



Royal

Environment Auditing & Consultancy Service

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

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Ref. No : 41/02/2018-19

Date : 04/03/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - FEBRUARY : 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							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	05/02/19 09.00	08/02/19 09.15	11/02/19 08.45	15/02/19 09.00	19/02/19 09.15	22/02/19 09.30	25/02/19 09.30	27/02/19 08.45
03.	Date & Time Ending of Monitoring	---	06/02/19 09.00	09/02/19 09.15	12/02/19 08.45	16/02/19 09.00	20/02/19 09.15	23/02/19 09.30	26/02/19 09.30	28/02/19 08.45
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	N	WNW	WNW	NNW	WNW	WNW
06.	Average Wind Speed	Km/Hr.	4.8	8.6	6.1	3.6	6.4	3.9	4.4	5.4
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.12	1.13	1.12	1.11	1.12	1.13	1.11	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	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	55	58	57	51	48	46	50	58
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	32	40	33	36	38	35	37	31
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.6	8.1	8.2	7.6	8.1	7.6	7.8	8.0
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.8	15.5	15.9	16.1	17.1	16.3	16.1	15.9
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	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





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Ref. No. : 42/02/2018-19

Date : 04/03/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - FEBRUARY : 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							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	05/02/19 09.15	08/02/19 09.30	11/02/19 09.00	15/02/19 09.30	19/02/19 09.30	22/02/19 09.00	25/02/19 08.45	27/02/19 09.15
03.	Date & Time Ending of Monitoring	---	06/02/19 09.15	09/02/19 09.30	12/02/19 09.00	16/02/19 09.30	20/02/19 09.30	23/02/19 09.00	26/02/19 08.45	28/02/19 09.15
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	N	WNW	WNW	NNW	WNW	WNW
06.	Average Wind Speed	Km/Hr	4.8	8.6	6.1	3.6	6.4	3.9	4.4	5.4
07.	Average flow rate for Dust Monitoring PM10	m ³ /min.	1.11	1.12	1.13	1.11	1.13	1.12	1.14	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	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	54	60	52	50	58	54	53	57
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	36	39	41	36	42	38	31	33
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.3	8.1	7.6	8.0	7.7	8.2	8.4	7.9
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.4	15.7	16.8	17.4	18.4	16.9	17.2	18.3
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO#	µg/m ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

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.



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Ref. No : 43/02/2018-19

Date : 04/03/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - FEBRUARY : 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.3 : Nr. Spiral-II Pipe Storage Yard							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	05/02/19 08.45	08/02/19 09.00	11/02/19 09.30	15/02/19 08.45	19/02/19 09.00	22/02/19 08.45	25/02/19 09.00	27/02/19 09.30
03.	Date & Time Ending of Monitoring	---	06/02/19 08.45	09/02/19 09.00	12/02/19 09.30	16/02/19 08.45	20/02/19 09.00	23/02/19 08.45	26/02/19 09.00	28/02/19 09.30
04.	Duration of Sampling	Min.	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00	1440.00
05.	Dominant Wind Direction (From)	---	NNW	WNW	N	WNW	WNW	NNW	WNW	WNW
06.	Average Wind Speed	Km/Hr	4.8	8.6	6.1	3.6	6.4	3.9	4.4	5.4
07.	Average flow rate for Dust Monitoring PM10	m ³ /min	1.13	1.11	1.12	1.14	1.13	1.14	1.11	1.14
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	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	59	60	55	51	58	59	62	54
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	39	41	36	37	50	48	40	38
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	8.1	8.2	7.6	8.4	7.5	8.0	8.8	7.7
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	17.5	18.3	17.9	18.2	17.5	18.1	17.2	18.8
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	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.



