	28/01/19 09.30	30/01/19 09.45
03.	Date & Time Ending of Monitoring	---	16/01/19 08.45	18/01/19 09.00	22/01/19 09.30	26/01/19 09.15	29/01/19 09.30	31/01/19 09.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	SW	NW	NNW	NNW
06.	Average Wind Speed	Km/Hr.	11.9	4.1	3.2	9.1	13.1	8.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min	1.12	1.13	1.11	1.12	1.13	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
09.	Average flow rate for Gas Monitoring	LPM	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
11.	Measured Concentration of PM10	µg/m ³	56	49	52	48	63	64
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	31	38	36	32	36	43
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.0	7.8	8.2	7.9	8.1	8.3
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	15.6	16.2	16.8	15.9	16.5	16.4
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	BDL	BDL	B.D.L	B.D.L

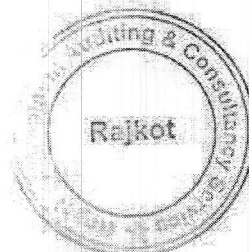
Instrument used : RDS (APM - 217 BL), Gaseous Sampler (AAS 109), PM 2.5 Sampler (AAS 127)

Parameters are not covered in NABL Scope

All Calibration due on : 05/05/2019

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

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bal Adalal, Gondal Road, RAJKOT - 360 002.
Ph. +91 261 2360695 Email : royalsenvironment@live.com admin@royalconsultancy.com

Ref. No. : 02/01/2018-19

Date : 04/02/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 2019

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

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	Location No.2 : Vikasapuram					
			3	4	5	6	7	8
01.	No. of Week	---						
02.	Date & Time Starting of Monitoring	---	15/01/19 09.00	18/01/19 09.15	21/01/19 09.00	25/01/19 09.30	28/01/19 09.15	30/01/19 08.45
03.	Date & Time Ending of Monitoring	---	16/01/19 09.00	18/01/19 09.15	22/01/19 09.00	26/01/19 09.30	29/01/19 09.15	31/01/19 08.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	SW	NW	NNW	NNW
06.	Average Wind Speed	Km/Hr.	11.9	4.1	3.2	9.1	13.1	8.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.13	1.11	1.14	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
09.	Average flow rate for Gas Monitoring	LPM	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
11.	Measured Concentration of PM10	µg/m ³	49	53	59	57	51	54
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	38	39	44	36	38	31
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.1	8.3	7.9	8.5	8.2	7.6
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.5	17.2	18.2	16.5	17.6	18.1
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO#	µg/m ³	BDL	BDL	BDL	BDL	BDL	BDL

Parameters are not covered in NABL Scope

Instrument used : RD6 (APM - 217 BL), Gaseous Sampler (AAS 109), PM2.5 Sampler (AAS 127)

All Calibration due on : 05/05/2019

*Permissible Limits are as per NAAQ Standard 15th November 2008.



Royal Environment Auditing & Consultancy Service

D. Jadhav

Aitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Date : 04/02/2019

Ref. No. : 03/01/2018-19

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 2019

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

NABL Certificate No. : TC 5948

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

Sr. No.	Particulars	Unit	Location No.3 : Nr. Spiral-II Pipe Storage Yard					
			3		4		5	
01.	No. of Week	---						
02.	Date & Time Starting of Monitoring	---	15/01/19 09.15	18/01/19 08.45	21/01/19 08.45	25/01/19 09.00	28/01/19 09.00	30/01/19 09.00
03.	Date & Time Ending of Monitoring	---	16/01/19 09.15	18/01/19 08.45	22/01/19 08.45	26/01/19 09.00	29/01/19 09.00	31/01/19 09.15
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	SW	NW	NNW	NNW
06.	Average Wind Speed	Km/Hr.	11.9	4.1	3.2	9.1	13.1	8.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.12	1.14	1.13	1.12	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
09.	Average flow rate for Gas Monitoring	LPM	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
11.	Measured Concentration of PM10	µg/m ³	52	49	63	54	60	62
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	39	36	51	44	38	42
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.8	8.1	8.7	7.6	8.4	7.5
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	18.2	17.8	18.1	18.3	17.9	18.1
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	BDL	BDL	B.D.L	B.D.L

Instrument used : RDS (APM - 217 8L), Gaseous Sampler (AAS-109), PM 2.5 Sampler (AAS-127)

All Calibration due on : 05/06/2019

*Permissible Limits are as per NAAQ Standard 10th November 2009.

