

Transportation Engineering Laboratory (TEL)

Department of Civil Engineering (CED)

UNIVERSITY OF ENGINEERING & TECHNOLOGY (UET)

LAHORE – 54890 (PAKISTAN)



Phone: 092-42-9929202 Cable: UNIVENGTECH Fax: 092-42-9922566

Ref.:-----

Date:-----

Mr. Muhammad Azmat
Resident Engineer,
NESPAK-TurkPark JV Site Office,
Lady Willingdon Hospital,
Lahore.

Subject: **Testing of Bitumen**
Reconstruction of Lady Willingdon Hospital, Lahore

Dear Sir,

It is with reference to your letter No. 4729/13/MA/04/43 dated 29-06-2024.

Please find below the results of tests conducted on the bitumen sample provided to this laboratory on 02-07-2024 through your representative.

Sr.#	Laboratory Tests	Results
1	Penetration (ASTM D-5)	87 Units
2	Flash Point (ASTM D-92)	272°C
3	Specific Gravity Value (ASTM D-70)	1.016
4	Loss on Heating Value (ASTM D-6)	0.224%

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

Best Regards,

Director
Transportation Engineering Laboratory

Note:

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

The Executive Engineer,
Highways Division,
Narowal.

Subject: **Testing of Bitumen (PARCO)– AASHTO Standard (M-20)**
Widening / Improvement of Road from Sialkot Cantt to Jassar Garrison,
Length = 69.00 km in District Narowal

Dear Sir,

It is with reference to your letter No. 1036/DB dated 10-06-2024.

Please find below the results of tests conducted on the bitumen sample provided to this laboratory on 03-07-2024 through your representative.

Sr.#	Laboratory Tests	Results
1	Penetration (ASTM D-5)	70 Units
2	Penetration of Residue (ASTM D-5)	64 Units
3	Ductility (ASTM D-113)	Above 100 cm
4	Ductility of Residue (ASTM D-113)	Above 100 cm
5	Flash Point (ASTM D-92)	312°C
6	Solubility (ASTM D-2042)	99.80%
7	Thin Film Oven Test Value (ASTM D-1754)	0.252%
8	Loss on Heating Value (ASTM D-6)	0.232%

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

Best Regards,

Director
Transportation Engineering Laboratory

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Date:-----

Mr. Muhammad Awais
Resident Engineer,
NESPAK.

Subject: **Testing of Bitumen – AASHTO Standard (M-20)**
Construction of Bridge Over River Ravi at Mal Fatyana, District Toba Tek Singh
(NA-94)

Dear Sir,

It is with reference to your letter No. P3205/24/MA/02 dated 27-05-2024.

Please find below the results of tests conducted on the bitumen sample provided to this laboratory on 13-06-2024 through your representative.

Sr.#	Laboratory Tests	Results
1	Penetration (ASTM D-5)	96 Units
2	Penetration of Residue (ASTM D-5)	88 Units
3	Ductility (ASTM D-113)	Above 100 cm
4	Ductility of Residue (ASTM D-113)	90 cm
5	Softening Point (ASTM D-36)	44.6°C
6	Flash Point (ASTM D-92)	284°C
7	Solubility (ASTM D-2042)	99.75%
8	Thin Film Oven Test Value (ASTM D-1754)	0.253%

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

Best Regards,

Director
Transportation Engineering Laboratory

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