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Ref. No. : 44/02/2018-19

Date : 04/03/2019

NATIONAL AMBIENT AIR QUALITY MONITORING REPORT FOR THE MONTH - FEBRUARY : 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							
			1	2	3	4	5	6	7	8
01.	No. of Week	---								
02.	Date & Time Starting of Monitoring	---	05/02/19 09 30	08/02/19 08.45	11/02/19 09 15	15/02/19 09 15	19/02/19 08 45	22/02/19 09 15	25/02/19 09 15	27/02/19 09 00
03.	Date & Time Ending of Monitoring	----	06/02/19 09 30	09/02/19 08 45	12/02/19 09 15	16/02/19 09 15	20/02/19 08 45	23/02/19 09 15	26/02/19 09 15	28/02/19 09 00
04.	Duration of Sampling	Min.	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00	1440 00
05.	Dominant Wind Direction (From)	---	NNW	WNW	N	WNW	WNW	NNW	WNW	WNW
06.	Average Wind Speed	Km/Hr.	4.8	8.6	6.1	3.6	6.4	3.9	4.4	5.4
07.	Average flow rate for Dust Monitoring PM10	m ³ /min	1.11	1.13	1.14	1.13	1.12	1.11	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	1.0	1.0
09.	Average flow rate for Gas Monitoring	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible limits for PM10*	µg/m ³	100	100	100	100	100	100	100	100
11.	Measured Concentration of PM10	µg/m ³	48	51	57	50	59	50	48	56
12.	Permissible limits for PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
13.	Measured Concentration of PM2.5 #	µg/m ³	34	32	34	41	36	42	39	44
14.	Permissible limits for SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	7.8	8.1	7.8	8.2	7.9	8.2	8.2	8.4
16.	Permissible limits for NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	16.8	17.2	18.2	18.3	17.6	18.1	18.4	17.2
18.	Permissible limit for CO **	µg/m ³	2000	2000	2000	2000	2000	2000	2000	2000
19.	Measured Concentration of CO #	µg/m ³	BDL	BDL	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.



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Ref. No. :45/02/2018-19

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-7
01.	Location of Ambient	----	BF-1 GROUND HOPPER
02.	Date of sampling	----	13/02/2019
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.	4.4
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/m³	3000
10.	Measured Concentration of PM 10	µg/m ³	1556
11.	Permissible limits for SO₂*	µg/m³	150
12.	Measured Concentration of SO ₂	µg/m ³	16.7
13.	Permissible limits for NO₂*	µg/m³	120
14.	Measured Concentration of NO ₂	µg/m ³	18.5
15.	Permissible limit for CO **	µg/m³	2000
16.	Measured Concentration of CO #	µg/m ³	BDL
17.	Permissible limit for Pb*	µg/m³	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) # Parameters are not covered in NABL Scope
All Calibration due on : 05/05/2019

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Ref. No. :46/02/2018-19

Date : 04/03/2019

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 - 3
01.	Location of Ambient	---	Sinter RMH Yard
02.	Date of sampling	---	13/02/2019
03.	Time of sampling	---	9.00
04.	Duration of Sampling	Hr.	8.00
05.	Dominant Wind Direction (From)	---	WNW
06.	Average Wind Speed	Km/Hr.	4.4
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/m³	3000
10.	Measured Concentration of PM 10	µg/m ³	1382
11.	Permissible limits for SO₂*	µg/m³	150
12.	Measured Concentration of SO ₂	µg/m ³	12.9
13.	Permissible limits for NO₂*	µg/m³	120
14.	Measured Concentration of NO ₂	µg/m ³	16.7
15.	Permissible limit for CO **	µg/m³	2000
16.	Measured Concentration of CO #	µg/m ³	BDL
17.	Permissible limit for Pb*	µg/m³	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)

BDL= Below Detectable Limit

All Calibration due on : 05/05/2019

ND= Not Detectable

Parameters are not covered in NABL Scope

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Ref. No. 47/02/2018-19

Date : 04/03/2019

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 - 5
01.	Location of Ambient	---	DISP CCM Area
02.	Date of sampling	---	14/02/2019
03.	Time of sampling	---	9.30
04.	Duration of Sampling	Hr.	8.00
05.	Dominant Wind Direction (From)	---	WNW
06.	Average Wind Speed	Km/Hr.	4.6
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/m³	3000
10.	Measured Concentration of PM 10	µg/m ³	1126
11.	Permissible limits for SO₂*	µg/m³	150
12.	Measured Concentration of SO ₂	µg/m ³	13.2
13.	Permissible limits for NO₂*	µg/m³	120
14.	Measured Concentration of NO ₂	µg/m ³	16.8
15.	Permissible limit for CO **	µg/m³	2000
16.	Measured Concentration of CO #	µg/m ³	BDL
17.	Permissible limit for Pb*	µg/m³	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

