



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/24-25/00197	Date	20/07/2024
1.	Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2.	Reference No.	Your TRF Dated: 13/07/2024 (Reg. No. 98803)		
3.	Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 11/07/2024 (11:20 am) to 12/07/2024 (11:20 am), Location: Core Zone Station No.1 (AAQMS), Qty. 1 No.		
4.	Date of Sampling	11/07/2024		
5.	Time of Sampling	11:20 am to 11:20 am		
6.	Sampling Location	Core Zone Station No.1 (AAQMS)		
7.	Sampling Protocol	IS: 5182 (Pt. 14) 2000		
8.	Duration of Sampling (Minutes)	1440 Min.		
9.	Test Started On	13/07/2024		
10.	Test Completed On	19/07/2024		
11.	Date of sample Testing	13/07/2024 To 19/07/2024		
12.	Nature & Activity of the Unit	Human and Plat Site Activity		
13.	Ambient Temperature (oC)	Min. 28°C, Max. 38°C		
14.	Weather Condition during Monitoring	Cloudy Sky		
15.	Instrument Code & Calibration Status	RDS-15-G-267, FPS-364-2008, GSM-12-1-243		

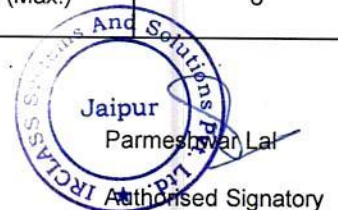
## RESULTS

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
I. Chemical Parameter:-						
1. Atmospheric Pollution.						
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	17.5	µg/m <sup>3</sup>	80 (Max.)	4
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff	25.4	µg/m <sup>3</sup>	80 (Max.)	6

Page No. 1/2

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Jaipur  
Parmeshwar Lal  
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## TEST REPORT

Report No.		ISSPL/EN/24-25/00197			Date	20/07/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
2		:2017				
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	40.3	µg/m <sup>3</sup>	60 (Max.)	1
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	80.4	µg/m <sup>3</sup>	100 (Max.)	1
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.67	mg/m <sup>3</sup>	4 (Max.)	0.02
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LO Q:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	0.0005

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. Pokhar Nath Yogi).

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

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**TEST REPORT**

Report No.	ISSPL/EN/24-25/00198	Date	20/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 13/07/2024 (Reg. No. 98802)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 11/07/2024 (12:00 pm) to 12/07/2024 (12:00 pm), Location: Core Zone Station No.2 (AAQMS), Qty. 1 No.		
4. Date of Sampling	11/07/2024		
5. Time of Sampling	12:00 pm to 12:00 pm		
6. Sampling Location	Core Zone Station No.2 (AAQMS)		
7. Sampling Protocol	IS: 5182 (Pt. 14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	13/07/2024		
10. Test Completed On	19/07/2024		
11. Date of sample Testing	13/07/2024 To 19/07/2024		
12. Nature & Activity of the Unit	Human and Plat Site Activity		
13. Ambient Temperature (oC)	Min. 28°C, Max. 38°C		
14. Weather Condition during Monitoring	Cloudy Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/121, ISSPL/INS/C/129, ISSPL/INS/C/131		

**RESULTS**

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
<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	19.7	µg/m <sup>3</sup>	80 (Max.)	4
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff	27.5	µg/m <sup>3</sup>	80 (Max.)	6

Page No. 1/2

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## TEST REPORT

Report No.		ISSPL/EN/24-25/00198			Date	20/07/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
2		:2017				
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	46.1	µg/m <sup>3</sup>	60 (Max.)	1
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	86.9	µg/m <sup>3</sup>	100 (Max.)	1
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.72	mg/m <sup>3</sup>	4 (Max.)	0.02
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ: 0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	0.0005

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. Pokhar Nath Yogi).

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

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## TEST REPORT

Report No.	ISSPL/EN/24-25/00199	Date	20/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 13/07/2024 (Reg. No.98801)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 11/07/2024 (12:30 pm) to 12/07/2024 (12:30 pm), Location: Core Zone Station No.3 (AAQMS), Qty. 1 No.		
4. Date of Sampling	11/07/2024		
5. Time of Sampling	12:30 pm to 12:30 pm		
6. Sampling Location	Core Zone Station No.3 (AAQMS)		
7. Sampling Protocol	IS: 5182 (Pt. 14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	13/07/2024		
10. Test Completed On	19/07/2024		
11. Date of sample Testing	13/07/2024 To 19/07/2024		
12. Nature & Activity of the Unit	Human and Plat Site Activity		
13. Ambient Temperature (oC)	Min. 28°C, Max. 38°C		
14. Weather Condition during Monitoring	Cloudy Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/120, ISSPL/INS/C/128, ISSPL/INS/C/122		

## RESULTS

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
I. Chemical Parameter:-						
1. Atmospheric Pollution						
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	21.5	µg/m <sup>3</sup>	80 (Max.)	4
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff	25.2	µg/m <sup>3</sup>	80 (Max.)	6

Page No. 1/2

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## TEST REPORT

Report No.		ISSPL/EN/24-25/00199			Date	20/07/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
2		:2017				
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	42.1	µg/m <sup>3</sup>	60 (Max.)	1
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	77.8	µg/m <sup>3</sup>	100 (Max.)	1
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.68	mg/m <sup>3</sup>	4 (Max.)	0.02
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ: 0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	0.0005

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. Pokhar Nath Yogi).

