





Phone: (0341) 2252011 : (0341) 2252011

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur

ASANSOL-713304 (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

### **TEST REPORT**

Report Release Date : 22.03.2018

Test Report No

: EC/TR/42/03267

Type of Sample Sample Collected by

: Suspended Dust & Gases : Mr. Ranjeet Yadav & Team

Sample Details

: Ambient Air

Name & Address

: Indian Oil Corporation Ltd (MD)

(Jasidih Terminal)

DGM (T), Jasidih Industrial Area

Jasidih - 814142, Deoghar, Jharkhand

Sample Ref. No.(ARF)

: EC/ARF/29/180355

Source of Sample

: Store & Dispatch of Petroleum Oil

Sampling Date

: 12.03.18 to 13.03.18

Period of Analysis Sample Condition

: 14.03.18 to 15.03.18 : Sealed & Preserved

Remarks

Sample Drawn By

: ECO CARE

Deviation if any

: None

# METEOROLOGICAL INFORMATION

1	Average Temperature	29.6 °C	2	Barometric Pressure	748 mm Ha	
3	Average Relative Humidity	43.4 %	4	Weather Condition	Clear Day	-

TEST METHOD	IS: 5182 (Part - 2)	IS: 5182 (Part - 6)	IS: 5182 (Part - 23)	EPA CFR40(50),
PARAMETERS	$SO_2 (\mu g/M^3)$	$NO_x(\mu g/M^3)$	PM < 10 micron $(\mu g/M^3)$	Appendix 1 PM-2.5 (μg/M³)
Method Detection Limit	4	6	20	10
NAAQS	80	80	100	60
1. Sampling Location: Near Adm	inistrative Bui	lding		
Shift - A (10:10 AM To 06:10 PM)	29.38	36.20	67.18	
Shift - B (06:20 PM To 02:10 AM)	20.00	28.54	56.24	
Shift - C (02:20 AM To 10:20 AM)	26.25	33.41	63.39	25.28
Average (Shift - A To Shift - C)	25.21	32.72	62.27	
2. Sampling Location: Near Main	Gate		And the second s	
Shift - A (10:30 AM To 06:30 PM)	32.50	40.37	85.48	
Shift - B (06:40 PM To 02:40 AM)	23.13	32.02	69.35	
Shift - C (02:50 AM To 10:50 AM)	26.25	35.50	77.53	29.05
Average (Shift - A To Shift - C)	27.29	35.96	77.45	
3. Sampling Location: Near Store				
Shift - A (11:05 AM To 07:05 PM)	26.25	38.28.	80.96	
Shift - B (07:20 PM To 03:20 AM)	20.00	29.23	59.72	
Shift - C (03:30 AM To 11:30 AM)	23.13	34.11	68.09	22.55
Average (Shift - A To Shift - C)	23.13	33.87	69.59	

- 1. Test values are reported based on the samples received.
- 2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
- 3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory Nupur Chatteriee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager







Phone: (0341) 2252011 : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

### **TEST REPORT**

	: 22.03.2018	Sample Ref. No.(ARF)	: EC/ARF/29/180355
Test Report No	: EC/TR/42/03268	Source of Sample	: Store & Dispatch of
Type of Sample	: Suspended Dust & Gases	133	Petroleum Oil Unit
Sample Collected by	: Mr. Ranjeet Yadav & Team	Sampling Date	: 12.03.18 to 13.03.18
Sample Details	: Ambient Air	Period of Analysis	: 14.03.18 to 15.03.18
Name & Address	: Indian Oil Corporation Ltd (MD)	Sample Condition	: Sealed & Preserved
	(Jasidih Terminal)	Remarks	:
	DGM (T), Jasidih Industrial Area	Sample Drawn By	: ECO CARE
	Jasidih - 814142, Deoghar, Jharkhand	Deviation if any	: None

## METEOROLOGICAL INFORMATION

1	Average Temperature	29.6 °C	2	Barometric Pressure 748 mm Hg
3	Average Relative Humidity	43.4 %	4	Weather Condition Clear Day

