



CEG Tower, 1<sup>st</sup> & 2<sup>nd</sup> Floor, B-11G, Industrial Area,  
Malviya Nagar, Jaipur, Rajasthan – 302017: India  
Tel: 0141-4805672 | Email – lab@irclass.org | Website : www.isspllab.com

**TEST REPORT**

ULR : TC584324100000217F

Report No.	ISSPL/EN/24-25/10113	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88887)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 15/06/2024 (10:38 am) to 16/06/2024 (10:38 am), Location: Station No.01 (CAAQMS) Core Zone, Qty. 1 No.		
4. Date of Sampling	15/06/2024 - 16/06/2024		
5. Time of Sampling	10:38 am to 10:38 am		
6. Sampling Location	Station No.01 (CAAQMS) Core Zone		
7. Sampling Protocol	IS:5182 (Pt-14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	19/06/2024		
10. Test Completed On	21/06/2024		
11. Date of sample Testing	19/06/2024 To 21/06/2024		
12. Nature & Activity of the Unit	Human and Plant Site Activities		
13. Ambient Temperature (°C)	Min. 33°C, Max. 44°C		
14. Weather Condition during Monitoring	Clear Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/215, ISSPL/INS/C/197, ISSPL/INS/C/226		

**RESULTS**

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*
<b>I. Chemical Parameter:-</b>					
<b>1. Atmospheric Pollution</b>					
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	12.7	µg/m <sup>3</sup>	80 (Max.)
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff :2017	24.2	µg/m <sup>3</sup>	80 (Max.)

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26/06/2024

Reviewed By



26/06/2024  
Parmeshwar Lal  
Assist. Manager  
Authorised Signatory



CEG Tower, 1<sup>st</sup> & 2<sup>nd</sup> Floor, B-11G, Industrial Area,  
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## TEST REPORT

ULR : TC584324100000217F

Report No.		ISSPL/EN/24-25/10113			Date	26/06/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	42.3	µg/m <sup>3</sup>	60 (Max.)	
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	81.8	µg/m <sup>3</sup>	100 (Max.)	
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.71	mg/m <sup>3</sup>	4 (Max.)	
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

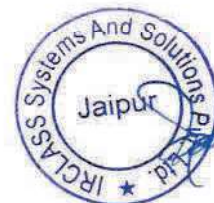
\*NAAQS- National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-se.-3(i)] 16.11.2009.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

26/06/2024

Reviewed By



26/06/2024

Parmeshwar Lal  
Assist. Manager  
Authorised Signatory





## TEST REPORT

ULR : TC584324100000219F

Report No.	ISSPL/EN/24-25/10115	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88885)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 13/06/2024 (10:38 am) to 14/06/2024 (10:38 am), Location: Station No.02 (CAAQMS) Core Zone, Qty. 1 No.		
4. Date of Sampling	13/06/2024 - 14/06/2024		
5. Time of Sampling	10:38 am to 10:38 am		
6. Sampling Location	Station No.02 (CAAQMS) Core Zone		
7. Sampling Protocol	IS:5182 (Pt-14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	19/06/2024		
10. Test Completed On	21/06/2024		
11. Date of sample Testing	19/06/2024 To 21/06/2024		
12. Nature & Activity of the Unit	Human and Plant Site Activities		
13. Ambient Temperature (°C)	Min. 29°C, Max. 43°C		
14. Weather Condition during Monitoring	Clear Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/122, ISSPL/INS/C/128, ISSPL/INS/C/219		

## RESULTS

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*
<b>I.Chemical Parameter:-</b>					
<b>1. Atmospheric Pollution</b>					
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	15.2	µg/m <sup>3</sup>	80 (Max.)
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff :2017	26.4	µg/m <sup>3</sup>	80 (Max.)

Page No. 1/2

26/06/2024

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## TEST REPORT

ULR : TC584324100000219F

Report No.		ISSPL/EN/24-25/10115			Date	26/06/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	42.1	µg/m <sup>3</sup>	60 (Max.)	
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	88.2	µg/m <sup>3</sup>	100 (Max.)	
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.71	mg/m <sup>3</sup>	4 (Max.)	
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

\*NAAQS- National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-se.-3(i)] 16.11.2009.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