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

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**TEST REPORT**

Report No.	ISSPL/EN/24-25/00200	Date	20/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 13/07/2024 (Reg. No.87086)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 11/07/2024 (12:50 pm) to 12/07/2024 (12:50 pm), Location: Core Zone Station No.4 (AAQMS), Qty. 1 No.		
4. Date of Sampling	11/07/2024		
5. Time of Sampling	12:50 pm to 12:50 am		
6. Sampling Location	Core Zone Station No.4 (AAQMS)		
7. Sampling Protocol	IS: 5182 (Pt. 14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	13/07/2024		
10. Test Completed On	19/07/2024		
11. Date of sample Testing	13/07/2024 To 19/07/2024		
12. Nature & Activity of the Unit	Human and Plat Site Activity		
13. Ambient Temperature (oC)	Min. 28°C, Max. 38°C		
14. Weather Condition during Monitoring	Cloudy Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/172, ISSPL/INS/C/199, ISSPL/INS/C/179		

**RESULTS**

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
I. Chemical Parameter:-						
1. Atmospheric Pollution						
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	15.1	µg/m <sup>3</sup>	80 (Max.)	4
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff	27.2	µg/m <sup>3</sup>	80 (Max.)	6

Page No. 1/2

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**TEST REPORT**

Report No.		ISSPL/EN/24-25/00200			Date	
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	Detection Limit
2		:2017				
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	48.4	µg/m <sup>3</sup>	60 (Max.)	1
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	88.9	µg/m <sup>3</sup>	100 (Max.)	1
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.76	mg/m <sup>3</sup>	4 (Max.)	0.02
6	Lead (as Pb)	USEPA Method IO 3.5 1999	BLQ(LOQ:0.000 5)	µg/m <sup>3</sup>	1.0 (Max.)	0.005

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. Pokhar Nath Yogi).

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

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## TEST REPORT

Report No.	ISSPL/EN/24-25/00201	Date	20/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 13/07/2024 (Reg. No.98799)		
3. Material Identification with details	Ambient Air Quality Monitoring: Date and Time of Sampling: 11/07/2024 (01:20 pm) to 12/07/2024 (01:20 pm), Location: Near Buffer Zone Chappianwali Village(AAQMS), Qty. 1 No.		
4. Date of Sampling	11/07/2024		
5. Time of Sampling	01:20 pm to 01:20 pm		
6. Sampling Location	Near Buffer Zone Chappianwali Village (AAQMS)		
7. Sampling Protocol	IS: 5182 (Pt. 14) 2000		
8. Duration of Sampling (Minutes)	1440 Min.		
9. Test Started On	13/07/2024		
10. Test Completed On	19/07/2024		
11. Date of sample Testing	13/07/2024 To 19/07/2024		
12. Nature & Activity of the Unit	Human and Plat Site Activity		
13. Ambient Temperature (oC)	Min. 28°C, Max. 38°C		
14. Weather Condition during Monitoring	Cloudy Sky		
15. Instrument Code & Calibration Status	ISSPL/INS/C/214, ISSPL/INS/C/228, ISSPL/INS/C/219		

## RESULTS

S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*
I.Chemical Parameter:-					
1. Atmospheric Pollution					
1	Sulphur Dioxide ( as SO <sub>2</sub> )	IS:5182 (Part 2)-2001, Reaff :2017	16.2	µg/m <sup>3</sup>	80 (Max.)
2	Nitrogen Dioxide( as NO <sub>2</sub> )	IS:5182 (Part 6)-2006, Reaff	28.6	µg/m <sup>3</sup>	80 (Max.)

Page No. 1/2

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**TEST REPORT**

Report No.		ISSPL/EN/24-25/00201			Date	20/07/2024
S.No.	Name of Test	Method of Test	Results	Unit	Limit as per NAAQS*	
2		:2017				
3	Particulate Matter ( as PM2.5)	IS:5182 (Part 24):2019	44.6	µg/m <sup>3</sup>	60 (Max.)	
4	Particulate Matter ( as PM10)	IS:5182 (Part 23)-2006, Reaff:2017	87.8	µg/m <sup>3</sup>	100 (Max.)	
5	Carbon Monoxide ( as CO)	IS 5182 (Part -10):1999	0.81	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. Pokhar Nath Yogi).

