

Environmental and Social Due Diligence Report

Project Number: 47083-004
January 2022

INDIA: Accelerating Infrastructure Investment Facility in India – Tranche 3 Shamlaji Expressway Private Limited (Part 29 of 34)

Prepared by India Infrastructure Finance Company Limited for the India Infrastructure Finance Company Limited and the Asian Development Bank.

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0161	Report No. AA/03/21/0161	Report Date	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Majra RMC/HMP Camp 524+240 km LHS	Date - Sampling	05/03/2021 to 06/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tedlar bag	Date - Receipt of Sample	08/03/2021
Sampling Procedure	As per method reference	Date - Start of Analysis	08/03/2021
Order Reference	As per your W.O. No. CEL/SM/2021-22/WO-02 dated 09.02.2021	Date - Completion of Analysis	14/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	4.90	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	9.19	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	49	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	11	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.40	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.86	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999

TWA : Time Weighted Average

: NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area)

specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and

Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.

[Signature]



Sample ID : AA/03/21/0161

Report No. AA/03/21/0161

Report Date

15/03/2021



Ninad Soundankar

Technical Manager (Chemical)

Reviewed & Authorised by



End of Report

Note:

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4. There are no additions to, deviations or exclusions from the method.



TC-5509

AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0162	Report No. AA/03/21/0162	Report Date	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Ghadoda RMC/HMP Camp 446+424 km LHS	Date - Sampling	05/03/2021 to 06/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tedlar bag	Date - Receipt of Sample	08/03/2021
Sampling Procedure	As per method reference	Date - Start of Analysis	08/03/2021
Order Reference	As per your W.O. No. CEL/SM/2021-22/WO-02 dated 09.02.2021	Date - Completion of Analysis	14/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
Parameter	Result	NAAQS# 2009	Unit	Method

CHEMICAL TESTING

Sulphur Dioxide (SO ₂)	5.88	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	10.1	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	42	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	9	60	µg/m ³	USEPA CFR 40, Part 50, Appendix I
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 6 3.2, Jun 1999
Carbon Monoxide (CO)	1.58	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.55	5	µg/m ³	IS 5182 (Part II): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 6 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 6 3.2, Jun 1999

TWA : Time Weighted Average

: NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area)

specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and

Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.



Sample ID : AA/03/21/0162	Report No. AA/03/21/0162	Report Date	15/03/2021
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Technical Manager (Chemical)
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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0163	Report No. AA/03/21/0163	Report Date	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Motipura 491 km	Date - Sampling	06/03/2021 to 07/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tedlar bag	Date - Receipt of Sample	08/03/2021
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Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	6.45	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	9.94	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	22	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	7	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.60	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	4.23	5	µg/m ³	IS 5182 (Part II): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part IZ): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999

TWA : Time Weighted Average

: NAAQS (National Ambient Air Quality Standards (Industrial, Residential, Rural and other Area)

specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and

Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.



Sample ID : AA/03/21/0163

Report No. AA/03/21/0163

Report Date

15/03/2021

H. Soundankar

Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by



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AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0164	Report No. AA/03/21/0164	Report Date	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Asal Camp 454 km RHS	Date - Sampling	06/03/2021 to 07/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tediar bag	Date - Receipt of Sample	08/03/2021
Sampling Procedure	As per method reference	Date - Start of Analysis	08/03/2021
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Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	5.33	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	9.85	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	47	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	10	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/DIO a Compendium Method IO-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.84	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.59	5	µg/m ³	IS 5182 (Part II): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/DIO a Compendium Method IO-3.1 & 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/DIO a Compendium Method IO-3.1 & 3.2, Jun 1999

TWA : Time Weighted Average

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Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0164	Report No. AA/03/21/0164	Report Date	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Asal Camp 454 km RHS	Date - Sampling	06/03/2021 to 07/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tedlar bag	Date - Receipt of Sample	08/03/2021
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Order Reference	As per your W.O. No. CEL/SM/2021-22/WO-02 dated 09.02.2021	Date - Completion of Analysis	14/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
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Parameter	Result	NAAQS# 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	5.33	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	9.85	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	47	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5 µm) or PM _{2.5}	10	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA, 3rd Ed., Method 411, Page no. 403.1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.84	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	2.59	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/010 a Compendium Method 10-3.1 & 3.2, Jun 1999

TWA : Time Weighted Average

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specified as: 24 hours TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM₁₀, PM_{2.5}, Lead and

Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.

