## **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. Khan Muhammad Dogar Resident Engineer, (EFAP) Larkana.

Subject:Testing of Bitumen – AASHTO Standard (M-20)Package 16 & 17Source:National Refinery, Karachi

Dear Sir,

It is with reference to your letter No. RE/EFAP/LAR/PKG-16&17/M/2024/169 dated 06-07-2024. 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)	64 Units
2	Penetration of Residue (ASTM D-5)	56 Units
3	Ductility (ASTM D-113)	Above 100 cm
4	Ductility of Residue (ASTM D-113)	92 cm
5	Softening Point (ASTM D-36)	50.2°C
6	Flash Point (ASTM D-92)	304°C
7	Fire Point (ASTM D-92)	329°C
8	Solubility (ASTM D-2042)	99.75%
9	Specific Gravity Value (ASTM D-70)	1.016
10	Thin Film Oven Test Value (ASTM D-1754)	0.246%
11	Loss on Heating Value (ASTM D-6)	0.226%

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

Best Regards, Director Transportation Engineering Laboratory	<ol> <li>Note:         <ol> <li>This test report is based solely on the particular sample(s) supplied by the client and should not be reproduced in parts.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol> </li> </ol>