VOLATILE ORGANIC COMPOUND	IN AMBIENT AIR QUALITY ANA	LYSIS REPORT
1. Sampling Location: Near MCC Tank	Building Tank Farm Area	
PARAMETERS	Volatile Organic Compound	
Shift - A (10:00 AM To 06:00 PM)	2.6 ppm	5.0
Shift - B (06:10 PM To 02:10 AM)	2.4 ppm	5.0 ppm
Shift - C (02:20 AM To 10:20 AM)	2.0 ppm	(as per NAAQS)
Average (Shift - A To Shift - C)	2.33 ppm	

- 1. Test values are reported based on the samples received.
- 2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.
- 3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager







Phone : (0341) 2252011 Fax : (0341) 2252011

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

### **TEST REPORT**

Sample Ref. No.(ARF) : EC/ARF/29/180355 : 22.03.2018 Report Release Date : Store & Dispatch of Source of Sample Test Report No : EC/TR/42/03269 Petroleum Oil Type of Sample : Noise : 12.03.2018 : Mr. Ranjeet Yadav & Team Sampling Date Sample Collected by Period of Analysis Sample Details : Ambient Noise Sample Condition : Indian Oil Corporation Ltd (MD) : ----Name & Address Remarks (Jasidih Terminal) DGM (T), Jasidih Industrial Area Sample Drawn By : ECO CARE Jasidih - 814142, Deoghar, Jharkhand Deviation if any : None

### METEOROLOGICAL INFORMATION

1	Average Temperature ( °C )	29.6
2	Average Relative Humidity (%)	43.4
3	Barometric Pressure (mm of Hg)	748
4	Weather Condition	Clear Day

#### AMBIENT NOISE STANDARDS

Area Category	Limit in dB(A)Leq - Day Time	Limit in dB(A)Leq - Night Time
Industrial Area	75 dB(A)	70 dB(A)

### AMBIENT NOISE QUALITY REPORT

		NOISE LEVEL				
Sampling Location		Minimum	Leq – Mean	Maximum		
	Day	56.30 dB(A)	65.63 dB(A)	70.60 dB(A)		
1. Near D.G Area	Night	52.10 dB(A)	61.83 dB(A)	67.00 dB(A)		
	Day	49.00 dB(A)	53.11 dB(A)	56.40 dB(A)		
. Near Lock Room	Night	44.50 dB(A)	48.31 dB(A)	50.80 dB(A)		
	Day	43.40 dB(A)	54.95 dB(A)	60.30 dB(A)		
Near Administrative Building	Night	38.50 dB(A)	45.45 dB(A)	49.70 dB(A)		

1. Test values are reported based on the samples received.

2. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory

Nupur Chatterjee

B. Sc. M. Sc. (Env. Sc.)

Dy Technical Manager







Phone : (0341) 2252011 Fax : (0341) 2252011

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur

ASANSOL-713304 (W.B.)

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

### **TEST REPORT**

Report Release Date Sample Ref. No.(ARF) : EC/ARF/29/180355 : 22.03.2018 Test Report No Source of Sample : EC/TR/42/03272 : Store & Dispatch of Type of Sample : Water Petroleum Oil Sample Collected by : Mr. Ranjeet Yadav Sampling Date : 12.03.2018 Sample Details : Effluent Water Period of Analysis : 14.03.18 to 19.03.18 Name & Address Sampling Location : OWS (Oil Separator) : Indian Oil Corporation Ltd (MD) (Jasidih Terminal) No. 2 Sample Condition : Sealed & Preserved DGM (T), Jasidih Industrial Area Sample Stamped as : "IOC - 33" Jasidih - 814142, Deoghar Jharkhand Sample Drawn By : ECO CARE Remarks : ----Deviation if any : None

Sl. No.	Parameters	Unit	Test Method (APHA 22 <sup>nd</sup> Edition)	Standards (EPR 1986 & IS 2296:1982)	Results
1	pH 24.5 °C		4500-H <sup>+</sup> B	5.5 – 9.0	7.52
. 2	Temperature	°C			24.5
3	TSS	mg/l	2540 D	100.0	66.70
4	TDS	mg/l	2540 C	2100.0	216.30
5	BOD (3 days) at 27.0 °C	mg/l	IS 3025 (Part - 44): 2009	30.0	23
6	COD	mg/l	5220 B	250.0	70.56
7	Oil & Grease	mg/l	5520 B	10.0	6.73

1. Test values are reported based on the samples received.

2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.