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Ref. No. :48/02/2018-19

Date : 04/03/2019

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 - 1
01.	Location of Ambient	---	BF-2 CAST HOUSE	BF-2 RMH Stock House
02.	Date of sampling	---	12/02/2019	12/02/2019
03.	Time of sampling	---	10.00	9.30
04.	Duration of Sampling	Hr.	8.00	8.00
05.	Dominant Wind Direction (From)	---	ESE	ESE
06.	Average Wind Speed	Km/Hr	5.8	5.8
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	1152	1126
11.	Permissible limits for SO ₂ *	µg/m ³	150	150
12.	Measured Concentration of SO ₂	µg/m ³	13.2	15.2
13.	Permissible limits for NO ₂ *	µg/m ³	120	120
14.	Measured Concentration of NO ₂	µg/m ³	15.4	18.1
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

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Ref. No. : 49/02/18-19

Date : 04/03/2019

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	---	05-02-2019
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	146
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	1332
10	PM Concentration in Outlet	mg/Nm ³	20
11	Efficiency	%	98.50

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

Calibration due on 12/09/2019

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Ref. No. : 50/02/18-19

Date : 04/03/2019

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	---	16-02-2019
02	Attached to	---	De-dustingSystem
03	Stack Height	Meter	35
04	Stack Duct Diameter	Meter	1.4
05	Stack Temperature	°C	44
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	14.6
08	IsoKinetic Flowrate for Sampling	LPM	26
09	PM Concentration in Inlet	mg/Nm ³	882
10	PM Concentration in Outlet	mg/Nm ³	9
11	Efficiency	%	98.98

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

Calibration due on 12/09/2019

Royal Environment Auditing & Consultancy Service



Mitkash
Analyst



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Ref. No. : 51/02/18-19

Date : 04/03/2019

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 - 7
01	Date of Sampling	---	08-02-2019
02	Attached to	---	Sinter Furnace
03	Stack Height	Meter	50
04	Stack Diameter	Meter	2.0
05	Stack Temperature	°C	145
06	Ambient Temperature	°C	29
07	Average Velocity of Flue Gases	m/sec.	17.3
08	IsoKinetic Flowrate for Sampling	LPM	20
09	PM Concentration in Inlet	mg/Nm ³	1445
10	PM Concentration in Outlet	mg/Nm ³	23
11	Efficiency	%	98.41

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

Calibration due on 12/09/2019

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Ref. No. : 52/02/18-19

Date : 04/03/2019

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 - 8
01	Date of Sampling	---	19/02/2019
02	Attached to	---	Common stack Mg Converter - I & II
03	Stack Height	Meter	30
04	Stack Diameter	Meter	0.5
05	Stack Temperature	°C	62
06	Ambient Temperature	°C	29
07	Average Velocity of Flue Gases	m/sec.	8.75
08	IsoKinetic Flowrate for Sampling	LPM	15
09	PM Concentration in Inlet	mg/Nm ³	879
10	PM Concentration in Outlet	mg/Nm ³	24
11	Efficiency	%	97.27

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

Calibration due on 12/09/2019



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Ref. No. : 53/02/18-19

Date : 04/03/2019

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	S - 20
01	Date of Sampling	---	20/02/2019	20/02/2019
02	Attached to	---	Zinc Coating - II	Zinc Coating - III
03	Stack Height	Meter	30	30
04	Stack Duct Diameter	Meter	0.6	0.6
05	Stack Temperature	°C	39	38
06	Ambient Temperature	°C	31	31
07	Average Velocity of Flue Gases	m/sec.	11.1	13.1
08	IsoKinetic Flowrate for Sampling	LPM	20	24
09	PM Concentration in Inlet	mg/Nm ³	458	461
10	PM Concentration in Outlet	mg/Nm ³	15	11
11	Efficiency	%	96.72	97.63

