



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Potable Sample S1 of River Yamuna at Palla in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10¹

Code No.	Name of Laboratories performing analysis	Test report no.	Date of Receiving sample	Date of Analysis of sample	Performance for Total Coliform MPN/100ml	
					Presumptive Phase	Confirmatory phase
ILC1	Meghalaya SPCB by Assam Pollution Control Board	Bio/ Micro/130-D/ 18.12.2013	23.09.2013,4.30 PM	25.09.2013	Good to Excellent	Good to Excellent
ILC2	Odisha State Pollution Control Board, Bhubaneswar	Bio/ Micro/110-D/ 18.12.2013	18.09.2013	23.09.2013, 11.00 AM	Excellent	Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	Bio/ Micro/123-D/ 18.12.2013	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	Good to Excellent	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	Bio/ Micro/124-D/ 18.12.2013	-	28.09.2013, 11:30AM	Good to Excellent	Good to Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	Bio/ Micro/125-D/ 18.12.2013	26.9.2013	27.09.2013, 12.21 PM	Good to Excellent	Good to Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	Bio/ Micro/126-D/ 18.12.2013	-	03.10.2013, 12 PM	Excellent	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	Bio/ Micro/127-D/ 18.12.2013	-	7.10.2013, 10.20 AM	Good to Excellent	Good to Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	Bio/ Micro/128-D/ 18.12.2013	26.9.2013, 4.23PM	01.10.2013, 12 PM	Excellent	Excellent
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/121-D/ 18.12.2013	12.9.2013	12.09.2013	Excellent	Excellent
ILC10	Kerala State Pollution Control Board	Bio/ Micro/114-D/ 18.12.2013	05.10.2013	07.10.2013- 09.10.2013, 12: hrs.	Good to Excellent	Good to Excellent

ILC11	Karnataka State Pollution Control Board, Bangalore	Bio/ Micro/111-D/ 18.12.2013	19.09.2013	23.09.2013,	Excellent	Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	Bio/ Micro/112-D/ 18.12.2013	19.09.2013	23.09.2013	Good to Excellent	Good to Excellent
ILC13	Madhya Pradesh Pollution Control Board	Bio/ Micro/113-D/ 18.12.2013	20.9.2013 4.30 PM	28.09.2013	Excellent	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/119-D/ 18.12.2013	12.9.2013	12.09.2013	Excellent	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/120-D/ 18.12.2013	12.9.2013 4. 30 PM	12.09.2013, 11.58AM	Excellent	Excellent
ILC16	SGS, Gurgaon	Bio/ Micro/115-D/ 18.12.2013	26.09.2013	27.09.2013,	Good to Excellent	Good to Excellent
ILC17	Shriram Institute for Industrial Research	Bio/ Micro/116-D/ 18.12.2013	26.09.2013	27.09.2013,	Excellent	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/122-D/ 18.12.2013	-	-	Excellent	Excellent
ILC19	Delhi Test House	Bio/ Micro/117-D/ 18.12.2013	26.09.2013	27.09.2013	Excellent	Excellent
ILC20	FICCI Research & Analysis Centre	Bio/ Micro/118-D/ 18.12.2013	27.09.2013	12.11.2013	-	Good to Excellent
ILC21	West Bengal Pollution Control Board	Bio/ Micro/133-D/ 18.12.2013	25.09.2013	28.09.2013	Good to Excellent	Good to Excellent
ILC22	Assam Pollution Control Board	Bio/ Micro/129-D/ 18.12.2013	23.09.2013,4.30 PM	25.09.2013	Good to Excellent	Good to Excellent
ILC23	Tamil Nadu State Pollution Control Board	Bio/ Micro/132-D/ 18.12.2013	26.09.2013	1.10.2013 to 3.10.2013	Good to Excellent	Good to Excellent
ILC24	Gujrat State Pollution Control Board	Bio/ Micro/131-D/ 18.12.2013	30.9.2013	3.10.2013 to5.10.2013	Good to Excellent	Good to Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



**CENTRAL POLLUTION CONTROL BOARD
Bio-Lab, CPCB, Delhi**

**Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi
Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13
Test method reference: APHA 22nd Edition, 2012
Initial Dilution factor used by CPCB: 10²**

