Transportation Engineering Laboratory (TEL)

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET)



The Sub Divisional Officer, Highway Sub Division No. II, Gujranwala.

Ref.----

Subject: <u>Testing of Bitumen – AASHTO Standard (M-20)</u>

Rehabilitation of G.T. Road from Chan Da Qila to Aziz Cross Chowk in Gujranwala

City, Length = 12.75 km in District Gujranwala

Dear Sir,

It is with reference to your letter No. 470/G-II dated 04-04-2025.

Please find below the results of tests conducted on the bitumen sample provided to this laboratory through your representative.

Sr.#	Laboratory Tests		Results
1	Penetration (ASTM D-5)		69 Units
2	Softening Point (ASTM D-36)		48.9°C

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

Director

Transportation Engineering Laboratory

1. This test report is based solely on the particular sample(s) supplied by the client and should not be reproduced in parts.

Date:----

- 2. Sampling has not been performed by Transportation Engineering Laboratory (TEL), UET and TEL-UET does not accept the responsibility that the sample(s) supplied is/are truly representative sample(s) of any batch or stock or entire
- 3. While TEL-UET agrees to take every reasonable precaution to ensure validity of its test results, it assumes no liability thereof beyond the amount of the fee charged for the analysis or test.
- 4. The party shall assume full responsibility for the ethical use of the results in the test reports and the TEL-UET shall be held free from any and all claims which may result from the use of such data by client or others.
- 5. This test report shall not be reproduced wholly or in parts unless negotiated.

Transportation Engineering Laboratory (TEL)

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET)



Date:----

The Assistant Director Engineering, Bahawalpur Development Authority, Bahawalpur.

Subject: <u>Testing of Bitumen – AASHTO Standard (M-20)</u>

Dualization of Road from Shikarpuri Gate to Saraiki Chowk Bahawalpur

(Length = 0.28 km)

Dear Sir,

It is with reference to your letter No. BDA/Eng/2025/12325 dated 08-04-2025. Please find below the results of tests conducted on the bitumen sample provided to this laboratory through your representative.

Sr.#	Laboratory Tests	Results
1	Penetration (ASTM D-5)	76 Units
2	Penetration of Residue (ASTM D-5)	69 Units
3	Ductility (ASTM D-113)	Above 100 cm
4	Ductility of Residue (ASTM D-113)	Above 100 cm
5	Softening Point (ASTM D-36)	52.0°C
6	Flash Point (ASTM D-92)	287°C
7	Solubility (ASTM D-2042)	99.80%
8	Specific Gravity Value (ASTM D-70)	1.034
9	Thin Film Oven Test Value (ASTM D-1754)	0.476%

If you have further query, please do not hesitate to contact the undersigned.

Best Regards,

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Director

Transportation Engineering Laboratory