26/06/2024

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**TEST REPORT**

ULR : TC584324100000216F

Report No.	ISSPL/EN/24-25/10112		Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab			
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88888)			
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 15/06/2024 (11:25 am) to 16/06/2024 (11:25 am), Location: Station No.03 (CAAQMS) Core Zone, Qty. 1 No.			
4. Date of Sampling	15/06/2024 - 16/06/2024			
5. Time of Sampling	11:25 am to 11:25 am			
6. Sampling Location	Station No.03 (CAAQMS) Core Zone			
7. Sampling Protocol	IS:5182 (Pt-14) 2000			
8. Duration of Sampling (Minutes)	1440 Min.			
9. Test Started On	19/06/2024			
10. Test Completed On	21/06/2024			
11. Date of sample Testing	19/06/2024 To 21/06/2024			
12. Nature & Activity of the Unit	Human and Plant Site Activities			
13. Ambient Temperature (oC)	Min. 33°C, Max. 44°C			
14. Weather Condition during Monitoring	Clear Sky			
15. Instrument Code & Calibration Status	ISSPL/INS/C/122, ISSPL/INS/C/128, ISSPL/INS/C/219			

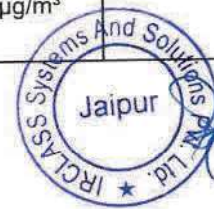
**RESULTS**

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*
<b>I. Chemical Parameter:-</b>					
<b>1. Atmospheric Pollution</b>					
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	12.0	µg/m <sup>3</sup>	80 (Max.)
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff :2017	24.4	µg/m <sup>3</sup>	80 (Max.)

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26/06/2024

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## TEST REPORT

ULR : TC584324100000216F

Report No.		ISSPL/EN/24-25/10112			Date	26/06/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	42.8	µg/m <sup>3</sup>	60 (Max.)	
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	79.8	µg/m <sup>3</sup>	100 (Max.)	
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.64	mg/m <sup>3</sup>	4 (Max.)	
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

\*NAAQS- National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-se.-3(i)] 16.11.2009.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

26/06/2024

Reviewed By



26/06/2024

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## TEST REPORT

ULR : TC584324100000218F

Report No.	ISSPL/EN/24-25/10114	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88886)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 13/06/2024 (11:20 am) to 14/06/2024 (11:20 am), Location: Station No.04 (CAAQMS) Core Zone, Qty. 1 No.		
4. Date of Sampling	13/06/2024 - 14/06/2024		
5. Time of Sampling	11:20 am to 11:20 am		
6. Sampling Location	Station No.04 (CAAQMS) Core Zone		
7. Sampling Protocol	IS:5182 (Pt-14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	19/06/2024		
10. Test Completed On	21/06/2024		
11. Date of sample Testing	19/06/2024 To 21/06/2024		
12. Nature & Activity of the Unit	Human and Plant Site Activities		
13. Ambient Temperature (oC)	Min. 29°C, Max. 43°C		
14. Weather Condition during Monitoring	Clear Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/215, ISSPL/INS/C/197, ISSPL/INS/C/226		

## RESULTS

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*
<b>I. Chemical Parameter:-</b>					
<b>1. Atmospheric Pollution</b>					
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	13.1	µg/m <sup>3</sup>	80 (Max.)
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff :2017	27.2	µg/m <sup>3</sup>	80 (Max.)

Page No. 1/2

26/06/2024

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## TEST REPORT

ULR : TC584324100000218F

Report No.		ISSPL/EN/24-25/10114			Date	26/06/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	48.0	µg/m <sup>3</sup>	60 (Max.)	
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	88.9	µg/m <sup>3</sup>	100 (Max.)	
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.72	mg/m <sup>3</sup>	4 (Max.)	
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

\*NAAQS- National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-se.-3(i)] 16.11.2009.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

26/06/2024

Reviewed By

IRCLASS Systems And Solutions  
Jaipur  
26/06/2024  
Armeshwar Lal  
Assist. Manager  
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**TEST REPORT**

