

[A Govt. Approved, ISO 9001:2015, 14001 & 45001: 2018 certified & Approved by MOEF, PPCB]

PPCB-Ref. No. Lab/3238392

Dated-30.09.2011

TEST REPORT

Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL090620GW001
Type of Sample	Ground Water	Date of Reporting	13/06/2020

Customer	Thapar Institute of Engineering & Technology Bhadson Road, Patiala (Punjab)	Work Order No. & Date	WO/TIET/CS/PR/19358 dt. 07/11/19
		Customer reference No. (If any)	NA
Sampling Protocol	IS:3025(P-1) 1987 RA2019	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	09/06/2020	Date of Receipt of Sample	09/06/2020
Sampling Location	From Tubewell No. 1	Packing, Markings, Seal & Quantity	Plastic & Glass Bottle Marked '1' 2 litre +250 ml
Testing Protocol	IS 10500 : 2012 (Second Revision)	Period of Analysis	09/06/2020 to 13/06/2020
Sample Description	Colorless liquid		
Testing Location	Permanent Facility		

TEST RESULTS

I -Chemical Testing

1. Water (Ground Water)

S. No.	Test Parameter	Units	Results	Acceptable limit	Permissible limit ¹	Test Method
1.	Colour	Colour Unit	BDL(DL 5)	5	15	APHA-23 rd Ed 2017-2120B
2.	Total Hardness as CaCO ₃	mg/l	300	200	600	APHA-23 rd Ed 2017-2340C
3.	Odour	mg/l	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 1983 RA 2017
4.	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-8):1984 RA 2017
5.	Turbidity	NTU	BDL (DL 0.1)	1	5	APHA-23 rd Ed 2017- 2130B
6.	Chloride as Cl	mg/l	32	250	1000	APHA-23 rd Ed 2017- 4500B
7.	pH	-	7.04	6.5 - 8.5	No Relaxation	APHA-23 rd Ed 2017-4500B
8.	Iron as Fe	mg/l	0.05	1.0	No relaxation	APHA-23 rd Ed 2017-3111B

II - Biological Testing

1. Water (Ground Water)

S. No.	Test Parameter	Units	Results	Acceptable limit	Permissible limit ¹	Test Method
1.	Total coliforms	CFU/100ml	Absent	Absent	--	IS: 15185:2016
2.	E. coli	CFU/100ml	Absent	Absent	--	IS: 15185:2016

Remarks

: Party asked for above tests only

OTHER INFORMATION

Abbreviation

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

Symbols

: ¹Permissible limit in absence of alternate source

Terms & Conditions

Please refer terms and conditions on backside of Test Report (Page-1)

****End of Report****

Checked by QA

Simranjit Kaur
Authorized Signatory-Biological

Dr. Rai Singh
Authorized Signatory-Chemical

PPCB Ref. No. Lab/3238392
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TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL090620GS001
Type of Sample	Soil	Date of Reporting	13/06/2020

Customer	Thapar Institute of Engineering & Technology Bhadson Road, Patiala (Punjab)	Work Order No. & Date	WO/TIET/CS/PR/19358 dt. 07/11/19
		Customer reference No. (If any)	NA
Sampling Protocol	USEPA/600/R-92/128	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	09/06/2020	Date of Receipt of Sample	09/06/2020
Sampling Location	Park Near Construction & Maintenance Section	Packing, Markings, Seal & Quantity	Poly Bag Marked '1' 1 kg
Testing Protocol	IS:2720 & IS:14767	Period of Analysis	09/06/2020 to 13/06/2020
Sample Description	Brown colored soil		
Testing Location	Permanent Facility		

TEST RESULTS

I -Chemical Testing

1. Pollution & Environment (Soil)

S. No.	Test Parameter	Units	Results	Test Method
1.	pH	--	7.31	IS:2720 (P-26) 1987
2.	Conductivity	mmhos/cm	0.257	IS:14767: 2000
3.	Moisture Content	%	8.0	IS:2720 (P-2) 1973 R 2002
4.	Organic Matter	%	0.91	IS:2720 (P-22) 1972 R2010
5.	Texture	--	Sandy Loam	IS:2720 (P-4) 1985
6.	Bulk Density	gm/cc	1.66	IS: 2720 (P- 3) 1980