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

Calibration due on 12/09/2019



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Ref. No. : 54/02/18-19

Date : 04/03/2019

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	---	14/02/2019	14/02/2019	16/02/2019
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	51	42	38
06	Ambient Temperature	°C	29	30	29
07	Average Velocity of Flue Gases	m/sec.	10.7	11.5	8.58
08	IsoKinetic Flowrate for Sampling	LPM	19	21	15
09	PM Concentration in Inlet	mg/Nm ³	1054	439	462
10	PM Concentration in Outlet	mg/Nm ³	19	15	11
11	Efficiency	%	98.20	96.58	97.62

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

Calibration due on 12/09/2019

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Ref. No. : 55/02/18-19

Date : 04/03/2019

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	---	12/02/2019
02	Attached to	---	Dedusting System
03	Stack Height	Meter	40
04	Stack Duct Diameter	Meter	1.5
05	Stack Temperature	°C	42
06	Ambient Temperature	°C	30
07	Average Velocity of Flue Gases	m/sec.	14.1
08	IsoKinetic Flowrate for Sampling	LPM	26
09	Inlet	mg/Nm ³	1132
10	Outlet	mg/Nm ³	15
11	Efficiency	%	98.67

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

Calibration due on 12/09/2019

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Ref. No. : 56/02/18-19

Date : 04/03/2019

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 - 1	S - 3	S - 4	S - 5	S - 6
01	Date of Sampling	---	06-02-2019	05-02-2019	06-02-2019	06-02-2019	05-02-2019
02	Time of sampling	---	10.30	9.30	11.30	11.25	14.20
03	Stack Attached to	---	Fuel & Flux Crusher and Screening building	Sinter Furnace	Primary Mixture House	Secondary Mixture House	Discharge End
04	Air Pollution Control Measures	---	Bag Filter	ESP	---	---	ESP
05	Stack Height	Meter	32.0	50	19.75	36.08	32
06	Stack Diameter	Meter	1.40	2.0	1.25	1.25	1.30
07	Stack Temperature	°C	37	140	39	36	132
08	Ambient Temperature	°C	29	31	30	30	31
09	Average Velocity of Flue Gases	m/sec.	7.71	10.7	7.1	3.6	10.9
10	Isokinetic flow rate for P.M. Sampling	LPM	14	15	13	15	16
11	Gaseous Sampling Flow Rate	LPM	NA	2.0	NA	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	17	20	15	11	24
14	Permissible limits for SO ₂	ppm	NA	100	NA	NA	NA
15	Measured Concentration of SO ₂	ppm	...	7.8	---	---	---
16	Permissible limits for NO _x	ppm	NA	50	NA	NA	NA
17	Measured Concentration of NO _x	ppm	---	16.7	---	---	---

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

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Ref No : 57/02/18-19

Date : 04/03/2019

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 - 2	S - 3	S - 5	S - 7	S - 9
01	Date of Sampling	---	06-02-2019	21-02-2019	09-02-2019	11-02-2019	08-02-2019	11-02-2019
02	Time of sampling	Hr.	9.45	11.15	12.10	10.30	12.25	15.45
03	Stack Attached to	---	Secondary Mixer House	Fuel crushing de-duster system (Flux)	Fuel Screening deduster System (Flux Screening)	Primary Mixer De-duster system	Sinter Furnace	Discharging End of sinter de-dusting system
04	Air Pollution Control Measures	---	Dust Collector	Dust Collector	Dust Collector	Dust Collector	ESP	ESP
05	Stack Height	Meter	30	30	30	20	50	50
06	Stack Diameter	Meter	0.7	0.7	0.7	0.7	2	1.3
07	Stack Temperature	°C	40	38	45	35	136	131
08	Ambient Temperature	°C	30	30	29	31	29	31
09	Average Velocity of Flue Gases	m/sec.	3.40	7.04	7.32	3.78	11.6	12.2
10	Isokinetic flow rate for P.M. Sampling	LPM	14	13	13	16	16	17
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA	NA	2.0	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150	150	150
13	Measured Concentration of PM	mg/Nm ³	12	14	16	15	23	19
14	Permissible limits for SO ₂	ppm	NA	NA	NA	NA	100	NA
15	Measured Concentration of SO ₂	ppm	---	---	---	---	7.9	---
16	Permissible limits for NO _x	ppm	NA	NA	NA	NA	50	NA
17	Measured Concentration of NO _x	ppm	---	---	---	---	17.7	---