Parameters are not covered in NABL Scope

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivallik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002
Ph. +91 281 2360695 Email : royalsenvironment@live.com admin@royalconsultancy.com

Ref. No. : 04/01/2018-19

Date : 04/02/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - JANUARY : 2019

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

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

NABL Certificate No. : TC 5948

Sr.No.	Particulars	Unit	Location No.4 : Old Colony					
			3	4	5	6	7	8
01.	No. of Week	---						
02.	Date & Time Starting of Monitoring	---	15/01/19 09.30	18/01/19 08.30	21/01/19 09.15	25/01/19 08.45	28/01/19 08.45	30/01/19 09.00
03.	Date & Time Ending of Monitoring	---	16/01/19 08.30	18/01/19 08.30	22/01/19 08.15	26/01/19 08.45	29/01/19 08.45	31/01/19 09.00
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (Front)	---	NNW	WNW	SW	NW	NNW	NNW
06.	Average Wind Speed	Km/Hr.	11.9	4.1	3.2	9.1	13.1	6.8
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.13	1.11	1.14	1.12	1.11
08.	Average flow rate for Dust Monitoring PM2.5	m ³ /hr.	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
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	59	48	61	64	62	60
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	31	39	32	41	36	42
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.4	7.9	8.3	8.5	7.8	8.1
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	17.5	17.9	18.1	18.6	18.2	18.4
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	BDL	BDL	B.D.L.	B.D.L.

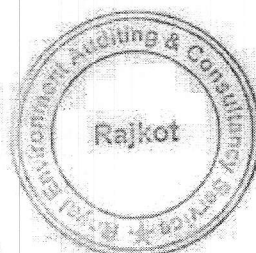
Instrument used : RDS (APM - 217 BL), Gaseous Sampler (AAS 108), PM 2.5 Sampler (AAS 127)

All Calibration due on : 06/05/2019

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

Parameters are not covered in NABL Scope

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivallik-7, B/s Bai Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. :07/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	A - 6	A - 2
01.	Location of Ambient	---	BF-1 CAST HOUSE	BF-1 RMH Stock House
02.	Date of sampling	---	16/01/2019	19/01/2019
03.	Time of sampling	---	10.00	9.30
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	---	WNW	NW
06.	Average Wind Speed	Km/Hr.	7.0	3.9
07.	Average flow rate during sampling	m ³ /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 ³	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1142	1184
11.	Permissible limits for SO ₂ *	µg/m ³	150	150
12.	Measured Concentration of SO ₂	µg/m ³	13.5	13.4
13.	Permissible limits for NO ₂ *	µg/m ³	120	120
14.	Measured Concentration of NO ₂	µg/m ³	15.1	15.1
15.	Permissible limit for CO **	µg/m ³	2000	2000
16.	Measured Concentration of CO #	µg/m ³	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2
18.	Measured Concentration of Pb #	µg/m ³	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

Parameters are not covered in NABL Scope

BDL= Below Detectable Limit

ND= Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivallik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royalenvironment@live.com admin@royalconsultancy.com

Ref. No. :06/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	A - 4	A - 3
01.	Location of Ambient	---	Sinter 2 Ground Hopper	Sinter RMH Yard
02.	Date of sampling	---	16/01/2019	17/01/2019
03.	Time of sampling	---	8.45	9.00
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	---	WNW	WNW
06.	Average Wind Speed	Km/Hr.	7.0	7.1
07.	Average flow rate during sampling	m ³ /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 ³	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1143	1392
11.	Permissible limits for SO ₂ *	µg/m ³	150	150
12.	Measured Concentration of SO ₂	µg/m ³	12.1	12.5
13.	Permissible limits for NO ₂ *	µg/m ³	120	120
14.	Measured Concentration of NO ₂	µg/m ³	16.5	16.2
15.	Permissible limit for CO **	µg/m ³	2000	2000
16.	Measured Concentration of CO #	µg/m ³	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2
18.	Measured Concentration of Pb #	µg/m ³	ND	ND

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

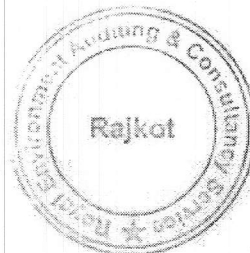
All Calibration due on : 05/05/2019

Parameters are not covered in NABL Scope

BDL= Below Detectable Limit

ND= Not Detectable

Royal Environment Auditing & Consultancy Service



Mitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360895 Email : royalenvironment@live.com admin@royalconsultancy.com

Ref. No. :05/01/2018-19

Date : 04/02/2019

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

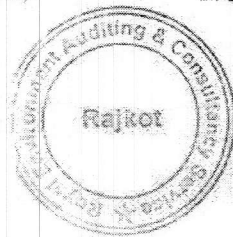
NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	A-7
01.	Location of Ambient	---	BF-2 GROUND HOPPER
02.	Date of sampling	---	17/01/2019
03.	Time of sampling	---	9.45
04.	Duration of Sampling	Hr.	8.00
05.	Dominant Wind Direction (From)	---	WNW
06.	Average Wind Speed	Km/Hr.	3.7
07.	Average flow rate during sampling	m ³ /Hr.	1.0
08.	Average flow rate for Gas sampling	LPM	0.2
09.	Permissible limits for PM-10*	µg/m ³	3000
10.	Measured Concentration of PM 10	µg/m ³	1549
11.	Permissible limits for SO ₂ *	µg/m ³	150
12.	Measured Concentration of SO ₂	µg/m ³	17.2
13.	Permissible limits for NO ₂ *	µg/m ³	120
14.	Measured Concentration of NO ₂	µg/m ³	18.3
15.	Permissible limit for CO **	µg/m ³	2000
16.	Measured Concentration of CO #	µg/m ³	BDL
17.	Permissible limit for Pb*	µg/m ³	2
18.	Measured Concentration of Pb #	µg/m ³	ND