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : ULR: Unique Lab Report; NA: Not Applicable

Symbols : -

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

****End of Report****

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Dr. Rai Singh
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PPCB-Ref. No. Lab/3238392

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No.	EL100620GA001
Type of Sample	Ambient Air	Date of Reporting	13/06/2020

Customer	Thapar Institute of Engineering & Technology Bhadson Road, Patiala (Punjab)	Work Order No. & Date	WO/TIET/CS/PR/19358 dt. 07/11/19
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 5182 (P-14) 2000, CPCB Guidelines (NAAQMS/36/2012-13)	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	09/06/2020	Date of Receipt of Sample	10/06/2020
Sampling Location	Near Construction & Maintenance Section	Period of Analysis	10/06/2020 to 13/06/2020
Testing Protocol	IS:5182 and CPCB Air Manual Volume-I (NAAQM/36/2012-13) & NAAQS 2009	Environmental Conditions	Clear Sky
Testing Location	Site Testing & Permanent Facility		

TEST RESULTS

I -Chemical Testing

Atmospheric Pollution (Ambient Air Quality)

S. No.	Test Parameter	Units	Results	Standards (NAAQS 2009)	Test Method
1	Particulate Matter (PM ₁₀)	µg/m ³	86	100	IS:5182 (P-23) 2006 RA 2017
2	Particulate Matter (PM _{2.5})	µg/m ³	45	60	Lab SOP EL/SOP/AAQ/01
3	Sulphur Dioxide (SO ₂)	µg/m ³	11	80	IS:5182 (P-2) 2001 RA 2017
4	Oxides of Nitrogen (NO ₂)	µg/m ³	24	80	IS:5182 (P-6) 2006 RA 2017
5	Ammonia (NH ₃)	µg/m ³	15	400	Lab SOP EL/SOP/AAQ/02
6	Ozone (O ₃)	µg/m ³	27	180	IS:5182 (P-9):2006 RA 2014
7	Carbon Monoxide (CO)	mg/m ³	0.51	04	IS 5182 Part-10:1999, RA 2014

Remarks : Party asked for above tests only

OTHER INFORMATION

Abbreviation : DL- Detection Limit, BDL- Below Detection Limit, ULR-Unique Lab Report, NAAQMS- National Ambient Air Quality Series, NAAQS- National Ambient Air Quality Standards

Symbols : --

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

****End of Report****



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PPCB-Ref. No. Lab/32-8532

Dated-30.09.2011

TEST REPORT

Not Valid for Consent Purpose

ULR No.	NA	Test Report No	EL100620GN001
Type of Sample	Ambient Noise	Date of Reporting	13/06/2020

Customer	Thapar Institute of Engineering & Technology Bhadson Road, Patiala (Punjab)	Work Order No. & Date	WO/TIET/CS/PR/19358 dt. 07/11/19
		Customer reference No. (If any)	NA
Sampling Protocol	IS: 9989:1981	Mode of Collection of Sample	Sampling by laboratory
Date of Sampling	09/06/2020	Date of Receipt of Sample	10/06/2020
Sampling Location	Near Construction & Maintenance Section	Period of Analysis	10/06/2020 to 13/06/2020
Testing Protocol	IS:9989: 1981		
Testing Location	Site Testing		

TEST RESULTS

I -Chemical Testing

1. Atmospheric Pollution (Ambient Noise Levels)

S. No.	Test Parameter	Units	Results	Test Method
1.	Ambient Day Time Noise Levels	dB(A)	46.8	IS: 9989:1981 and manufacture's manual

Ambient Noise Quality Standards as per Noise Pollution (Regulation and Control) Rules, 2000

Area Code	Category of Area/Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Day time shall mean from 6.00 a.m. to 10.00 p.m., Night time shall mean from 10.00 p.m. to 6.00 a.m., Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority, Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale 'A' which is relatable to human hearing

Remarks : Party asked for above tests only

Other Information :

Abbreviations : ULR-Unique Lab Report; NA: Not Applicable

Note : --

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

End of Report

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