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

Reviewed By



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## TEST REPORT

Report No.	ISSPL/EN/24-25/00250/A	Date	30/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 22/07/2024 (Reg.No. 86858)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (11:30 am to 11:55 am), Location: Boiler Stack-1 (Third Unit) Unit-1, Qty. 1 No.		
4. Sample code	86858		
5. Date of sampling	18/07/2024		
6. Date of Sample testing	22/07/2024 To 30/07/2024		
7. Sampling duration (in minutes)	25 Min.		
8. Sampling Location	Boiler Stack-1 (Third Unit) Unit-1		
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/134		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	42°C		
18. Flue Gas Temperature (oC)	129°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA:	35.5	mg/Nm <sup>3</sup>	1

Page No. 1/2

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**TEST REPORT**

Report No.		ISSPL/EN/24-25/00250/A		Date	
S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
1		2019			
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1151	mg/Nm <sup>3</sup>	0.3
3	Oxides of Nitrogen (NO <sub>X</sub> )	USEPA 7E: 1990/By Flue Gas Analyzer	187	mg/Nm <sup>3</sup>	0.2
4	Carbon Monoxide (CO)	USEPA 10: 1996/By Flue Gas Analyzer	4.4	mg/Nm <sup>3</sup>	0.1
5	CO <sub>2</sub>	USEPA 3A:1989	11.6	%	0.1
6	O <sub>2</sub>	USEPA 3A:1989	7.1	%	0.1
7	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ(LOQ0.01)	µg/Nm <sup>3</sup>	0.01

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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





## SYSTEMS AND SOLUTIONS PRIVATE LIMITED

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### Testing Laboratory

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## TEST REPORT

Report No.	ISSPL/EN/24-25/00250/B	Date	30/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 22/07/2024 (Reg. No. 86858)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (11:30 am to 11:55 am), Location: Boiler Stack-1 (Third Unit) Unit-1, Qty. 1 No.		
4. Sample code	86858		
5. Date of sampling	18/07/2024		
6. Date of Sample testing	22/07/2024 To 30/07/2024		
7. Sampling duration (in minutes)	25 Min.		
8. Sampling Location	Boiler Stack-1 (Third Unit) Unit-1		
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/134		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	42°C		
18. Flue Gas Temperature (oC)	129°C		

### RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
31. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Velocity of Gas	CPCB Emission	25.8	m/s	Not Specified

Page No. 1/2

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## TEST REPORT

Report No.		ISSPL/EN/24-25/00250/B			Date	30/07/2024
S.No.	Test Parameters	Test Method	Results	Units	Detection Limit	
1		Regulation(Part -3)				
2	Temperature	CPCB Emission Regulation(Part -3)	124	°C	5	
3	Moisture	USEPA 4	13.8	%	1	

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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

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## TEST REPORT

Report No.	ISSPL/EN/24-25/00251/A	Date	30/07/2024
1.	Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab	
2.	Reference No.	Your TRF Dated: 22/07/2024 (Reg. No. 98750)	
3.	Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (12:10 pm to 12:35 pm), Location: Boiler Stack-2 (First Unit) Unit-2, Qty. 1 No.	
4.	Sample code	98750	
5.	Date of sampling	18/07/2024	
6.	Date of Sample testing	22/07/2024 To 30/07/2024	
7.	Sampling duration (in minutes)	25 Min.	
8.	Sampling Location	Boiler Stack-2 (First Unit) Unit-2	
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/134	
16.	Control Measures if any	-	
17.	Ambient Temperature (oC)	42°C	
18.	Flue Gas Temperature (oC)	126°C	

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA:	36.2	mg/Nm3	1

Page No. 1/2

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## TEST REPORT

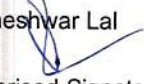
Report No.		ISSPL/EN/24-25/12144/A			Date	30/07/2024
S.No.	Test Parameters	Test Method	Results	Units	Detection Limit	
1		2019				
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1181	mg/Nm <sup>3</sup>	0.3	
3	Oxides of Nitrogen (NO <sub>X</sub> )	USEPA 7E: 1990/By Flue Gas Analyzer	210	mg/Nm <sup>3</sup>	0.2	
4	Carbon Monoxide (CO)	USEPA 10: 1996/By Flue Gas Analyzer	5.6	mg/Nm <sup>3</sup>	0.1	
5	CO <sub>2</sub>	USPA 3A:1989	12.4	%	0.1	
6	O <sub>2</sub>	USPA 3A:1989	6.9	%	0.1	
7	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ(LOQ0.01)	µg/Nm <sup>3</sup>	0.01	

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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