ULR : TC58432410000213F

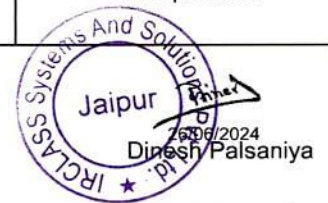
Report No.	ISSPL/EN/24-25/10096/A		Date	26/06/2024
1.	<b>Name &amp; address of Customer</b>	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2.	<b>Reference No.</b>	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88904)		
3.	<b>Material Identification with details</b>	Boiler Stack: Date and Time of Sampling: 14/06/2024 (12:40 pm to 01:08 pm), Location: Boiler No.1 (Third Unit, Unit-1) 660 MW, Qty. 1 No.		
4.	<b>Sample code</b>	88904		
5.	<b>Date of sampling</b>	14/06/2024		
6.	<b>Date of Sample testing</b>	18/06/2024 To 21/06/2024		
7.	<b>Sampling duration (in minutes)</b>	28 Min.		
8.	<b>Sampling Location</b>	Boiler No.1 (Third Unit, Unit-1) 660 MW		
9.	<b>Sampling Protocol</b>	IS:11255(Pt-1) 1985 (RA 2014)		
10.	<b>Type of stack</b>	MS Circular		
11.	<b>Stack attached to</b>	Boiler Stack		
12.	<b>Stack Diameter (in meters)</b>	7.2 Mtr.		
13.	<b>Stack height (in meters)</b>	275 Mtr.		
14.	<b>Type and quantity of fuel used</b>	Coal		
15.	<b>Instrument Code &amp; Calibration Status</b>	ISSPL/INS/C/133		
16.	<b>Control Measures if any</b>	-		
17.	<b>Ambient Temperature (oC)</b>	49°C		
18.	<b>Flue Gas Temperature (oC)</b>	135°C		

**RESULTS**

S.No.	Test Parameters	Test Method	Results	Units	Specifications
<b>3I. Chemical Testing:-</b>					
<b>1. Atmospheric Pollution:-</b>					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA: 2019	39.97	mg/Nm3	Not Specified

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26/06/2024  
Rupal Mukhiya  
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26/06/2024  
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## TEST REPORT

**ULR : TC584324100000213F**

Report No.		ISSPL/EN/24-25/10096/A		Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1158	mg/Nm <sup>3</sup>	Not Specified
3	Oxides of Nitrogen (NO <sub>X</sub> )	USEPA 7E: 1990/By Flue Gas Analyzer	180	mg/Nm <sup>3</sup>	Not Specified
4	CO	IS 13270: 1992, Reaff. 2014 ORSAT Analysis/ USEPA 3/ USEPA 10	4.35	mg/Nm <sup>3</sup>	Not Specified
5	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ (LOQ 0.001)	mg/Nm <sup>3</sup>	Not Specified

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

\*\*End of the Report\*\*

  
 26/06/2024  
 Rupal Mukhiya  
 Reviewed By



Authorised Signatory





## TEST REPORT

Report No.	ISSPL/EN/24-25/10096/B	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88904)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 14/06/2024 (12:40 pm to 01:08 pm), Location: Boiler No.1 (Third Unit, Unit-1) 660 MW, Qty. 1 No.		
4. Sample code	88904		
5. Date of sampling	14/06/2024		
6. Date of Sample testing	18/06/2024 To 21/06/2024		
7. Sampling duration (in minutes)	28 Min.		
8. Sampling Location	Boiler No.1 (Third Unit, Unit-1) 660 MW		
9. Sampling Protocol	IS:11255(Pt-1) 1985 (RA 2014)		
10. Type of stack	MS Circular		
11. Stack attached to	Boiler Stack		
12. Stack Diameter (in meters)	7.2 Mtr.		
13. Stack height (in meters)	275 Mtr.		
14. Type and quantity of fuel used	Coal		
15. Instrument Code & Calibration Status	ISSPL/INS/C/133		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	49°C		
18. Flue Gas Temperature (oC)	135°C		

### RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Specifications
<b>3I. Chemical Testing:-</b>					
<b>1. Atmospheric Pollution:-</b>					
1	Temperature	CPCB Emission Regulation(Part -3)	120	°C	Not Specified



# IRCLASS

SYSTEMS AND SOLUTIONS PRIVATE LIMITED  
(Promoted by Indian Register of Shipping)  
**Testing Laboratory**

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## TEST REPORT


Report No.		ISSPL/EN/24-25/10096/B			Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications	
2	Velocity of Gas	CPCB Emission Regulation(Part -3)	26.1	m/s	Not Specified	
3	O <sub>2</sub>	USPA 3A:1989	6.2	%	Not Specified	
4	CO <sub>2</sub>	USPA 3A:1989	11.3	%	Not Specified	
5	Moisture	USEPA 4	13.5	%	Not Specified	


BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

  
26/06/2024  
Rupal Mukhiya  
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26/06/2024  
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## TEST REPORT

