

## TEST REPORT



ULR No. : TC118180000001200F		Test Report No. : NSTL111223NA042	
Type of Sample : Emission Stack- Boiler			
Name & Address of Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
		Date of Sampling	08/12/2023
Sampling Protocol	IS 11255, CPCB: LATS/80/2013-14	Date of Sample Receipt	11/12/2023
Mode of Collection of Sample	Sampling by laboratory	Period of Analysis	11/12/2023 To 16/12/2023
Source of Emission	Boiler No.3 (Second Unit; Unit-3) 660MW	Date of Reporting	16/12/2023
Stack Description	Single, Circular & Metal	Fuel Used	Coal
Point of Sample Collection	From Port Hole after APCD	APCD Details (If provided)	ESP followed by fabric filter
Standard/Specification	Emission Stack- Boiler: EPA 1986		
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Stack Emission)

S.No.	Test Parameters	Unit	Result	Detection Limit	Test Method
1	Particulate Matter at 12% CO <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	39	5	IS 11255 (Part 1)
2	Sulphur Dioxide at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	1073	5	EL/SOP/FGA/01
3	Mercury as Hg	mg/Nm <sup>3</sup>	BDL	0.01	USEPA Method 29
4	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	4.3	5	EL/SOP/FGA/01
5	Carbon Dioxide as CO <sub>2</sub>	%	10.8	1	EL/SOP/FGA/01
6	Oxides of Nitrogen as NO <sub>x</sub> at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	178	5	EL/SOP/FGA/01
7	Oxygen as O <sub>2</sub>	%	6.5	1	EL/SOP/FGA/01
8	Temperature	°C	116	5	IS 11255 (Part 3)
9	Flue Gas Velocity	m/s	25.7	3	IS 11255 (Part 3)
10	Moisture	%	14.8	1	IS 11255 (Part 3)

Remarks : NA

### OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report, BDL: Below Detection Level, NA: Not Applicable

Terms & Conditions : Please refer terms and conditions on backside of Test Report (Page-1)

\*\*End of Report\*\*



Umesh Kumar

Authorized Signatory-Chemical

Stack- EL-FMT-7.8.2-SW

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**ECO BHAWAN** E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071

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## TEST REPORT



ULR No. : TC118180000001201F		Test Report No. : NSTL111223NA043	
Type of Sample : Emission Stack- Boiler			
Name & Address of Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
		Date of Sampling	08/12/2023
Sampling Protocol	IS 11255, CPCB: LATS/80/2013-14	Date of Sample Receipt	11/12/2023
Mode of Collection of Sample	Sampling by laboratory	Period of Analysis	11/12/2023 To 16/12/2023
Source of Emission	Boiler No.2 (First Unit; Unit-2) 660MW	Date of Reporting	16/12/2023
Stack Description	Single, Circular & Metal	Fuel Used	Coal
Point of Sample Collection	From Port Hole after APCD	APCD Details (If provided)	ESP followed by fabric filter
Standard/Specification	Emission Stack- Boiler: EPA 1986		
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Stack Emission)

S.No.	Test Parameters	Unit	Result	Detection Limit	Test Method
1	Particulate Matter at 12% CO <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	41	5	IS 11255 (Part 1)
2	Sulphur Dioxide at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	1148	5	EL/SOP/FGA/01
3	Mercury as Hg	mg/Nm <sup>3</sup>	BDL	0.01	USEPA Method 29
4	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	4.4	5	EL/SOP/FGA/01
5	Carbon Dioxide as CO <sub>2</sub>	%	10.5	1	EL/SOP/FGA/01
6	Oxides of Nitrogen as NO <sub>x</sub> at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	179	5	EL/SOP/FGA/01
7	Oxygen as O <sub>2</sub>	%	6.0	1	EL/SOP/FGA/01
8	Temperature	°C	121	5	IS 11255 (Part 3)
9	Flue Gas Velocity	m/s	25.6	3	IS 11255 (Part 3)
10	Moisture	%	14.5	1	IS 11255 (Part 3)

Remarks : NA

### OTHER INFORMATION

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\*\*End of Report\*\*



## TEST REPORT



ULR No. : TC118180000001202F		Test Report No. : NSTL111223NA044	
Type of Sample : Emission Stack- Boiler			
Name & Address of Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
		Date of Sampling	08/12/2023
Sampling Protocol	IS 11255, CPCB: LATS/80/2013-14	Date of Sample Receipt	11/12/2023
Mode of Collection of Sample	Sampling by laboratory	Period of Analysis	11/12/2023 To 16/12/2023
Source of Emission	Boiler No.1 (Third Unit; Unit-1) 660MW	Date of Reporting	16/12/2023
Stack Description	Single, Circular & Metal	Fuel Used	Coal
Point of Sample Collection	From Port Hole after APCD	APCD Details (If provided)	ESP followed by fabric filter
Standard/Specification	Emission Stack- Boiler: EPA 1986		
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Stack Emission)

S.No.	Test Parameters	Unit	Result	Detection Limit	Test Method
1	Particulate Matter at 12% CO <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	38	5	IS 11255 (Part 1)
2	Sulphur Dioxide at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	1108	5	EL/SOP/FGA/01
3	Mercury as Hg	mg/Nm <sup>3</sup>	BDL	0.01	USEPA Method 29
4	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	4.1	5	EL/SOP/FGA/01
5	Carbon Dioxide as CO <sub>2</sub>	%	10.9	1	EL/SOP/FGA/01
6	Oxides of Nitrogen as NO <sub>x</sub> at 6% O <sub>2</sub> Corr.	mg/Nm <sup>3</sup>	180	5	EL/SOP/FGA/01
7	Oxygen as O <sub>2</sub>	%	6.1	1	EL/SOP/FGA/01
8	Temperature	°C	112	5	IS 11255 (Part 3)
9	Flue Gas Velocity	m/s	25.4	3	IS 11255 (Part 3)
10	Moisture	%	14.2	1	IS 11255 (Part 3)