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

NA= Not Applicable

ND= Not Detectable

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Ref. No. : 58/02/18-19

Date : 04/03/2019

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	S - 3	S - 5
01	Date of Sampling	—	16/02/2019	21/02/2019	21/02/2019	23/02/2019
02	Time of sampling	Hr.	15.00	11.00	12.00	15.00
03	Stack Attached to	—	Dedusting System	Boiler - I	Boiler - II	Stove Stack
04	Air Pollution Control Measures	—	Bag Filter	—	—	—
05	Stack Height	Meter	35.0	45	45	50.0
06	Stack Diameter	Meter	1.5	1.4	1.4	2.25
07	Stack Temperature	°C	36	156	158	173
08	Ambient Temperature	°C	30	29	30	30
09	Average Velocity of Flue Gases	m/sec.	9.7	8.9	8.1	8.6
10	Isokinetic flow rate for P.M. Sampling	LPM	18	27	24	25
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	9	4	5	4
14	Permissible limits for SO ₂	ppm	100	100	100	100
15	Measured Concentration of SO ₂	ppm	ND	8.2	8.1	ND
16	Permissible limits for NO _x	ppm	50	50	50	50
17	Measured Concentration of NO _x	ppm	ND	12.7	12.2	ND
18	Permissible limits for CO vol/vol	%	N.A.	1 % Max.	1 % Max.	1 % Max.
19	Measured Concentration of CO vol/vol #	%	N.A.	0.2	0.3	0.4

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

Parameters are not covered in NABL Scope

N D=Not Detectable
N.A.=Not Applicable

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Ref. No. : 59/02/18-19

Date : 04/03/2019

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	S - 5
01	Date of Sampling	---	12/02/2019	26/02/2019	11/02/2019	12/02/2019
02	Time of sampling	Hr.	10.45	12.30	10.30	12.30
03	Stack Attached to	---	Dedusting System	Stove Stack	Coke fine building dust collecting system	Iron Ore fine & Dust Collecting System
04	Air Pollution Control Measures	---	Bag Filter	---	Bag Filter	Bag Filter
05	Stack Height	Meter	40.0	65.0	30.0	30.0
06	Stack Diameter	Meter	1.5	2.250	0.45	0.35
07	Stack Temperature	°C	36	176	34	38
08	Ambient Temperature	°C	30	31	30	30
09	Average Velocity of Flue Gases	m/sec.	12.1	8.6	6.4	5.1
10	Isokinetic flow rate for P.M. Sampling	LPM	22	25	27	21
11	Gaseous Sampling Flow Rate	LPM	NA	NA	NA	NA
12	Permissible limits for PM	mg/Nm ³	150	150	150	150
13	Measured Concentration of PM.	mg/Nm ³	15	4	19	20
14	Permissible limits for SO ₂	mg/Nm ³	NA	100	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	---	ND	---	---
16	Permissible limits for No _x	mg/Nm ³	NA	50	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	---	ND	---	---

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

NA=Not Applicable

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

Calibration due on : 12/09/2019

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Ref. No. : 60/02/2018-19

Date : 04/03/2019

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_Part - 1/2/3/7

Sr. No.	Particulars	Unit	S - 1	S - 2
01	Date of Sampling	---	27/02/2019	27/02/2019
02	Time of sampling	Hr.	9.45	10.25
03	Stack Attached to	---	Pickling & Passivation -1	Pickling & Passivation -2
04	Air Pollution Control Measures	---	Wet Scrubber	Wet Scrubber
05	Stack Height	Meter	15.0	15.0
06	Stack Diameter	Meter	-	-
07	Stack Temperature	°C	34	35
08	Ambient Temperature	°C	30	30
09	Average Velocity of Flue Gases	m/sec.	6.5	6.4
10	Isokinetic flow rate for P.M. Sampling	LPM	-	-
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	NA	NA
13	Measured Concentration of PM	mg/Nm ³	-	-
14	Permissible limits for SO ₂	mg/Nm ³	40	40
15	Measured Concentration of SO ₂	mg/Nm ³	10.2	11.3
16	Permissible limits for NO _x	mg/Nm ³	25	25
17	Measured Concentration of NO _x	mg/Nm ³	11.7	12.6