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

Parameters are not covered in NABL Scope

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalk-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 261 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. :06/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	A - 4	A - 3
01.	Location of Ambient	---	Sinter 2 Ground Hopper	Sinter RMH Yard
02.	Date of sampling	---	16/01/2019	17/01/2019
03.	Time of sampling	---	8.45	9.00
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	---	WNW	WNW
06.	Average Wind Speed	Km/Hr.	7.0	7.1
07.	Average flow rate during sampling	m ³ /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 ³	3000	3000
10.	Measured Concentration of PM 10	µg/m ³	1143	1392
11.	Permissible limits for SO ₂ *	µg/m ³	150	150
12.	Measured Concentration of SO ₂	µg/m ³	12.1	12.5
13.	Permissible limits for NO ₂ *	µg/m ³	120	120
14.	Measured Concentration of NO ₂	µg/m ³	16.5	16.2
15.	Permissible limit for CO **	µg/m ³	2000	2000
16.	Measured Concentration of CO #	µg/m ³	BDL	BDL
17.	Permissible limit for Pb*	µg/m ³	2	2
18.	Measured Concentration of Pb #	µg/m ³	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

Parameters are not covered in NABL Scope

BDL= Below Detectable Limit;
ND= Not Detectable

Royal Environment Auditing & Consultancy Service



Mitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 17/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1	S - 2
01	Date of Sampling	---	21/01/2019	21/01/2019
02	Time of sampling	Hr.	15.00	11.00
03	Stack Attached to	---	Dedusting System	Boiler - I
04	Air Pollution Control Measures	---	Bag Filter	---
05	Stack Height	Meter	35.0	45
06	Stack Diameter	Meter	1.5	1.4
07	Stack Temperature	°C	35	157
08	Ambient Temperature	°C	30	30
09	Average Velocity of Flue Gases	m/sec.	9.5	8.4
10	Isokinetic flow rate for P.M. Sampling	LPM	18	25
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM	mg/Nm ³	10	6
14	Permissible limits for SO ₂	ppm	100	100
15	Measured Concentration of SO ₂	ppm	ND	7.3
16	Permissible limits for NO _x	ppm	50	50
17	Measured Concentration of NO _x	ppm	ND	12.4
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.
19	Measured Concentration of CO vol/vol #	%	N.A.	0.3

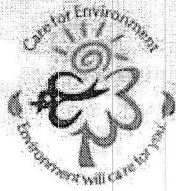
Note : Minimum Detectable Limit of SO₂ & Nox is 0.1 and 0.01 ppm respectively.
Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100
Calibration due on : 12/09/2019

Parameters are not covered in NABL Scope

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 2380695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 09/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	21-01-2019
02	Attached to	---	De-dusting System
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	43
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	14.3
08	IsoKinetic Flowrate for Sampling	LPM	26
09	PM Concentration in Inlet	mg/Nm ³	872
10	PM Concentration in Outlet	mg/Nm ³	10
11	Efficiency	%	98.85

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

Calibration due on 12/09/2019

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 15/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 3	S - 6
01	Date of Sampling	---	16-01-2019	16-01-2019
02	Time of sampling	---	9.30	14.20
03	Stack Attached to	---	Sinter Furnace	Discharge End
04	Air Pollution Control Measures	---	ESP	ESP
05	Stack Height	Meter	50	32
06	Stack Diameter	Meter	2.0	1.30
07	Stack Temperature	°C	138	131
08	Ambient Temperature	°C	31	30
09	Average Velocity of Flue Gases	m/sec.	10.4	10.8
10	Isokinetic flow rate for P.M. Sampling	LPM	15	15
11	Gaseous Sampling Flow Rate	LPM	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM	mg/Nm ³	22	26
14	Permissible limits for SO ₂	ppm	100	NA
15	Measured Concentration of SO ₂	ppm	8.2
16	Permissible limits for NO _x	ppm	50	NA
17	Measured Concentration of NO _x	ppm	16.4

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 : 12/09/2019

NA= Not Applicable

ND=Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalk-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 08/01/18-19

Date : 04/02/2019

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

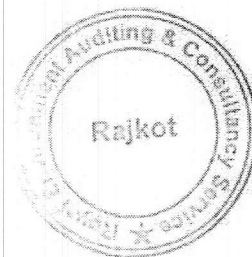
NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 3
01	Date of Sampling	---	16-01-2019
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	144
06	Ambient Temperature	°C	31
07	Average Velocity of Flue Gases	m/sec.	16
08	IsoKinetic Flowrate for Sampling	LPM	22
09	PM Concentration in Inlet	mg/Nm ³	1321
10	PM Concentration in Outlet	mg/Nm ³	22
11	Efficiency	%	98.33