Code No.	Name of Laboratories performing analysis	Test report no.	Date of Receiving sample	Date of Analysis of sample	Performance for Total Coliform MPN/100ml		
					Presumptive Phase	Confirmatory phase	Completed Phase
ILC1	Meghalaya SPCB by Assam Pollution Control Board for	Bio/ Micro/130-D/18.12.2013	23.09.2013, 4.30 PM	25.09.2013	Excellent	Excellent	-
ILC2	Odisha State Pollution Control Board, Bhubaneswar	Bio/ Micro/110-D/18.12.2013	18.09.2013	23.09.2013, 11.00 AM	Good to Excellent	Good to Excellent	Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	Bio/ Micro/123-D/18.12.2013	23.9.2013, 4.30 PM	23.09.2013, 11.00 AM	Good to Excellent	Good to Excellent	Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	Bio/ Micro/124-D/18.12.2013	-	28.09.2013, 11:30AM	Excellent	Excellent	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	Bio/ Micro/125-D/18.12.2013	26.9.2013	27.09.2013, 12.21 PM	Excellent	Excellent	Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	Bio/ Micro/126-D/18.12.2013	-	03.10.2013, 12 PM	Excellent	Excellent	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	Bio/ Micro/127-D/18.12.2013	-	7.10.2013, 10.20 AM	Excellent	Excellent	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	Bio/ Micro/128-D/18.12.2013	26.9.2013, 4.23PM	01.10.2013, 12 PM	Good to Excellent	Good to Excellent	Excellent
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/121-D/18.12.2013	12.9.2013	12.09.2013	Good to Excellent	Good to Excellent	Excellent
ILC10	Kerala State Pollution Control Board	Bio/ Micro/114-D/18.12.2013	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	Super excellent	Super excellent	Excellent

ILC11	Karnataka State Pollution Control Board, Bangalore	Bio/ Micro/111-D/ 18.12.2013	19.09.2013	23.09.2013,	Good to Excellent	Good to Excellent	Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	Bio/ Micro/112-D/ 18.12.2013	19.09.2013	23.09.2013	Excellent	Excellent	Excellent
ILC13	Madhya Pradesh Pollution Control Board	Bio/ Micro/113-D/ 18.12.2013	20.9.2013 4.30 PM	28.09.2013	Good to Excellent	Good to Excellent	Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/119-D/ 18.12.2013	12.9.2013	12.09.2013	Excellent	Excellent	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/120-D/ 18.12.2013	12.9.2013 4. 30 PM	12.09.2013, 11.58AM	Excellent	Excellent	Excellent
ILC16	SGS, Gurgaon	Bio/ Micro/115-D/ 18.12.2013	26.09.2013	27.09.2013,	Excellent	Excellent	Excellent
ILC17	Shriram Institute for Industrial Research	Bio/ Micro/116-D/ 18.12.2013	26.09.2013	27.09.2013,	Excellent	Excellent	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/122-D/ 18.12.2013	-	-	Excellent	Excellent	Super excellent
ILC19	Delhi Test House	Bio/ Micro/117-D/ 18.12.2013	26.09.2013	27.09.2013	Good to Excellent	Good to Excellent	Excellent
ILC20	FICCI Research & Analysis Centre	Bio/ Micro/118-D/ 18.12.2013	27.09.2013	12.11.2013	-	-	Excellent
ILC21	West Bengal Pollution Control Board	Bio/ Micro/133-D/ 18.12.2013	25.09.2013	28.09.2013	Good to Excellent	Good to Excellent	Excellent
ILC22	Assam Pollution Control Board	Bio/ Micro/129-D/ 18.12.2013	23.09.2013,4 .30 PM	25.09.2013	Super excellent	Super excellent	-
ILC23	Tamil Nadu State Pollution Control Board	Bio/ Micro/132-D/ 18.12.2013	26.09.2013	1.10.2013 to 3.10.2013	Good to Excellent	Good to Excellent	-
ILC24	Gujrat State Pollution Control Board	Bio/ Micro/131-D/ 18.12.2013	30.9.2013	3.10.2013 to5.10.2013	Excellent	Excellent	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



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Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Potable Sample S1 of River Yamuna at Palla in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10¹