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 : 12/09/2019

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Ref. No. : 61/02/2018-19

Date : 04/03/2019

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	S - 20
01	Date of Sampling	---	19/02/2019	19/02/2019	20/02/2019	20/02/2019
02	Time of sampling	Hr.	9.30	10.45	15.10	9.45
03	Stack Attached to	---	Common stack Mg Converter I&II	Zn Coating - I	Zn Coating - II	Zn Coating - III
04	Air Pollution Control Measures	---	Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	30	30
06	Stack Diameter	Meter	0.5	0.6	0.6	0.6
07	Stack Temperature	°C	56	40	36	35
08	Ambient Temperature	°C	29	30	31	31
09	Average Velocity of Flue Gases	m/sec.	10.83	8.3	7.7	9.3
10	Isokinetic flow rate for P.M. Sampling	LPM	19	15	14	17
11	Gaseous Sampling Flow Rate	LPM	2.0	---	---	---
12	Permissible limits for PM	mg/Nm ³	150	20 (Zn)	20 (Zn)	20 (Zn)
13	Measured Concentration of PM	mg/Nm ³	24	12	15(Zn)	11(Zn)
14	Permissible limits for SO ₂	mg/Nm ³	40	NA	NA	NA
15	Measured Concentration of SO ₂	mg/Nm ³	ND	---	---	---
16	Permissible limits for NO _x	mg/Nm ³	25	NA	NA	NA
17	Measured Concentration of NO _x	mg/Nm ³	5.2	---	---	---

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

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Ref. No. : 62/02/2018-19

Date : 04/03/2019

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	---	26/02/2019
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	37
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/sec.	8.1
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	24
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	6.2

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

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Ref. No. : 63/02/2018-19

Date : 04/03/2019

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 - 7	S - 13
01	Date of Sampling	---	26/02/2019	23/02/2019
02	Time of sampling	Hr.	16.30	11.00
03	Stack Attached to	---	Sand Reclamation	Annealing Furnace
04	Air Pollution Control Measures	---	Bag Filter	---
05	Stack Height	Meter	30	32
06	Stack Diameter	Meter	0.9	1.375
07	Stack Temperature	°C	93	131
08	Ambient Temperature	°C	30	30
09	Average Velocity of Flue Gases	m/sec.	9.37	7.6
10	Isokinetic flow rate for P.M. Sampling	LPM	15	24
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	28	6
14	Permissible limits for SO ₂	mg/Nm ³	40	100 (PPM)
15	Measured Concentration of SO ₂	mg/Nm ³	6.8	3.7
16	Permissible limits for NO _x	mg/Nm ³	25	50 (PPM)
17	Measured Concentration of NO _x	mg/Nm ³	13.4	9.1 (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



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Ref. No. : 64/02/2018-19

Date : 04/03/2019

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 - 2	S - 4	S - 5	S - 8
01	Date of Sampling	---	14/02/2019	15/02/2019	15/02/2019	14/02/2019	16/02/2019
02	Time of sampling	Hr.	9.30	9.3	15.30	10.25	16.30
03	Stack Attached to	---	Magnesium Treatment	Socket Cleaning	Annealing Furnace-II	Zinc Coating	Zinc Coating Machine (FL-7)
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter	---	Bag Filter	Cyclone Separator & Bag Filter
05	Stack Height	Meter	30	30	45	30	30
06	Stack Diameter	Meter	1.00	0.50	0.85	1.00	1.20
07	Stack Temperature	°C	47	37	126	39	34
08	Ambient Temperature	°C	29	29	30	30	29
09	Average Velocity of Flue Gases	m/sec	7.9	6.5	8.1	6.9	7.0
10	Isokinetic flow rate for PM Sampling	LPM	14	27	27	13	13
11	Gaseous Sampling Flow Rate	LPM	---	---	2.00	---	---
12	Permissible limits for PM	mg/Nm ³	50	50	150	50	50
13	Measured Concentration of PM	mg/Nm ³	19	21	6	15 (Zn)	11 (Zn)
14	Permissible limits for SO ₂	PPM	NA	NA	100 (PPM)	NA	NA
15	Measured Concentration of SO ₂	PPM	---	---	3.2	---	---
16	Permissible limits for NO _x	PPM	NA	NA	50 (PPM)	NA	NA
17	Measured Concentration of NO _x	PPM	---	---	7.9 (PPM)	---	---