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

Calibration due on 12/09/2019

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 16/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1	S - 7	S - 9
01	Date of Sampling	---	17-01-2019	17-01-2019	18-01-2019
02	Time of sampling	Hr.	9.45	12.25	15.45
03	Stack Attached to	---	Secondary Mixer House	Sinter Furnace	Discharging End of sinter de- dusting system
04	Air Pollution Control Measures	---	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	50	50
06	Stack Diameter	Meter	0.7	2	1.3
07	Stack Temperature	°C	38	135	130
08	Ambient Temperature	°C	30	30	31
09	Average Velocity of Flue Gases	m/sec.	3.21	11.5	12.1
10	Isokinetic flow rate for P.M. Sampling	LPM	13	16	17
11	Gaseous Sampling Flow Rate	LPM	NA	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM	mg/Nm ³	14	20	16
14	Permissible limits for SO ₂	ppm	NA	100	NA
15	Measured Concentration of SO ₂	ppm	---	8.3	---
16	Permissible limits for NO _x	ppm	NA	50	NA
17	Measured Concentration of NO _x	ppm	---	18.2	---

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

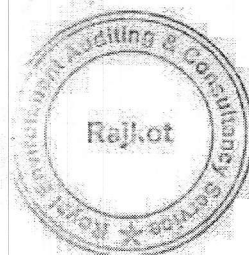
Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on : 12/09/2019

NA= Not Applicable

ND= Not Detectable

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bai Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royalenvironment@live.com admin@royalconsultancy.com

Ref. No. : 10/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S-15	S - 7
01	Date of Sampling	---	18-01-2019	17-01-2019
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	134	144
06	Ambient Temperature	°C	31	30
07	Average Velocity of Flue Gases	m/sec.	18.72	17.1
08	IsoKinetic Flowrate for Sampling	LPM	27	24
09	PM Concentration in Inlet	mg/Nm ³	345	1451
10	PM Concentration in Outlet	mg/Nm ³	16	20
11	Efficiency	%	95.36	98.62

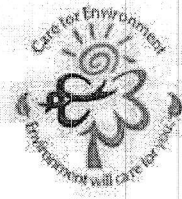
Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2019

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 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 18/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1	S - 3	S - 4
01	Date of Sampling	---	19/01/2019	29/01/2019	19/01/2019
02	Time of sampling	Hr.	10.45	12.30	10.30
03	Stack Attached to	---	Dedusting System	Stove Stack	Coke fine building 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	0.45
07	Stack Temperature	°C	37	175	34
08	Ambient Temperature	°C	29	30	30
09	Average Velocity of Flue Gases	m/sec.	11.0	8.2	6.2
10	Isokinetic flow rate for P.M. Sampling	LPM	20	24	12
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150
13	Measured Concentration of PM	mg/Nm ³	16	3	16
14	Permissible limits for SO ₂	mg/Nm ³	NA	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	---	---	---
16	Permissible limits for No _x	mg/Nm ³	NA	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	---	---	---

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

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

Calibration due on : 12/09/2019

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalk-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002
Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 14/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1
01	Date of Sampling	---	19/01/2019
02	Attached to	---	Dedusting System
03	Stack Height	Meter	40
04	Stack Duct Diameter	Meter	1.5
05	Stack Temperature	°C	41
06	Ambient Temperature	°C	29
07	Average Velocity of Flue Gases	m/sec.	13.6
08	IsoKinetic Flowrate for Sampling	LPM	25
09	Inlet	mg/Nm ³	1143
10	Outlet	mg/Nm ³	16
11	Efficiency	%	98.60

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

Calibration due on 12/09/2019

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 22/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1	S - 5	S - 8
01	Date of Sampling	---	23/01/2019	23/01/2019	25/01/2019
02	Time of sampling	Hr.	9.50	10.25	16.30
03	Stack Attached to	---	Magnesium Treatment	Zinc Coating	Zinc Coating Machine(FL-7)
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30
06	Stack Diameter	Meter	1.00	1.00	1.20
07	Stack Temperature	°C	46	38	36
08	Ambient Temperature	°C	29	31	29
09	Average Velocity of Flue Gases	m/sec	7.8	6.5	6.5
10	Isokinetic flow rate for PM Sampling	LPM	14	27	12
11	Gaseous Sampling Flow Rate	LPM	---	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	50
13	Measured Concentration of PM	mg/Nm ³	17	16 (Zn)	13 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	---
16	Permissible limits for NO _x	PPM	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 - Ecolech make - ESS 100