  
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### TEST REPORT

Report No.	ISSPL/EN/24-25/00251/B	Date	30/07/2024
1.	Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab	
2.	Reference No.	, Your TRF Dated: 22/07/2024 (Reg. No. 98750)	
3.	Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (12:10 pm to 12:35 pm), Location: Boiler Stack-2 (First Unit) Unit-2, Qty. 1 No.	
4.	Sample code	98750	
5.	Date of sampling	18/07/2024	
6.	Date of Sample testing	22/07/2024 To 30/07/2024	
7.	Sampling duration (in minutes)	25 Min.	
8.	Sampling Location	Boiler Stack-2 (First Unit) Unit-2	
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/134	
16.	Control Measures if any	-	
17.	Ambient Temperature (oC)	42°C	
18.	Flue Gas Temperature (oC)	126°C	

### RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Velocity of Gas	CPCB Emission	26.2	m/s	Not Specified

Page No. 1/2

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## TEST REPORT

Report No.		ISSPL/EN/24-25/00250/B		Date	
S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
1		Regulation(Part -3)			
2	Temperature	CPCB Emission Regulation(Part -3)	119	°C	5
3	Moisture	USEPA 4	14.0	%	1

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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

Page No. 2/2

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## TEST REPORT

Report No.	ISSPL/EN/24-25/00252/A	Date	30/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 22/07/2024 (Reg. No. 98748)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (12:45 pm to 01:11 pm), Location: Boiler Stack-3 (Second Unit) Unit-3, Qty. 1 No.		
4. Sample code	98748		
5. Date of sampling	18/07/2024		
6. Date of Sample testing	22/07/2024 To 30/07/2024		
7. Sampling duration (in minutes)	26 Min.		
8. Sampling Location	Boiler Stack-3 (Second Unit) Unit-3		
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/134		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	42°C		
18. Flue Gas Temperature (oC)	128°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Particulate Matter (PM)	IS 11255 (Part 1) 1985, RA:	38.6	mg/Nm3	1

Page No. 1/2

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**TEST REPORT**

Report No.		ISSPL/EN/24-25/00252/A			Date	30/07/2024
S.No.	Test Parameters	Test Method	Results	Units	Specifications	
1		2019				
2	Sulphur dioxide (SO <sub>2</sub> )	USEPA 6C: 1996/By Flue Gas Analyzer	1178	mg/Nm <sup>3</sup>	0.3	
3	Oxides of Nitrogen (NO <sub>x</sub> )	USEPA 7E: 1990/By Flue Gas Analyzer	215	mg/Nm <sup>3</sup>	0.2	
4	Carbon Monoxide (CO)	USEPA 10: 1996/By Flue Gas Analyzer	5	mg/Nm <sup>3</sup>	0.1	
5	CO <sub>2</sub>	USEPA 3A:1989	11.5	%	0.1	
6	O <sub>2</sub>	USEPA 3A:1989	6.6	%	0.1	
7	Mercury (Hg)	USEPA 29:1996/101A:1991	BLQ(LOQ:0.01)	µg/Nm <sup>3</sup>	0.01	

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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





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## TEST REPORT

Report No.	ISSPL/EN/24-25/00252/B	Date	30/07/2024
1. Name & address of Customer	KEPCO Plant Service & Engineering Co. Ltd. Talwandi Sabo Power Ltd., 3X660MW Thermal Power Plant, Banawala, Mansa District Punjab		
2. Reference No.	Your TRF Dated: 22/07/2024 (Reg.No. 98748)		
3. Material Identification with details	Boiler Stack: Date and Time of Sampling: 18/07/2024 (12:45 pm to 01:11 pm), Location: Boiler Stack-3 (Second Unit) Unit-3, Qty. 1 No.		
4. Sample code	98748		
5. Date of sampling	18/07/2024		
6. Date of Sample testing	22/07/2024 To 30/07/2024		
7. Sampling duration (in minutes)	26 Min.		
8. Sampling Location	Boiler Stack-3 (Second Unit) Unit-3		
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/134		
16. Control Measures if any	-		
17. Ambient Temperature (oC)	42°C		
18. Flue Gas Temperature (oC)	128°C		

## RESULTS

S.No.	Test Parameters	Test Method	Results	Units	Detection Limit
3I. Chemical Testing:-					
1. Atmospheric Pollution:-					
1	Velocity of Gas	CPCB Emission	25.8	m/s	5

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### TEST REPORT

Report No.		ISSPL/EN/24-25/00252/B			Date	30/07/2024
S.No.	Test Parameters	Test Method	Results	Units	Detection Limit	
1		Regulation(Part -3)				
2.	Temperature	CPCB Emission Regulation(Part -3)	128	°C	5	
3.	Moisture	USEPA 4	13.8	%	1	

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

Remark: Sampling done by ISSPL Representative (Mr. Pokhar Nath Yogi).

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

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