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

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

Calibration due on : 12/09/2019

ND= Not Detectable

NA= Not Applicable

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Hitesh
Analyst



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Ref. No. : 70/02/2018-19

Date : 04/03/2019

AMBIENT NOISE LEVEL MEASUREMENT

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 7th February, 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	42.3	67.4	55.8	42.4	55.2	51.4
02.	OHC	41.8	56.3	54.1	45.7	55.6	52.8
03.	New Colony (School)	42.8	54.3	51.0	42.3	55.4	50.8
04.	Behind FL-7	53.2	67.2	57.3	52.2	63.1	57.2
05.	Coating Plant	54.3	64.7	60.4	46.3	68.7	57.2
06.	Nr. Sinter Plant-1 Canteen	53.4	76.8	62.4	52.1	71.1	63.4
07.	Blast Furnace RMHS	58.2	68.1	64.2	55.4	69.3	64.2
08.	Spiral-2-Behind work shop	55.5	66.1	63.4	47.5	65.9	58.7
09.	Chairman Bungalow	43.8	58.1	53.4	42.5	54.7	47.9
10.	301 Yard	54.2	67.4	64.2	52.3	66.4	63.7
11.	Guest House	44.6	64.8	56.2	45.2	61.2	49.5
12.	Harvesting pond	55.7	68.2	63.1	44.3	66.7	54.2

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

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

Recalibration is due on : 12/09/2019

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Ref. No. : 71/02/2018-19

Date : 04/03/2019

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 : 5th February, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
1	Inside Control Room	43.1	62.5	57.2
2	Near Flux Crushing Building	53.8	67.5	62.1
3	Sinter Machine area	44.7	64.8	58.3

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



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Ref. No. : 72/02/2018-19

Date : 04/03/2019

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 February, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Stock House	61.2	76.4	70.1
02.	Inside BF Control Room	54.3	58.9	54.5
03.	Cast House	48.6	66.2	56.4
04.	Inside Laboratory	44.6	55.2	51.2
05.	Inside Control Room of Blower House	53.1	62.3	60.1
06.	Inside Control Room of CPP	48.3	58.4	55.2

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

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

Recalibration is due on : 12/09/2019

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Ref. No. : 73/02/2018-19

Date : 04/03/2019

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: 7th, 14th & 19th February, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room of Annealing Furnace of DISP	42.3	56.4	52.1
02	Inside Control Room – Mill Area of Spiral Plant	54.6	64.3	62.8
03	Nr. ID / OD Area of JCO Plant	42.3	57.9	55.4
01.	Nr. CCM area of DISP Plant	53.6	72.2	65.7
06	Nr. CCM area of SDP-2	58.5	78.2	67.4
07	Inside Control Room of Annealing Furnace of SDP-2	73.1	84.6	77.5
08	Zinc Coating of FL-7 control room	64.4	75.6	72.8
09	Control room of Shot Blasting of Coating Plant- 1	70.3	79.5	76.5
10	Mould Shop control room	64.3	78.4	73.4

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

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Ref. No. : 74/02/2018-19

Date : 04/03/2019

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 : 12th February, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside BF Control Room	45.2	65.2	59.5
02.	Stock House	53.4	71.2	58.9
03.	Inside control room of blower house	48.3	61.2	56.9
03.	Cast House	49.3	65.8	56.7

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

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Ref. No. : 75/02/2018-19

Date : 04/03/2019

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

Name of company : JINDAL SAW LIMITED,

Village: Samaghogha,

Tal. : Mundra, Dist. Kutch

Date of sampling : 8th February, 2019

Sr. No.	Location of Sampling	Value in dB(A)		
		Min.	Max.	Leq
01.	Inside Control Room	42.5	65.3	57.2
02.	Sinter Machine area	45.3	68.7	58.3
03.	Near Proportioning Building	53.4	73.4	62.1
04.	Near Crusher House	58.3	75.9	68.2