ULR : TC584324100000212F

Report No.	ISSPL/EN/24-25/10097/A	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88903)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 14/06/2024 (12:02 pm to 12:30 pm), Location: Boiler No.2 (Third Unit, Unit-2) 660 MW, Qty. 1 No.		
4. Sample code	88903		
5. Date of sampling	14/06/2024		
6. Date of Sample testing	18/06/2024 To 21/06/2024		
7. Sampling duration (in minutes)	28 Min.		
8. Sampling Location	Boiler No.2 (Third Unit, Unit-2) 660 MW		
9. Sampling Protocol			
10. Type of stack	MS Circular		
11. Stack attached to	Boiler Stack		
12. Stack Diameter (in meters)	7.2 Mtr.		
13. Stack height (in meters)	275 Mtr.		
14. Type and quantity of fuel used	Coal		
15. Instrument Code & Calibration Status	ISSPL/INS/C/133		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	49°C		
18. Flue Gas Temperature (oC)	136°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Specifications
31. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA: 2019	38.95	mg/Nm3	Not Specified

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## TEST REPORT

**ULR : TC58432410000212F**


Report No.		ISSPL/EN/24-25/10097/A			Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications	
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1139	mg/Nm <sup>3</sup>	Not Specified	
3	Oxides of Nitrogen (NOX)	USEPA 7E: 1990/By Flue Gas Analyzer	182	mg/Nm <sup>3</sup>	Not Specified	
4	CO	IS 13270: 1992, Reaff. 2014 ORSAT Analysis/ USEPA 3/ USEPA 10	4.12	%	Not Specified	
5	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ (LOQ 0.001)	mg/Nm <sup>3</sup>	-	


BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

\*\*End of the Report\*\*

  
 26/06/2024  
 Rupal Mukhiya  
 Reviewed By

  
 26/06/2024  
 Dinesh Palsaniya  
 Authorised Signatory





# IRCLASS

SYSTEMS AND SOLUTIONS PRIVATE LIMITED  
(Promoted by Indian Register of Shipping)  
**Testing Laboratory**

CEG Tower, 1<sup>st</sup> & 2<sup>nd</sup> Floor, B-11G, Industrial Area,  
Malviya Nagar, Jaipur, Rajasthan – 302017: India  
Tel: 0141-4805672 | Email – lab@irclass.org | Website : www.isspllab.com

## TEST REPORT

Report No.	ISSPL/EN/24-25/10097/B	Date	26/06/2024
1.	<b>Name &amp; address of Customer</b>	<b>Talwandi Sabo Power Ltd.</b> 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab	
2.	<b>Reference No.</b>	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88903)	
3.	<b>Material Identification with details</b>	Boiler Stack: Date and Time of Sampling: 14/06/2024 (12:02 pm to 12:30 pm), Location: Boiler No.2 (Third Unit, Unit-2) 660 MW, Qty. 1 No.	
4.	<b>Sample code</b>	88903	
5.	<b>Date of sampling</b>	14/06/2024	
6.	<b>Date of Sample testing</b>	18/06/2024 To 21/06/2024	
7.	<b>Sampling duration (in minutes)</b>	28 Min.	
8.	<b>Sampling Location</b>	Boiler No.2 (Third Unit, Unit-2) 660 MW	
9.	<b>Sampling Protocol</b>		
10.	<b>Type of stack</b>	MS Circular	
11.	<b>Stack attached to</b>	Boiler Stack	
12.	<b>Stack Diameter (in meters)</b>	7.2 Mtr.	
13.	<b>Stack height (in meters)</b>	275 Mtr.	
14.	<b>Type and quantity of fuel used</b>	Coal	
15.	<b>Instrument Code &amp; Calibration Status</b>	ISSPL/INS/C/133	
16.	<b>Control Measures if any</b>	-	
17.	<b>Ambient Temperature (oC)</b>	49°C	
18.	<b>Flue Gas Temperature (oC)</b>	136°C	

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Specifications
<b>3I. Chemical Testing:-</b>					
<b>1. Atmospheric Pollution:-</b>					
1	Temperature	CPCB Emission Regulation(Part -3)	120	°C	Not Specified

Page No. 1/2

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## TEST REPORT


Report No.	ISSPL/EN/24-25/10097/B			Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications
2	Velocity of Gas	CPCB Emission Regulation(Part -3)	26.8	m/s	Not Specified
3	O2	USPA 3A:1989	6.5	%	Not Specified
4	CO2	USPA 3A:1989	11.0	%	Not Specified
5	Moisture	USEPA 4	12.7	%	Not Specified