[Handwritten Signature]



Sample ID : AA/03/21/0164

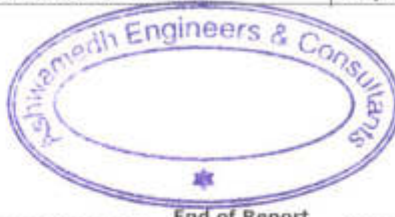
Report No. AA/03/21/0164

Report Date

15/03/2021



Ninad Soundankar
Technical Manager (Chemical)
Reviewed & Authorised by



End of Report

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TC-5509



AMBIENT AIR QUALITY MONITORING REPORT

Sample ID : AA/03/21/0165	Report No. AA/03/21/0165	Report Date:	15/03/2021
Name and address of Customer	Shamlaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Talod Road, Ghadoda, Himmatnagar, Sabarkantha - 383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Ambient Air (Group: Atmospheric Pollution, Subgroup: Ambient Air Quality)
Sampling Location	Pranti J 513 km	Date - Sampling	06/03/2021 to 07/03/2021
Sample Quantity / Packing	PM ₁₀ : Bap, Metals: 1 x 3 no. filter paper PM _{2.5} : 1 x 1 no. filter paper SO ₂ , NO ₂ : 30 ml x 6 no. plastic bottle each NH ₃ : 10 ml x 24 no. plastic bottle Ozone: 10 ml x 1 no. plastic bottle C ₆ H ₆ : 1 x 6 no. charcoal tubes CO: 1 x 1 no. tedlar bag	Date - Receipt of Sample	08/03/2021
Sampling Procedure	As per method reference	Date - Start of Analysis	08/03/2021
Order Reference	As per your W.O. No. CEL/SM/2021-22/WO-02 dated 09.02.2021	Date - Completion of Analysis	14/03/2021

Meteorological Data / Environmental Conditions

Average Wind Velocity 0.41 km/h	Wind Direction WN-SE	Relative Humidity (Max./Min.): 57/15%	Temperature (Max./Min.): 39/18°C	Duration of Survey 24 h
------------------------------------	-------------------------	--	-------------------------------------	----------------------------

Parameter	Result	NAAQS# 2009	Unit	Method
CHEMICAL TESTING				
Sulphur Dioxide (SO ₂)	8.12	80	µg/m ³	IS 5182 (Part 2): 2001, RA 2017
Nitrogen Dioxide (NO ₂)	10.2	80	µg/m ³	IS 5182 (Part 6): 2006, RA 2017
Particulate Matter (size less than 10 µm) or PM ₁₀	39	100	µg/m ³	IS 5182 (Part 23): 2006, RA 2017
Particulate Matter (size less than 2.5µm) or PM _{2.5}	8	60	µg/m ³	USEPA CFR 40, Part 50, Appendix L
Ozone (O ₃)	<19.6	180	µg/m ³	AWMA 3rd Ed., Method 411, Page no. 403, 1988
Lead (as Pb)	<0.02	1	µg/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Carbon Monoxide (CO)	1.91	4	mg/m ³	CPCB Guidelines, 37/2012-13, Page no.16
Ammonia (NH ₃)	<4	400	µg/m ³	AEC/C/SAP/AA-7
Benzene (C ₆ H ₆)	<1	5	µg/m ³	IS 5182 (Part 11): 2006, RA 2017
Benzo (a) pyrene (BaP) Particulate Phase only	<0.2	1	ng/m ³	IS 5182 (Part 12): 2004, RA 2019
Arsenic (as As)	<0.3	6	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999
Nickel (as Ni)	<3	20	ng/m ³	EPA/625/R-96/D10 a Compendium Method 10-3.1 & 3.2, Jun 1999

TWA : Time Weighted Average

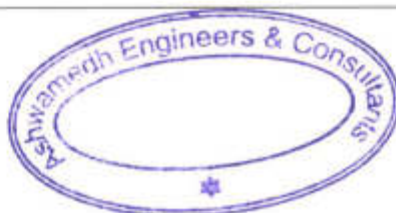
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Ammonia, 1 hour TWA in case of Carbon Monoxide and Ozone, Annual TWA in case of Benzene, Benzo (a)

Pyrene, Arsenic and Nickel.