Calibration due on : 12/09/2019

ND= Not Detectable

N.A= Not Applicable

Royal Environment Auditing & Consultancy Service



Hitesh
0



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 21/01/2018-19

Date : 04/02/2019

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

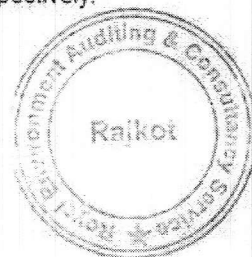
NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 13
01	Date of Sampling	---	29/01/2019
02	Time of sampling	Hr.	11:00
03	Stack Attached to	---	Annealing Furnace
04	Air Pollution Control Measures	---	---
05	Stack Height	Meter	32
06	Stack Diameter	Meter	1.375
07	Stack Temperature	°C	130
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/sec.	7.5
10	Isokinetic flow rate for P.M. Sampling	LPM	24
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	5
14	Permissible limits for SO ₂	mg/Nm ³	100 (PPM)
15	Measured Concentration of SO ₂	mg/Nm ³	3.2
16	Permissible limits for NO _x	mg/Nm ³	50 (PPM)
17	Measured Concentration of NO _x	mg/Nm ³	8.5 (PPM)

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 : 12/09/2019



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 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 20/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 12
01	Date of Sampling	---	29/01/2019
02	Time of sampling	Hr.	10.30
03	Stack Attached to	---	Core Cleaning & Dusting-I
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	30
06	Stack Diameter	Meter	0.6
07	Stack Temperature	°C	36
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/sec.	7.9
10	Isokinetic flow rate for P.M. Sampling	LPM	15
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	21
14	Permissible limits for SO ₂	mg/Nm ³	40
15	Measured Concentration of SO ₂	mg/Nm ³	ND
16	Permissible limits for NO _x	mg/Nm ³	25
17	Measured Concentration of NO _x	mg/Nm ³	5.4

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 : 12/09/2019

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 19/01/2018-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

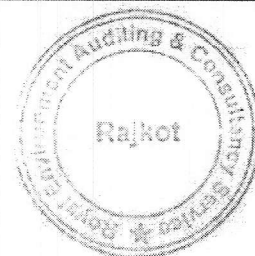
Sr. No.	Particulars	Unit	S - 8	S - 9	S - 15
01	Date of Sampling	---	25/01/2019	28/01/2019	28/01/2019
02	Time of sampling	Hr.	9.30	9.45	15.10
03	Stack Attached to	---	Common stack Mg Converter I&II	Zn Coating - I	Zn Coating - II
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Seprater & Bag Filter	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	55	39	35
08	Ambient Temperature	°C	30	30	29
09	Average Velocity of Flue Gases	m/sec.	10.66	8.1	7.2
10	Isokinetic flow rate for P.M. Sampling	LPM	19	15	13
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)
13	Measured Concentration of PM	mg/Nm ³	21	14	13(Zn)
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	ND	---	---
16	Permissible limits for NO _x	mg/Nm ³	25	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	4.8	---	---

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

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

Calibration due on : 12/09/2019

Royal Environment Auditing & Consultancy Service



Mitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bai Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Date : 04/02/2019

Ref. No. : 11/01/18-19

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 8
01	Date of Sampling	---	25/01/2019
02	Attached to	---	Common stack Mg Converter - I & II
03	Stack Height	Meter	30
04	Stack Diameter	Meter	0.5
05	Stack Temperature	°C	61
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	8.64
08	IsoKinetic Flowrate for Sampling	LPM	15
09	PM Concentration in Inlet	mg/Nm ³	872
10	PM Concentration in Outlet	mg/Nm ³	21
11	Efficiency	%	97.59

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

Royal Environment Auditing & Consultancy Service



Aitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 13/01/18-19

Date : 04/02/2019

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

NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 1	S - 5	S-8
01	Date of Sampling	---	23/01/2013	23/01/2019	25/01/2019
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	50	41	47
06	Ambient Temperature	°C	29	31	29
07	Average Velocity of Flue Gases	m/sec.	10.3	11.2	10.86
08	IsoKinetic Flowrate for Sampling	LPM	18	21	19
09	PM Concentration in Inlet	mg/Nm ³	1064	431	456
10	PM Concentration in Outlet	mg/Nm ³	17	16	13
11	Efficiency	%	98.40	96.29	97.15

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

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 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 12/01/18-19

Date : 04/02/2019

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

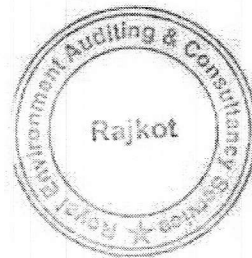
NABL Certificate No. : TC 5948

Sr. No.	Particulars	Unit	S - 15
01	Date of Sampling	---	28/01/2019
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	29
07	Average Velocity of Flue Gases	m/sec.	10.7
08	IsoKinetic Flowrate for Sampling	LPM	20
09	PM Concentration in Inlet	mg/Nm ³	454
10	PM Concentration in Outlet	mg/Nm ³	13
11	Efficiency	%	97.14