Remarks : NA

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\*\*End of Report\*\*

## TEST REPORT



ULR No. : TC118180000001706F		Test Report No. : NAIL221223NA018	
Type of Sample : Ambient Air		Date of Reporting : 28/12/2023	
Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
Sampling Protocol	IS 5182, EL-MSP-7.3	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/12/2023 To 21/12/2023	Date of Receipt of Sample	22/12/2023
Sampling Location	Station No.1	Period of Analysis	22/12/2023 To 28/12/2023
Standard/ Specification	National Ambient Air Quality: G.S.R.No.B-29016/20/19/PCI-L dated 18 Nov, 2009	Environmental Conditions	Clear Sky: fogg during night & early morning
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Ambient Air)

S.No.	Test Parameter	Unit	Result	Standard	Detection Limit	Test Method
1	Respirable Suspended Particulate Matter as PM10	µg/m3	129	100	5	IS 5182 (Part 23)
2	Particulate Matter as PM2.5	µg/m3	78	60	5	IS 5182 (Part 24)
3	Sulphur Dioxide as SO2	µg/m3	14	80	5	IS 5182 (Part 2)
4	Oxides of Nitrogen	µg/m3	29	80	7	IS 5182 (Part 6)
5	Carbon Monoxide as CO	µg/m3	0.76	4	0.1	IS 5182 (Part 10) NDIR method
6	Lead as Pb	µg/m3	BDL	1.0	0.04	USEPA Method IO-3.4

Remarks : NA

### OTHER INFORMATION

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\*\*End of Report\*\*



Dr. Rai Singh (EL-0055)

Authorized Signatory-Chemical

Ambient Air - EL-FMT-7.8.2 -AA

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**ECO BHAWAN**

E-207, Industrial Area, Phase VIII-B (Sector-74), Mohali (Punjab) 160071



## TEST REPORT



ULR No. : TC1181800000001707F		Test Report No. : NAIL221223NA019	
Type of Sample : Ambient Air		Date of Reporting : 28/12/2023	
Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
Sampling Protocol	IS 5182, EL-MSP-7.3	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/12/2023 To 21/12/2023	Date of Receipt of Sample	22/12/2023
Sampling Location	Station No.3	Period of Analysis	22/12/2023 To 28/12/2023
Standard/ Specification	National Ambient Air Quality: G.S.R.No.B-29016/20/19/PCI-L dated 18 Nov, 2009	Environmental Conditions	Clear Sky: fogg during night & early morning
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Ambient Air)

S.No.	Test Parameter	Unit	Result	Standard	Detection Limit	Test Method
1	Respirable Suspended Particulate Matter as PM10	µg/m3	142	100	5	IS 5182 (Part 23)
2	Particulate Matter as PM2.5	µg/m3	85	60	5	IS 5182 (Part 24)
3	Sulphur Dioxide as SO2	µg/m3	13	80	5	IS 5182 (Part 2)
4	Oxides of Nitrogen	µg/m3	27	80	7	IS 5182 (Part 6)
5	Carbon Monoxide as CO	µg/m3	0.82	4	0.1	IS 5182 (Part 10) NDIR method
6	Lead as Pb	µg/m3	BDL	1.0	0.04	USEPA Method IO-3.4

Remarks : NA

#### OTHER INFORMATION

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\*\*End of Report\*\*



Dr. Rai Singh (EL-0055)

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Ambient Air - EL-FMT-7.8.2 -AA

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## TEST REPORT



ULR No. : TC118180000001708F		Test Report No. : NAIL221223NA020	
Type of Sample : Ambient Air		Date of Reporting : 28/12/2023	
Customer	Talwandi Sabo Power Limited 3X660 MW, Thermal Power Plant, Mansa Talwandi Sabo Road Village Banawala, Distt. Mansa Punjab	Work Order No. & Date	WA23Y-00006 DT:05.05.2023
		Customer reference No. (If any)	NA
Sampling Protocol	IS 5182, EL-MSP-7.3	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	20/12/2023 To 21/12/2023	Date of Receipt of Sample	22/12/2023
Sampling Location	Village Chehlanwali	Period of Analysis	22/12/2023 To 28/12/2023
Standard/ Specification	National Ambient Air Quality: G.S.R.No.B-29016/20/19/PCI-L dated 18 Nov, 2009	Environmental Conditions	Clear Sky: fogg during night & early morning
Testing Location	On Site & Permanent Facility		

## RESULTS

### I. Chemical Testing

#### 1. Atmospheric Pollution (Ambient Air)

S.No.	Test Parameter	Unit	Result	Standard	Detection Limit	Test Method
1	Respirable Suspended Particulate Matter as PM10	µg/m3	148	100	5	IS 5182 (Part 23)
2	Particulate Matter as PM2.5	µg/m3	88	60	5	IS 5182 (Part 24)
3	Sulphur Dioxide as SO2	µg/m3	16	80	5	IS 5182 (Part 2)
4	Oxides of Nitrogen	µg/m3	35	80	7	IS 5182 (Part 6)
5	Carbon Monoxide as CO	µg/m3	0.92	4	0.1	IS 5182 (Part 10) NDIR method
6	Lead as Pb	µg/m3	BDL	1.0	0.04	USEPA Method IO-3.4

Remarks : NA

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\*\*End of Report\*\*



Dr. Rai Singh (EL-0055)

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Ambient Air - EL-FMT-7.8.2 -AA

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