[Handwritten Signature]



Sample ID : AA/03/21/0165

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TC-5509



ULR-TC550921000004103F

TEST REPORT

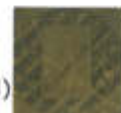
Sample ID : W/03/21/085	Report No. W/03/21/085	Report Date	12/03/2021
Name and address of Customer	Shyamalaji Express Way Pvt. Ltd. Chetak Enterprises Ltd. Near Sabar Dairy, Taloda Road, Ghadhoda Himnat Nagar, Sabarkantha-383001, Gujarat		
Sampling done by	Laboratory	Sample Description / Type	Drinking Water (Group:Water)
Sampling Location	Ghadhoda RMC/HMP Camp. 446+424 km LHS	Date - Sampling	07/03/2021
Sample Quantity / Packing	5 L x 1 no. plastic can 250 ml x 1 no. sterile bottle	Date - Receipt of Sample	08/03/2021
Sampling Procedure	IS 1622:1981 & IS 3025(Part I) 1987 & APHA 23rd Ed. 2017, 1060 B,1-40, 9060 A,9-36 & 9060 B,9-39	Date - Start of Analysis	08/03/2021
Order Reference	As per your W.O. No.CEL/SM/2021-22/WO-02 dated 09.02.2021	Date - Completion of Analysis	11/03/2021

Sr.No.	Parameter	Result	Acceptable Limit as per IS 10500:2012	Unit	Method
CHEMICAL TESTING					
Organoleptic and Physical Parameters					
1	Colour	1	Max. 5	Hazen	IS 3025 (Part 4):1983, RA 2017
2	Odour	Agreeable	Agreeable	-	IS 3025 (Part 5):1983, RA 2017
3	pH value	6.73	6.5-8.5	-	IS 3025 (Part 11):1983, RA 2017
4	Turbidity	<0.2	Max. 1	NTU	IS 3025 (Part 10):1984, RA 2017
5	Total Dissolved Solids	56	Max. 500	mg/L	IS 3025 (Part 16):1984, RA 2017
General Parameters concerning substances undesirable in excessive amounts					
6	Calcium(as Ca)	7.21	Max. 75	mg/L	IS 3025 (Part 40):1991, RA 2014.
7	Chloride (as Cl)	20	Max. 250	mg/L	IS 3025 (Part 32):1988, RA 2014
8	Fluoride (as F)	<0.05	Max 1	mg/L	IS 3025 (Part 60):2008, RA 2013
9	Iron (as Fe)	0.157	Max.1.0	mg/L	IS 3025 (Part 2):2004, RA 2014 / ISO 11885:1996
10	Magnesium (as Mg)	4.83	Max. 30	mg/L	IS 3025 (Part 46):1994, RA 2014, Amds.2
11	Nitrate (as NO ₃)	1.24	Max 45	mg/L	APHA,23rd Ed.,2017,4500-NO3,B-4-127
12	Sulphate (as SO ₄)	1.80	Max. 200	mg/L	IS 3025 (Part 24):1986, RA 2014
13	Total Alkalinity (as CaCO ₃)	32.5	Max. 200	mg/L	IS 3025(Part 23):1986, RA 2014, Amds.2
14	Total Hardness (as CaCO ₃)	38	Max. 200	mg/L	IS 3025 (Part 21):1983, RA 2009
BIOLOGICAL TESTING					
Bacteriological Parameters					
15	E.coli	Absent	Not Detectable	/100 ml	APHA, 23rd Ed., 2017,9221-G, 9-80
16	Total Coliforms	Absent	Not Detectable	/100 ml	APHA, 23rd Ed., 2017, 9221-D, 9-75
Remarks: The Water Sample complies with Acceptable Limit as per IS 10500:2012, RA 2018 [With Amendment No.1 and 2] Standard with respect to the parameters tested, without applying measurement uncertainty.					

Divya Sharma
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 Section In-charge (Biological)
 Reviewed & Authorised by

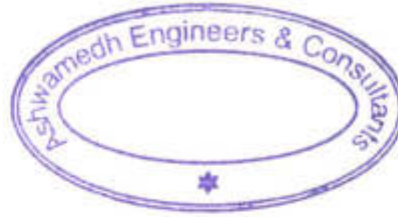


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Sample ID : W/03/21/085	Report No. W/03/21/085	Report Date	13/03/2021
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Note:

1. The result listed refer only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.
3. In case sampling is not done by laboratory, the results apply to the sample as received.
4. There are no additions to, deviations or exclusions from the method.
5. Statement of conformity is based on the decision rule applied.