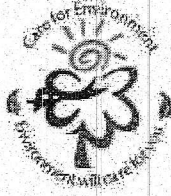
Instrument Used : Stack Monitoring Kit - Ecotech make - ESS 100

Calibration due on 12/09/2019

Royal Environment Auditing & Consultancy Service



Mitesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 28/01/2018-19

Date : 04/02/2019

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 15th January, 2019

Sr. No.	Location of Sampling	Value in dB(A) Day Time			Value in dB(A) Night Time		
		Min.	Max.	Leq	Min.	Max.	Leq
01.	Admin. Building	41.2	66.4	56.2	41.7	56.4	52.8
02.	OHC	42.8	55.2	53.5	46.8	54.1	53.7
03.	New Colony (School)	43.5	53.6	52.8	43.1	54.7	50.5
04.	Behind FL-7	52.7	66.4	58.1	54.2	61.7	59.8
05.	Coating Plant	53.2	65.4	62.4	45.7	67.5	57.1
06.	Nr. Sinter Plant-1 Canteen	52.1	77.3	65.7	53.8	70.1	62.4
07.	Blast Furnace RMHS	57.5	67.1	65.2	54.2	68.5	63.1
08.	Spiral-2-Behind work shop	56.2	65.8	62.1	48.4	66.7	59.4
09.	Chairman Bungalow	44.5	58.7	52.3	41.3	53.7	46.5
10.	301 Yard	53.5	66.7	63.1	51.2	65.2	62.3
11	Guest House	43.2	63.4	55.2	44.5	60.1	50.4
12	Harvesting pond	56.4	67.4	62.5	43.9	65.7	55.4

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 : 12/09/2019

Royal Environment Auditing & Consultancy Service



Litesh
Analyst



Royal

Environment Auditing & Consultancy Service

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

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

Ref. No. : 30/01/2018-19

Date : 04/02/2019

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 : 21st January, 2019.

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Stock House	62.5	77.2	70.4
02.	Inside BF Control Room	55.3	57.9	55.1
03.	Cast House	49.8	65.4	57.5
04.	Inside Laboratory	45.7	54.2	50.1
05.	Inside Control Room of Blower House	52.4	61.2	59.4
06.	Inside Control Room of CPP	47.5	57.2	56.3

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

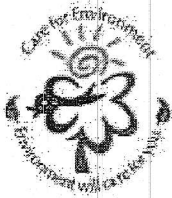
Range : A - 30 to 80 dB, B-50 to 100 dB,C-80 to 130 dB.

Recalibration is due on : 12/09/2019

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 Email : royalservice@live.com admin@royalconsultancy.com

Ref. No. : 29/01/2018-19

Date : 04/02/2019

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 : 16th January, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	42.3	61.4	56.5
2	Near Flux Crushing Building	54.7	68.2	61.3
3	Sinter Machine area	43.4	65.7	57.1

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



Royal Environment Auditing & Consultancy Service

Ritesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royalsenvironment@live.com admin@royalconsultancy.com

Ref. No. : 33/01/2018-19

Date : 04/02/2019

WORK ZONE NOISE LEVEL MEASUREMENT SINTER PLANT - 2 (29017)

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

Date of sampling : 17th January, 2019

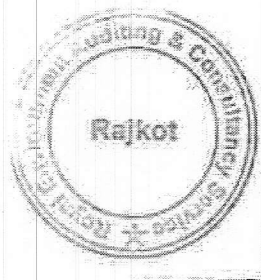
Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	43.2	64.2	56.4
02.	Sinter Machine area	44.8	67.3	57.8
03.	Near Proportioning Building	52.4	72.8	61.5
04.	Near Crusher House	59.3	74.2	67.7

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

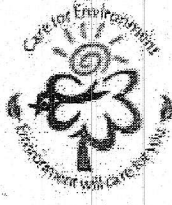
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 12/09/2019

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 Email : royalenvironment@live.com admin@royalconsultancy.com

Ref. No. : 32/01/2018-19

Date : 04/02/2019

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 : 19th January, 2019

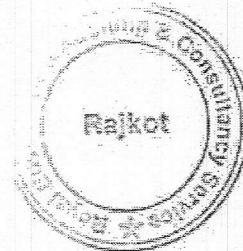
Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside BF Control Room	46.2	66.7	58.2
02.	Stock House	52.3	70.4	57.5
03.	Inside control room of blower house	47.9	60.2	55.2
03.	Cast House	58.3	71.4	68.5

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

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 Email : royalsenvironment@live.com admin@royalconsultancy.com