3. The Test report shall not be reproduced, without the written approval of laboratory.

Authorised Signatory

Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager







Phone: (0341) 2252011 : (0341) 2252011

Certificate No. TC-5109

Specialised House on Environmental Monitoring, Analysis, Assessment & Management

ISO 9001: 2015 Certified, OHSAS 18001:2007 Certfied

E-mail: ecocareasansol@rediffmail.com Manoj Talkies Basement, Kumarpur ASANSOL-713304 (W.B.)

### **TEST REPORT**

Report Release Date	: 22.03.2018	Sample Ref. No.(ARF)	: EC/ARF/29/180355	
Test Report No	: EC/TR/42/03265	Source of Sample	: Store & Dispatch of	
Type of Sample	: Dust & Gaseous Emission	7000	Petroleum Oil	
Sample Collected by	: Mr. Ranjeet Yadav & Team	Sampling Date	: 12.03.2018	
Sample Details	: Stack Emission	Period of Analysis	: 14.03.2018	
Name & Address	: Indian Oil Corporation LTD (MD)	Sampling Location	: D.G Stack (NO. 1)	
	(Jasidih Terminal)	Sample Condition	: Preserved & Sealed	
	DGM (T), Jasidih Industrial Area	Sample Stamped as	: TH – 235	
	Jasidih – 814142, Deoghar,	Sample Drawn By	: ECO CARE	
	Jharkhand	Remarks	:	
		Deviation if any	: None	ĺ

GENERAL	INFORMATION	

GL	MERAL INFORMATION		
1	Particular of the Plant	: Store & Dispatch of Petroleum Oil Unit	
2	Emission Due to	: Burning of HSD	
3	Stack Connected to	: D.G Set No. 1	
4	Material of Construction	: M.S	
5	Stack Height from G.L.	: 5.2 m	
6	Height of Sampling Port from G.L.	: 5.2 m	
7	Height of Sampling Port from L.D.Z.	:	
8	Dimension of Stack at Sampling Port	: 0.15 m	
9	Shape of the Stack	: Circular Ø	
10	Working Load	: 320 KVA	

### FUEL CHARACTERISTIC REPORT

1	Source of Energy	: HSD	
1	0.		
2	Energy Consumption	: 35 lit/hr	
3	Calorific Value (K-Cal/Kg)	i	

### RESULTS OF SAMPLING GASEOUS EMISSION ANALYSIS

PARAMETERS	RESULTS	METHOD	NAAQS
1 Flue Gas Temperature	171 °C	IS 11255 : Part 3	
2 Barometric Pressure	748 mm Hg	IS 11255 : Part 3	
3 Velocity of Flue Gas	17.37 m/sec	IS 11255 : Part 3	
4 Flue Gas Quantity	586 NM <sup>3</sup> / hr	11255 : Part 3	
5 Concentration of Particulate Matter	$71.38 \text{ mg/NM}^3$	IS 11255 : Part 1	150 mg/Nm <sup>3</sup>
6 Concentration of Carbon Dioxide	5.8 %	IS 13270	
7 Concentration of Hydrocarbons As CH <sub>4</sub>	< 0.1 gm/kw -hr	APHA	3.5 gm/kw -hr
8 Concentration of SO <sub>2</sub>	26.96 mg/NM <sup>3</sup>	IS 11255 : Part 2	
9 Concentration of NO <sub>x</sub>	54.39 mg/NM <sup>3</sup>	IS-11255: Part 7	

1. Test values are reported based on the samples received.

2. Sample(s) will be destroyed after 7 days from date of issues of the Test Report subject to nature of Preservation. Sample will be preserved as per the standard method.

3. The Test report shall not be reproduced, without the written approval of laboratory

Authorised Signatory Nupur Chatterjee B. Sc. M. Sc. (Env. Sc.) Dy Technical Manager