A) Details of Total Coliform results in Potable Sample S1

Code No.	Name of Laboratories performing analysis	Test report no.	Date of Receiving sample	Date of Analysis of sample	Dilution factor	Total Coliform MPN/100ml	
						Presumptive Phase	Confirmatory phase
ILC1	Meghalaya SPCB by Assam Pollution Control Board for	Bio/ Micro/130-D/ 18.12.2013	23.09.2013,4.30 PM	25.09.2013	-	78	18
ILC2	Odisha State Pollution Control Board, Bhubaneswar	Bio/ Micro/110-D/ 18.12.2013	18.09.2013	23.09.2013, 11.00 AM	-	16000	16000
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	Bio/ Micro/123-D/ 18.12.2013	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	-	790	210
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	Bio/ Micro/124-D/ 18.12.2013	-	28.09.2013, 11:30AM	-	1100	210
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	Bio/ Micro/125-D/ 18.12.2013	26.9.2013	27.09.2013, 12.21 PM	-	230	130
ILC6	CPCB, Bio-lab for Gujarat SPCB	Bio/ Micro/126-D/ 18.12.2013	-	03.10.2013, 12 PM	-	16000	16000
ILC7	CPCB, Bio-lab for Kerala SPCB	Bio/ Micro/127-D/ 18.12.2013	-	7.10.2013, 10.20 AM	-	230	130
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	Bio/ Micro/128-D/ 18.12.2013	26.9.2013, 4.23PM	01.10.2013, 12 PM	-	16000	16000
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/121-D/ 18.12.2013	12.9.2013	12.09.2013	-	5400	5400

ILC10	Kerala State Pollution Control Board	Bio/ Micro/114-D/ 18.12.2013	05.10.2013	07.10.2013- 09.10.2013, 12: hrs.	-	18	18
ILC11	Karnataka State Pollution Control Board, Bangalore	Bio/ Micro/111-D/ 18.12.2013	19.09.2013	23.09.2013,	-	16000	16000
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	Bio/ Micro/112-D/ 18.12.2013	19.09.2013	23.09.2013	-	330	330
ILC13	Madhya Pradesh Pollution Control Board	Bio/ Micro/113-D/ 18.12.2013	20.9.2013 4.30 PM	28.09.2013	-	16000	390
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/119-D/ 18.12.2013	12.9.2013	12.09.2013	-	16000	16000
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/120-D/ 18.12.2013	12.9.2013 4. 30 PM	12.09.2013, 11.58AM	-	9200	9200
ILC16	SGS, Gurgaon	Bio/ Micro/115-D/ 18.12.2013	26.09.2013	27.09.2013,	-	1700	1700
ILC17	Shriram Institute for Industrial Research	Bio/ Micro/116-D/ 18.12.2013	26.09.2013	27.09.2013,	-	16000	16000
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/122-D/ 18.12.2013	-	-	-	16000	16000
ILC19	Delhi Test House	Bio/ Micro/117-D/ 18.12.2013	26.09.2013	27.09.2013	-	16000	16000
ILC20	FICCI Research & Analysis Centre	Bio/ Micro/118-D/ 18.12.2013	27.09.2013	12.11.2013	-		460
ILC21	West Bengal Pollution Control Board	Bio/ Micro/133-D/ 18.12.2013	25.09.2013	28.09.2013	-	18	18
ILC22	Assam Pollution Control Board	Bio/ Micro/129-D/ 18.12.2013	23.09.2013,4.30 PM	25.09.2013	-	110	18
ILC23	Tamil Nadu State Pollution Control Board	Bio/ Micro/132-D/ 18.12.2013	26.09.2013	1.10.2013 to 3.10.2013	-	18	18
ILC24	Gujarat State Pollution Control Board	Bio/ Micro/131-D/ 18.12.2013	30.9.2013	3.10.2013 to5.10.2013	-	18	18



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Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