Ref. No. : 31/01/2018-19

Date : 04/02/2019

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

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

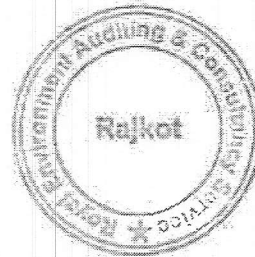
Date of sampling: 15th, 23rd & 25th January, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP	41.1	57.5	54.2
02	Inside Control Room – Mill Area of Spiral Plant	55.3	65.4	62.1
03	Nr. ID / OD Area of JCO Plant	43.8	56.7	54.1
01.	Nr. CCM area of DISP Plant	54.7	71.2	66.4
06	Nr. CCM area of SDP-2	59.4	77.1	68.2
07	Inside Control Room of Annealing Furnace of SDP-2	72.2	83.4	78.1
08	Nr. Zinc Coating of FL-7	65.1	76.2	73.2
09	Nr. Shot Blasting area of Coating Plant- 1	71.5	78.3	77.1
10	Near Mould Shop	65.2	77.8	72.4

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

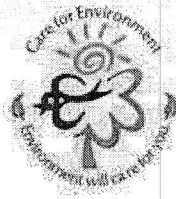
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Recalibration is due on : 12/09/2019



Royal Environment Auditing & Consultancy Service

Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalk-7, B/s Bal Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 201 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 34/01/2018-19

Date : 04/02/2019

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 : 31/01/2019

Test Method : As per IS Standards - 3025

NABL Certificate No. : TC 5948

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Raw Sewage	Treated Effluent
01.	pH	pH Unit	6.5 to 9.0	6.42	7.83
02.	BOD (3 Days at 27°C)	mg/l	30	152	10
03.	Total Dissolve Solid	mg/l	...	2042	1458
04.	COD	mg/l	...	134	12
05.	Total Suspended Solid	mg/l	100	132	4
06.	Oil & Grease	mg/l	...	ND	ND
07.	Fecal Coliform #	MPN/100ml	1000	NA	Absent
08.	Residual Chlorine #	mg/l	Min. 0.5		0.52

Parameters are not covered in NABL Scope

Royal Environment Auditing & Consultancy Service



Hitesh
Analyst



Royal

Environment Auditing & Consultancy Service

303-304, Shivalik-7, B/s Bai Adalat, Gondal Road, RAJKOT - 360 002.
Ph. +91 281 2360695 Email : royaleenvironment@live.com admin@royalconsultancy.com

Ref. No. : 35/01/2018-19

Date : 04/02/2019

WATER & WASTE WATER QUALITY ANALYSIS REPORT

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

Source of Sample : Effluent Treatment Plant

Date of Sampling : 31/01/2019

NABL Certificate No. : TC 5948

Sr. No.	Parameters	Unit	Permissible limit	Results
01.	pH	...	6.5 to 8.5	7.42
02.	Colour	pt.co.units	100	16
03.	Temperature	°C	40	34
04.	Total suspended solids	mg/l	100	12
05.	Total dissolve solids	mg/l	2100	1394
06.	Phenolic compounds	mg/l	1	ND
07.	Oil & Grease	mg/l	10	ND
08.	Chlorides	mg/l	600	332
09.	Sulphate	mg/l	1000	209
10.	Ammonical nitrogen (as NH ₃ -N)	mg/l	50	7.3
11.	BOD (3 Days at 27°C)	mg/l	30	10.2
12.	COD	mg/l	100	47.3

Royal Environment Auditing & Consultancy Service



Aitesh
Analyst

Form No. 37

(Prescribed under Rule 12-B)

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

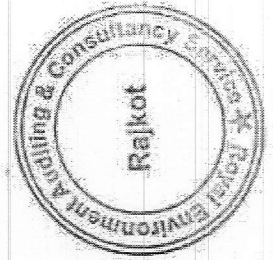
- 1 Name of the Department/Plant.: **BF Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18037)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 21st January, 2019

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	Personal Respirable Dust sampler VPDS 203	02	4.2-11.2	7.7	50 (ppm)	Gravimetric	5	---	Hitesh Umletiya	Mr. Hitesh Umletiya
		Total Dust			1.3-3.5	2.40	10					

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

For. Royal Environment Auditing & Consultancy Service



Hitesh Umletiya
 Authorized Sign

Ref. No. : 24/01/2018-19

Date : 04/02/2019

Form No. 37

(Prescribed under Rule 12-B)

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

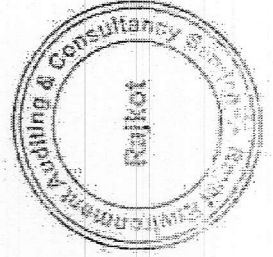
- 1 Name of the Department/Plant.: Sinter Plant-1 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 35456)
- 2 Raw materials, by products and finished products involved in the process. TOTAL DUST
- 3 Particulars of sampling

Date of Sampling : 16th January, 2019

0	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 (Sinter Machine area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-3.6	2.4	10	Gravimetric	7	---	<i>Hitesh Umletiya</i>	Mr. Hitesh Umletiya

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

Calibration Due on. : 12/03/2019



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.: **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