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

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

Recalibration is due on : 12/09/2019

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Ref. No. : 76/02/2018-19

Date : 04/03/2019

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 : 27/02/2019

Test Method : As per IS Standards - 3025

NABL Certificate No. : TC 5948

Sr. No.	Parameters	Unit	GPCB limits for Treated Effluent	Treated Effluent
01.	pH	pH Unit	6.5 to 9.0	7.62
02.	BOD (3 Days at 27°C)	mg/l	30	11
03.	Total Dissolve Solid	mg/l	...	1449
04.	COD	mg/l	...	14
05.	Total Suspended Solid	mg/l	100	6
06.	Oil & Grease	mg/l	...	ND
07	Fecal Coliform #	MPN/100ml	1000	Absent
08	Residual Chlorine #	mg/l	Min. 0.5	0.53

Parameters are not covered in NABL Scope

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Ref. No. : 77/02/2018-19

Date : 04/03/2019

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 : 27/02/2019

NABL Certificate No. : TC 5948

Sr. No.	Parameters	Unit	Permissible limit	Results
01.	pH	...	6.5 to 8.5	7.53
02.	Colour	pt.co.units	100	18
03.	Temperature	°C	40	35
04.	Total suspended solids	mg/l	100	16
05.	Total dissolve solids	mg/l	2100	1402
06.	Phenolic compounds	mg/l	1	ND
07.	Oil & Grease	mg/l	10	ND
08.	Chlorides	mg/l	600	326
09.	Sulphate	mg/l	1000	212
10.	Ammonical nitrogen (as NH ₃ -N)	mg/l	50	6.9
11.	BOD (3 Days at 27°C)	mg/l	30	11.2
12.	COD	mg/l	100	48.3

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Ref. No. : 78/02/2018-19

Date : 04/03/2019

WATER & WASTE WATER QUALITY ANALYSIS REPORT

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

Source of Sample : SLAG GRANULATION POND (BLAST FURNACE)

Date of Sampling : 27/02/2019

NABL Certificate No. : TC 5948

Sr. No.	Parameters	Unit	Permissible limit	Results
01.	pH	...	6.5 to 8.5	8.32
02.	Colour	pt.co.units	100	44
03.	Tempreture	°C	40	37
04.	Total suspended solids	mg/l	100	9
05.	Total dissolve solids	mg/l	2100	1752
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	676
10.	Ammonical nitrogen (as NH ₃ -N)	mg/l	50	1.84
11.	BOD (3 Days at 27°C)	mg/l	30	18.2
12.	COD	mg/l	100	66.3

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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 : 8th February, 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	1.1-3.5	2.30	10	Gravimetric	5	---	Hitesh	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
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 : 5th February, 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	1.3-3.2	2.3	10	Gravimetric	6	----	Hitesh	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

(Signature)
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 : 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	4.1-11.3	7.7	50 (ppm)	Gravimetric	7	---	Hitesh	Mr. Hitesh Umletiya
		Total Dust			1.5-3.3	2.40	10					

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

Calibration Due on. : 12/03/2019

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: **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 : 12th February, 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-2 (Cast House)	CO	Personal Respirable Dust sampler VPDS 203	02	3-16	9.5 (ppm)	50 (ppm)	Gravimetric	5	----	Hitesh	Mr. Hitesh Umletiya
		Total Dust			1.3-2.7	2.0	10					

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

Calibration Due on : 12/03/2019



For. Royal Environment Auditing & Consultancy Service


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

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

- 1 Name of the Department/Plant.: 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 : 7th, 14th & 15th February, 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	Spiral Plant-2 (Nr. ID/OD)	Total Dust	Personal Respirable Dust sampler VPDS 203	02	1.2-2.5	1.9	10	Gravimetric	6	---	Hitesh	Mr. Hitesh Umletiya
1	Coating Plant-2 (Shot Blasting area)	Total Dust		02	1.3-2.4	1.85	10	Gravimetric	5	---		
2	DISP Plant (CCM area)	Total Dust		02	1.1-3.3	2.2	10	Gravimetric	7	---		
3	SDP-2 (CCM area)	Total Dust		02	1.2-3.2	2.2	10	Gravimetric	6	---		

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

Calibration Due on : 12/03/2019



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