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

  
26/06/2024  
Rupal Mukhiya  
Reviewed By



Authorised Signatory





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## TEST REPORT

ULR : TC584324100000211F

Report No.	ISSPL/EN/24-25/10098/A	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88902)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 14/06/2024 (11:22 am to 11:50 am), Location: Boiler No.3 (Third Unit, Unit-3) 660 MW, Qty. 1 No.		
4. Sample code	88902		
5. Date of sampling	14/06/2024		
6. Date of Sample testing	18/06/2024 To 21/06/2024		
7. Sampling duration (in minutes)	28 Min.		
8. Sampling Location	Boiler No.3 (Third Unit, Unit-3) 660 MW		
9. Sampling Protocol	IS:11255(Pt-1) 1985 (RA 2014)		
10. Type of stack	MS Circular		
11. Stack attached to	Boiler Stack		
12. Stack Diameter (in meters)	7.2 Mtr.		
13. Stack height (in meters)	275 Mtr.		
14. Type and quantity of fuel used	Coal		
15. Instrument Code & Calibration Status	ISSPL/INS/C/133		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	49°C		
18. Flue Gas Temperature (oC)	138°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Specifications
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA: 2019	37.98	mg/Nm3	Not Specified

Page No. 1/2

*Rupal*  
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*Dinesh*  
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## TEST REPORT

**ULR : TC58432410000211F**

Report No.		ISSPL/EN/24-25/10098/A			Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications	
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1141	mg/Nm <sup>3</sup>	Not Specified	
3	Oxides of Nitrogen (NOX)	USEPA 7E: 1990/By Flue Gas Analyzer	187	mg/Nm <sup>3</sup>	Not Specified	
4	CO	IS 13270: 1992, Reaff. 2014 ORSAT Analysis/ USEPA 3/ USEPA 10	3.90	mg/Nm <sup>3</sup>	Not Specified	
5	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ(LOQ .001)	mg/Nm <sup>3</sup>	-	

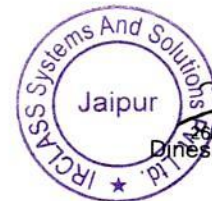
BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

\*\*End of the Report\*\*

  
 26/06/2024  
 Rupal Mukhiya  
 Reviewed By

  
 26/06/2024  
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## TEST REPORT

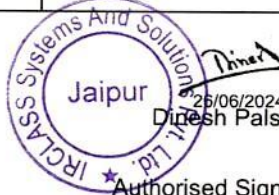
Report No.	ISSPL/EN/24-25/10098/B	Date	26/06/2024
1. Name & address of Customer	Talwandi Sabo Power Ltd. 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	PO - WA24Y-00002, Date: 10/05/2024 & TRF Dated: 17/06/2024 (Reg. No. 88902)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 14/06/2024 (11:22 am to 11:50 am), Location: Boiler No.3 (Third Unit, Unit-3) 660 MW, Qty. 1 No.		
4. Sample code	88902		
5. Date of sampling	14/06/2024		
6. Date of Sample testing	18/06/2024 To 21/06/2024		
7. Sampling duration (in minutes)	28 Min.		
8. Sampling Location	Boiler No.3 (Third Unit, Unit-3) 660 MW		
9. Sampling Protocol	IS:11255(Pt-1) 1985 (RA 2014)		
10. Type of stack	MS Circular		
11. Stack attached to	Boiler Stack		
12. Stack Diameter (in meters)	7.2 Mtr.		
13. Stack height (in meters)	275 Mtr.		
14. Type and quantity of fuel used	Coal		
15. Instrument Code & Calibration Status	ISSPL/INS/C/133		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	49°C		
18. Flue Gas Temperature (oC)	138°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Specifications
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Temperature	CPCB Emission Regulation(Part -3)	117	°C	Not Specified

Page No. 1/2

  
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## TEST REPORT

Report No.	ISSPL/EN/24-25/10098/B			Date	26/06/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications
2	Velocity of Gas	CPCB Emission Regulation(Part -3)	26.6	m/s	Not Specified
3	O2	USPA 3A:1989	5.8	%	Not Specified
4	CO2	USPA 3A:1989	10.80	%	Not Specified
5	Moisture	USEPA 4	12.8	%	Not Specified

BLQ= Below Limit of Quantification, LOQ= Limit of Quantification

Remark: - Sample Conforms to Limit as per Environmental (Protection) Act, 1986 with respect to above tested Parameters.

Remark: Sampling done by ISSPL Representative (Mr. Dinesh Jangid).

**\*\*End of the Report\*\***

  
26/06/2024  
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Reviewed By

  
26/06/2024  
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