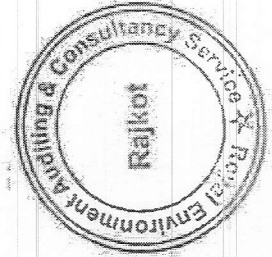
Date of Sampling : 17th January, 2019

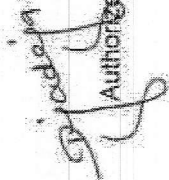
Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In block letters)
				Number of sample	Range	Average						
1	Sinter Plant-2 (Sinter Machine area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.3-3.4	2.35	10	Gravimetric	7	----		Mr. Hitesh Umletiya

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

Calibration Due on. : 12/03/2019

For. Royal Environment Auditing & Consultancy Service




Authorized Sign

Ref. No. :26/01/2018-19

Date : 04/02/2019

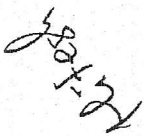
Form No. 37

(Prescribed under Rule 12-B)

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

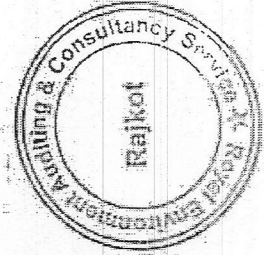
- 1 Name of the Department/Plant: **BF Plant-2 at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 29026)**
- 2 Raw materials, by products and finished products involved in the process. **TOTAL DUST & CO.**
- 3 Particulars of sampling

Date of Sampling : 19th January, 2019

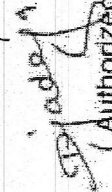
Sr. No	Location Operation monitored	Identified Contaminant	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average						
1	BF Plant-2 (Cast House)	CO Total Dust	Personal Respirable Dust sampler VPDS 203	02	2-14 1.1-2.3	8 (ppm) 1.7	50 (ppm) 10	Gravimetric	8	---		Mr. Hitesh Umletiya

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

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service


Authorized Sign

Ref. No. : 27/01/2018-19

Date : 04/02/2019

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


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

1 Name of the Department/Plant: DISP, JCO & Coating Units at JINDAL SAW LIMITED, Samaghogha. (GPCB ID: 18036)

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

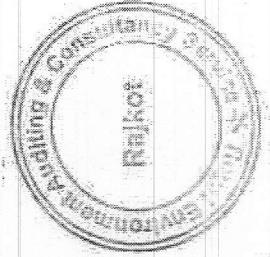
3 Particulars of sampling

Date of Sampling : 15th, 23rd & 25th January, 2019

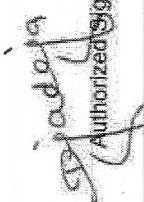
Sr. No	Location Operation monitored	Identified Contaminant	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule) mg/m ³	Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average						
1	Coating Plant-1 (Application area)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.1-2.6	1.85	10	Gravimetric	8	-----		Mr. Hitesh Umletiya
2	DISP Plant (Induction Furnace Area)	Total Dust		02	1.4-2.8	2.1	10	Gravimetric	4	-----		
3	SDP-2 (Induction Furnace Area)	Total Dust		02	1.3-2.9	2.1	10	Gravimetric	4	-----		

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

Calibration Due on. : 12/03/2019



For. Royal Environment Auditing & Consultancy Service


 Authorized Sign

Ref. No. : 26a/01/2018-19

Date : 04/02/2019

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

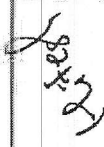
Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

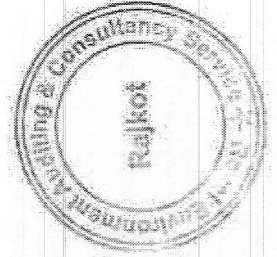
1 Name of the Department/Plant.: DISP.,JCO & Coating Units at JINDAL SAW LIMITED, Samaghogha.(GPCB ID: 18036)

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

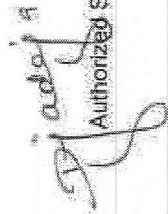
3 Particulars of sampling

Date of Sampling : 19th January, 2019

Sr. No	Location Operation monitored	Identified Contaminate	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule)		Reference Method	Number of workers exposed at the location being monitored	Remark	Signature of person taking samples	Name (in block letters)
				Number of sample	Range	Average	mg/m ³						
1	Butumin Coating Area (DISP)	VOC	Gas Analyzer	01	---	1.0	5	Gas Analyzer	5	---		Mr. Hitesh Umletiya	



For: Royal Environment Auditing & Consultancy Service


Authorized Sign

Ref. No. : 27a/01/2018-19

Date : 04/02/2019

**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, Samaghoghia.(GPCB ID: 18036)
- 2 Raw materials, by products and finished products involved in the process. VOC
- 3 Particulars of sampling

Date of Sampling : 19th January, 2019

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	Epoxy Coating Area (Coating Plant)	VOC	Gas Analyzer	01		1.5	10	Gas Analyzer	6		<i>Hitesh Umleti</i>	Mr. Hitesh Umleti



For: Royal Environment Auditing & Consultancy Service

Rajkoti
Authorized Sign