B) Details of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Test report no.	Date of Receiving sample	Date of Analysis of sample	Dilution factor	Performance for Total Coliform MPN/100ml		
						Presumptive Phase	Confirmatory phase	Completed Phase
ILC1	Meghalaya SPCB by Assam Pollution Control Board	Bio/ Micro/130-D/ 18.12.2013	23.09.2013,4 .30 PM	25.09.2013	10 ³	92000000	22000000	-
ILC2	Odisha State Pollution Control Board, Bhubaneswar	Bio/ Micro/110-D/ 18.12.2013	18.09.2013	23.09.2013, 11.00 AM	10 ³	1300000	1300000	1300000
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	Bio/ Micro/123-D/ 18.12.2013	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	10 ³	5163900	6100000	1700000
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	Bio/ Micro/124-D/ 18.12.2013	-	28.09.2013, 11:30AM	10 ³	22000000	7900000	1700000
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	Bio/ Micro/125-D/ 18.12.2013	26.9.2013	27.09.2013, 12.21 PM	10 ³	160000000	9486000	1700000
ILC6	CPCB, Bio-lab for Gujarat SPCB	Bio/ Micro/126-D/ 18.12.2013	-	03.10.2013, 12 PM	10 ³	160000000	160000000	3600000
ILC7	CPCB, Bio-lab for Kerala SPCB	Bio/ Micro/127-D/ 18.12.2013	-	7.10.2013, 10.20 AM	10 ³	160000000	160000000	400000
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	Bio/ Micro/128-D/ 18.12.2013	26.9.2013, 4.23PM	01.10.2013, 12 PM	10 ³	160000	160000	160000000
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/121-D/ 18.12.2013	12.9.2013	12.09.2013		680000	680000	180

ILC10	Kerala State Pollution Control Board	Bio/ Micro/114-D/ 18.12.2013	05.10.2013	07.10.2013- 09.10.2013, 12: hrs.	10 ³	54000000	54000000	54000000
ILC11	Karnataka State Pollution Control Board, Bangalore	Bio/ Micro/111-D/ 18.12.2013	19.09.2013	23.09.2013,	10 ³	130000	78000	78000
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	Bio/ Micro/112-D/ 18.12.2013	19.09.2013	23.09.2013	10 ³	92000000	92000000	92000000
ILC13	Madhya Pradesh Pollution Control Board	Bio/ Micro/113-D/ 18.12.2013	20.9.2013 4.30 PM	28.09.2013	10 ³	160	43	0.4
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/119-D/ 18.12.2013	12.9.2013	12.09.2013	10 ³	160000000	160000000	160000000
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/120-D/ 18.12.2013	12.9.2013 4. 30 PM	12.09.2013, 11.58AM	10 ³	92000000	24000000	13000000
ILC16	SGS, Gurgaon	Bio/ Micro/115-D/ 18.12.2013	26.09.2013	27.09.2013,	10 ³	28000000	1700000	1700000
ILC17	Shriram Institute for Industrial Research	Bio/ Micro/116-D/ 18.12.2013	26.09.2013	27.09.2013,	10 ³	22000000	11000000	11000000
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	Bio/ Micro/122-D/ 18.12.2013	-	-	10 ³	35000000	35000000	35000000
ILC19	Delhi Test House	Bio/ Micro/117-D/ 18.12.2013	26.09.2013	27.09.2013	10 ³	1700000	680000	680000
ILC20	FICCI Research & Analysis Centre	Bio/ Micro/118-D/ 18.12.2013	27.09.2013	12.11.2013	10 ³			2600000
ILC21	West Bengal Pollution Control Board	Bio/ Micro/133-D/ 18.12.2013	25.09.2013	28.09.2013	10 ³	5400000	130000	130000
ILC22	Assam Pollution Control Board	Bio/ Micro/129-D/ 18.12.2013	23.09.2013,4 .30 PM	25.09.2013	10 ³	54000000	24000000	-
ILC23	Tamil Nadu State Pollution Control Board	Bio/ Micro/132-D/ 18.12.2013	26.09.2013	1.10.2013 to 3.10.2013	10 ³	4900000	4900000	-
ILC24	Gujrat State Pollution Control Board	Bio/ Micro/131-D/ 18.12.2013	30.9.2013	3.10.2013 to5.10.2013	10 ³	160000000	160000000	160000000



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Potable Sample S1 of River Yamuna at Palla in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10¹

Z-score performance for Presumptive phase of Total Coliform results in Potable Sample S1

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for Presumptive Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013,4.30 PM	25.09.2013	78	7338.454545	0.965702115	Good to Excellent
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	16000	-8583.545455	-1.129549546	Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	790	6626.454545	0.872006651	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	1100	6316.454545	0.831212277	Good to Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	230	7186.454545	0.945699713	Good to Excellent

ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	16000	-8583.545455	-1.129549546	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	230	7186.454545	0.945699713	Good to Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	16000	-8583.545455	-1.129549546	Excellent
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	5400	2016.454545	0.265354838	Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013- 09.10.2013, 12: hrs.	18	7398.454545	0.9735978	Good to Excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	16000	-8583.545455	-1.129549546	Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	330	7086.454545	0.932540237	Good to Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	16000	-8583.545455	-1.129549546	Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	16000	-8583.545455	-1.129549546	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	9200	-1783.545455	-0.234705224	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	1700	5716.454545	0.752255425	Good to Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	16000	-8583.545455	-1.129549546	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-	-	16000	-8583.545455	-1.129549546	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	16000	-8583.545455	-1.129549546	Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	-	-	-	-

ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	18	7398.454545	0.9735978	Good to Excellent
ILC22	Assam Pollution Control Board	23.09.2013,4.30 PM	25.09.2013	110	7306.454545	0.961491083	Good to Excellent
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	18	7398.454545	0.9735978	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to 5.10.2013	18	7398.454545	0.9735978	Good to Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



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Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Potable Sample S1 of River Yamuna at Palla in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10¹

Z-score performance for Confirmatory phase of Total Coliform results in Potable Sample S1

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for Confirmatory phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013, 4.30 PM	25.09.2013	18	6340.696	0.84616934	Good to Excellent
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	16000	-9641.3	-1.286637394	Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	210	6148.696	0.820546833	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	210	6148.696	0.820546833	Good to Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	130	6228.696	0.831222878	Good to Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	16000	-9641.3	-1.286637394	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	130	6228.696	0.831222878	Good to Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	16000	-9641.3	-1.286637394	Excellent

ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	5400	958.6957	0.127938465	Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	18	6340.696	0.84616934	Good to Excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	16000	-9641.3	-1.286637394	Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	330	6028.696	0.804532767	Good to Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	390	5968.696	0.796525734	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	16000	-9641.3	-1.286637394	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	9200	-2841.3	-0.379173636	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	1700	4658.696	0.62170551	Good to Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	16000	-9641.3	-1.286637394	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-	-	16000	-9641.3	-1.286637394	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	16000	-9641.3	-1.286637394	Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	460	5898.696	0.787184195	Good to Excellent
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	18	6340.696	0.84616934	Good to Excellent
ILC22	Assam Pollution Control Board	23.09.2013 ,4.30 PM	25.09.2013	18	6340.696	0.84616934	Good to Excellent
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	18	6340.696	0.84616934	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to5.10.2013	18	6340.696	0.84616934	Good to Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are closer to Zero



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

Z-score performance for Presumptive phase of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for Presumptive Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013,4 .30 PM	25.09.2013	92000000	-36616633.64	-0.571057282	Excellent
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	1300000	54083366.36	0.843460939	Good to Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	5163900	50219466.36	0.783201215	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	22000000	33383366.36	0.520632635	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	160000000	-104616633.6	-1.631556058	Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	160000000	-104616633.6	-1.631556058	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	160000000	-104616633.6	-1.631556058	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	160000	55223366.36	0.861239889	Good to Excellent

ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	680000	54703366.36	0.853130192	Good to Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	54000000	1383366.364	0.021574387	Super excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	130000	55253366.36	0.861707756	Good to Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	92000000	-36616633.64	-0.571057282	Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	160	55383206.36	0.863732685	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	160000000	-104616633.6	-1.631556058	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	92000000	-36616633.64	-0.571057282	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	28000000	27383366.36	0.427059214	Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	22000000	33383366.36	0.520632635	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-		35000000	20383366.36	0.317890222	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	1700000	53683366.36	0.837222711	Good to Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	-	-	-	-
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	5400000	49983366.36	0.779519101	Good to Excellent
ILC22	Assam Pollution Control Board	23.09.2013,4 .30 PM	25.09.2013	54000000	-1383366.364	-0.021574387	Super excellent
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	4900000	50483366.36	0.787316886	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to5.10.2013	160000000	-104616633.6	-1.631556058	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

Z-score performance for Confirmatory phase of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for Confirmatory Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013,4 .30 PM	25.09.2013	92000000	-36616633.64	-0.571057282	Excellent
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	1300000	54083366.36	0.843460939	Good to Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	5163900	50219466.36	0.783201215	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	22000000	33383366.36	0.520632635	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	160000000	-104616633.6	-1.631556058	Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	160000000	-104616633.6	-1.631556058	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	160000000	-104616633.6	-1.631556058	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	160000	55223366.36	0.861239889	Good to Excellent

ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	680000	54703366.36	0.853130192	Good to Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	54000000	1383366.364	0.021574387	Super excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	130000	55253366.36	0.861707756	Good to Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	92000000	-36616633.64	-0.571057282	Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	160	55383206.36	0.863732685	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	160000000	-104616633.6	-1.631556058	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	92000000	-36616633.64	-0.571057282	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	28000000	27383366.36	0.427059214	Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	22000000	33383366.36	0.520632635	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi			35000000	20383366.36	0.317890222	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	1700000	53683366.36	0.837222711	Good to Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	-	-	-	-
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	5400000	49983366.36	0.779519101	Good to Excellent
ILC22	Assam Pollution Control Board	23.09.2013,4 .30 PM	25.09.2013	54000000	-1383366.364	-0.021574387	Super excellent
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	4900000	50483366.36	0.787316886	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to5.10.2013	160000000	-104616633.6	-1.631556058	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

Z-score performance for LES ENDO of Completed phase of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for LES ENDO of Completed Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013,4.30 PM	25.09.2013	Not Done	Not Done	Not Done	Not Done
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	1300000	63361341	0.875263449	Good to Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	2100000	62561341	0.864212377	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	160000000	-95338659	-1.316993016	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	160000000	-95338659	-1.316993016	Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	160000000	-95338659	-1.316993016	Excellent

ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	160000000	-95338659	-1.316993016	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	160000000	-95338659	-1.316993016	Excellent
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	13000000	51661341	0.713641517	Good to Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013 - 09.10.2013, 12: hrs.	54000000	10661341	0.147274062	Excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013	78000	64583341	0.892143962	Good to Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	92000000	-27338659	-0.377651872	Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	160	64661181	0.893219231	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	160000000	-95338659	-1.316993016	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	22000000	42661341	0.589316953	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013	1700000	-62961341	-0.869737913	Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013	11000000	-53661341	-0.741269197	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-	-	35000000	-29661341	-0.409737029	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	680000	63981341	0.88382803	Good to Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	-	-	-	-
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	130000	64531341	0.891425642	Good to Excellent

ILC22	Assam Pollution Control Board	23.09.2013,4.30 PM	25.09.2013	-	-	-	-
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	4900000	59761341	0.825533624	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to 5.10.2013	160000000	-95338659	-1.316993016	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

Z-score performance for Secondary LS Broth of Completed phase of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml for Secondary LS Broth of Completed Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual= X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013 4.30 PM	25.09.2013	Not Done	Not Done	Not Done	Not Done
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	1300000	42178476.21	0.6771379	Good to Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013 4.30 PM	23.09.2013, 11.00 AM	180000	43298476.21	0.6951185	Good to Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	7900000	35578476.21	0.5711808	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	7900000	35578476.21	0.5711808	Excellent

ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	43000000	478476.2095	0.0110049	Super excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	160000000	-116521524	-1.870649	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	160000000	-116521524	-1.870649	Excellent
ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	680000	42798476.21	0.6870914	Good to Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	54000000	-10521523.8	-0.168914	Excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	78000	43400476.21	0.696756	Good to Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	92000000	-48521523.8	-0.77897	Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	0.4	43478475.81	0.6980082	Good to Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	160000000	-116521524	-1.870649	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30 PM	12.09.2013, 11.58AM	13000000	30478476.21	0.4893048	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	1300000	42178476.21	0.6771379	Good to Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	11000000	32478476.21	0.521413	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-	-	35000000	8478476.21	0.1361144	Excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	680000	42798476.21	0.6870914	Good to Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	-	-	-	-
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	130000	43348476.21	0.6959212	Good to Excellent

ILC22	Assam Pollution Control Board	23.09.2013 4.30 PM	25.09.2013	-	-	-	-
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	4900000	38578476.21	0.6193431	Good to Excellent
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to5.10.2013	160000000	-116521524	-1.870649	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero



CENTRAL POLLUTION CONTROL BOARD

Bio-Lab, CPCB, Delhi

Details of Total Coliform results in Waste water Sample S2 of River Yamuna at Nizamuddin Bridge in Delhi

Sample Registration no. 10902/ Bio-2 / 2k₁₃, 10.9.13

Test method reference: APHA 22nd Edition, 2012

Initial Dilution factor used by CPCB: 10²

Z-score performance for Gram –ve bacteria of Completed phase of Total Coliform results in Waste water Sample S2

