



# MOUNTAIN STATES ASPHALT INC.


205 s Emerald Rd  
Tooele, UT 84074

|  |                             |                         |        |               |         |
|--|-----------------------------|-------------------------|--------|---------------|---------|
| SUPERPAVE™ Binder Grade: PG 76-34 UT                   |                             | Date Recieved: 5/2/2023 | By: JH |               |         |
| Sample ID: Batch 3                                     |                             |                         |        |               |         |
| Sample Condition (ie Good/Open): Good                  |                             | Date Tested: 5/2/2023   | By: JH |               |         |
| Test   |                             | Temp                    | Method | Specification | Result  |
| <b>ORIGINAL BINDER</b>                                 |                             |                         |        |               |         |
| <b>AASHTO M 320 Requirements</b>                       |                             |                         |        |               |         |
| Viscosity, Pa*s  |                             | 135°C                   | T 316  | 3.0 max       | 2.5     |
| Dynamic Shear  | G*, 10 rad./sec., kPa       | 76°C                    | T 315  | 1.3 min       | 1.43    |
|  | Phase Angle, δ (°)          |                         |        | 71 max        | 54.6°   |
| <b>RTFOT RESIDUE</b>                                   |                             |                         |        |               |         |
| <b>AASHTO M 320 Requirements</b>                       |                             |                         |        |               |         |
| Mass Change, % (Mass Loss is reported as Negative)     |                             |                         | T 240  | 1.0 max       | -0.291% |
| Dynamic Shear  | G*/sinδ, 10 rad./sec., kPa  | 76°C                    | T 315  | 2.2 min       | 3.09    |
| <b>Additional Requirements</b>                         |                             |                         |        |               |         |
| Elastic Recovery, %                                    |                             | 25°C                    | T 301  | 90 min        | 99%     |
| <b>PRESSURE AGING RESIDUE (100°C, 300 psi, 20 hr.)</b> |                             |                         |        |               |         |
| <b>AASHTO M 320 Requirements</b>                       |                             |                         |        |               |         |
| Dynamic Shear  | G*(sinδ), 10 rad./sec., kPa | 25°C                    | T 315  | 5,000 max     | 656     |
| Creep Stiffness  | Stiffness, MPa (60 sec.)    | -24°C                   | T 313  | 150-300       | 226     |
|  | m Value                     |                         |        | 0.300 min     | 0.33    |
| Creep Stiffness -6°C                                   | Stiffness, MPa (60 sec.)    | -30°C                   | T 313  | Report        | 451     |
|  | m Value                     |                         |        | Report        | 0.272   |
| Delta Tc   |                             |                         | -      | -1 min        | 0.643   |

\*Result from subcontractor

Notes: This sample complied with the requirments of UDOT Section 02745 - Asphalt Materials, PG 76-34

Tested By:

  
Jameson Hulse, Binder Tech

Reviewed By:

  
Gene Christenbery, Vice President