Code No.	Name of Laboratories performing analysis	Date of Receiving sample	Date of Analysis of sample	Total Coliform MPN/100ml fo Gram –ve bacteria of Completed Phase	Z-score for Total Coliform MPN/100ml		
					Average - individual=X	X/Standard Deviation = Z score	Performance
ILC1	Meghalaya SPCB by Assam Pollution Control Board	23.09.2013, 4.30 PM	25.09.2013	Not Done	Not Done	Not Done	-
ILC2	Odisha State Pollution Control Board, Bhubaneswar	18.09.2013	23.09.2013, 11.00 AM	1300000	32061342	0.556617	Excellent
ILC3	CPCB, Bio-lab for Assam, Odisha, Karnataka SPCB, ZO CPCB	23.9.2013, 4.30 PM	23.09.2013, 11.00 AM	1700000	31661342	0.549673	Excellent
ILC4	CPCB, Bio-lab For FICCI, West Bengal, Madhya Pradesh (15hrs)	-	28.09.2013, 11:30AM	1700000	31661342	0.549673	Excellent
ILC5	CPCB, Bio-lab for Sri Ram, SGS, DTH, WBPCB	26.9.2013	27.09.2013, 12.21 PM	1700000	31661342	0.549673	Excellent
ILC6	CPCB, Bio-lab for Gujarat SPCB	-	03.10.2013, 12 PM	3600000	29761342	0.516687	Excellent
ILC7	CPCB, Bio-lab for Kerala SPCB	-	7.10.2013, 10.20 AM	400000	32961342	0.572242	Excellent
ILC8	CPCB, Bio-lab for Tamil Nadu SPCB	26.9.2013, 4.23PM	01.10.2013, 12 PM	160000000	-1.3E+08	-2.19857	Excellent

ILC9	Devi Prasad, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	180	33361162	0.579183	Excellent
ILC10	Kerala State Pollution Control Board	05.10.2013	07.10.2013-09.10.2013, 12: hrs.	54000000	-2.1E+07	-0.35831	Excellent
ILC11	Karnataka State Pollution Control Board, Bangalore	19.09.2013	23.09.2013,	78000	33283342	0.577832	Excellent
ILC12	Zonal Office Bangalore, Central Pollution Control Board, Bangalore	19.09.2013	23.09.2013	92000000	-5.9E+07	-1.01803	Excellent
ILC13	Madhya Pradesh Pollution Control Board	20.9.2013 4.30 PM	28.09.2013	0.4	33361342	0.579186	Excellent
ILC14	M.Y.Ansari, Bio-lab Central Pollution Control Board, Delhi	12.9.2013	12.09.2013	160000000	-1.3E+08	-2.19857	Excellent
ILC15	Pratima Akolkar Bio-lab Central Pollution Control Board, Delhi	12.9.2013 4.30PM	12.09.2013, 11.58AM	13000000	20361342	0.353493	Excellent
ILC16	SGS, Gurgaon	26.09.2013	27.09.2013,	1700000	31661342	0.549673	Excellent
ILC17	Shriram Institute for Industrial Research	26.09.2013	27.09.2013,	11000000	22361342	0.388215	Excellent
ILC18	Yogita Kharayat, Bio-lab Central Pollution Control Board, Delhi	-	-	35000000	-1638658	-0.02845	Super excellent
ILC19	Delhi Test House	26.09.2013	27.09.2013	680000	32681342	0.567381	Excellent
ILC20	FICCI Research & Analysis Centre	27.09.2013	12.11.2013	2600000	30761342	0.534048	Excellent
ILC21	West Bengal Pollution Control Board	25.09.2013	28.09.2013	130000	33231342	0.576929	Excellent
ILC22	Assam Pollution Control Board	23.09.2013 ,4.30 PM	25.09.2013	-	-	-	-
ILC23	Tamil Nadu State Pollution Control Board	26.09.2013	1.10.2013 to 3.10.2013	-	-	-	-
ILC24	Gujarat State Pollution Control Board	30.9.2013	3.10.2013 to5.10.2013	160000000	-1.3E+08	-2.19857	Excellent

Z score = (- ve) = Excellent, (0) Super excellent, (0 – 1) Excellent, (1 – 2) Good, ≥ 2 Improvement required (Training), $\Rightarrow 2$ Rejected

Results should be considered excellent to super excellent which are close to Zero