GLASS BEADS TEST REPORT

Project No.: EA16450

11151

To:

To: Alberta Transportation Technical Standards Branch 2nd Floor, Twin Atria Building 4999 - 98 Ave

Edmonton, AB T6B 2X3

Attn:Rishi Adhikari, P.Eng.

Distribution Addressee: WSP E&I Canada Limited 5671 - 70 Street Edmonton, AB Canada T6B 3P6

Tel +1 (780) 436-2152 Fax +1 (780) 377-3599

| Lab Number | Date Received | Date Reported | Lot Number | Roundness (%) | Reflective (%) | Moisture Resistance | Sieve Analysis % Passing | | | | Supplier | 2023 | |
|---------------|------------------|------------------|---------------|------------------|----------------|------------------------|-----------------------------|-------|-------|-----|----------|---------|-----------|
| 2023 | 2023 | 2023 | | | | | 800 | 630 | 315 | 160 | 80 | | |
| GB1 | May-16 | Jul-31 | MJ-H-91422-2 | 83.2 | 78.4 | Pass | 100.0 | 96.5* | 38.4 | 3.9 | 0.0 | POTTERS | B1 & B2 |
| GB2 | May-17 | Jul-31 | MJ-H-33023-1 | | | Pass | 100.0 | 95.0 | 25.2 | 1.7 | 0.66* | POTTERS | B3 & B4 |
| GB3 | May-17 | Jul-31 | MJ-H-101922-1 | 84.6 | 79.4 | Pass | 100.0 | 95.0 | 23.0 | 1.1 | 0.0 | POTTERS | B5 & B6 |
| GB4 | May-23 | Jul-31 | MJ-H-50423-2 | | | Pass | 100.0 | 94.6 | 26.9 | 1.1 | 0.0 | POTTERS | B7 & B8 |
| GB5 | May-24 | Jul-31 | MJ-H-120120 | 81.4 | 76.2 | Pass | 100.0 | 93.7 | 25.3 | 1.1 | 0.10* | POTTERS | B9 & B10 |
| GB6 | May-24 | Jul-31 | 011823 | 80.6 | 75.8 | Pass | 100.0 | 75.4* | 13.0 | 0.8 | 0.0 | ISP | B11& B112 |
| GB7 | May-24 | Jul-31 | MJ-H-22321 | | | Pass | 100.0 | 94.9 | 19.7 | 1.7 | 0.0 | POTTERS | B13 & B14 |
| GB8 | May-25 | Jul-31 | MJ-H-92122-1 | 79.2 | 74.8 | Pass | 100.0 | 92.0 | 27.8 | 3.2 | 0.00 | POTTERS | B15 & B16 |
| GB9 | Jun-2 | Jul-31 | MJ-H-120120-2 | | A STATE OF | Pass | 99.2* | 90.3 | 23.0 | 2.6 | 0.00 | POTTERS | B17 & B8 |
| GB10 | Jun-5 | Jul-31 | MJ-H-51223-2 | 81.3 | 77.0 | Pass | 100.0 | 93.1 | 18.9 | 1.1 | 0.00 | POTTERS | B19 |
| | Spec | ification | | Min. 75 | Min. 70 | Pass | 100 | 75-95 | 15-35 | 0-5 | 0 | | - |

| * Indicates result outside tolerance limits. | | ^ <i> 1</i> | <u> </u> | |
|--|--------------|--------------|----------|--|
| Test not required by Alberta Transportation | PER: | 11 | Jul-31 | |
| | Reviewed By: | VV | DATE | |
| | | | | |

Reporting of these results constitutes a testing service only. Engineering Interpretation or evaluation of the test results is provided only on written request.

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|---------------|------------------|------------------|---------------|------------------|----------------|------------------------|-----------------------------|-------|-------|-----|----------|---------|------------|
| 2023 | 2023 | 2023 | | | | | 800 | 630 | 315 | 160 | 80 | | |
| GB11 | Jun-8 | Aug-9 | MJ-H-120120 | | CARL AND | Pass | 98.8* | 86.3 | 26.5 | 0.3 | 0.00 | POTTERS | B22 & B23 |
| GB12 | Jun-9 | Aug-9 | MJ-H-102022-1 | 84.3 | 79.2 | Pass | 100.0 | 91.8 | 21.9 | 1.1 | 0.00 | POTTERS | B28 & B29 |
| GB13 | Jun-9 | Aug-9 | MJ-H-51723-3 | | | Pass | 100.0 | 89.8 | 16.8 | 1.0 | 0.00 | POTTERS | B30 & B231 |
| GB14 | Jun-13 | Aug-9 | MJ-H-50623-1 | 88.3 | 83.1 | Pass | 100.0 | 89.4 | 26.1 | 2.1 | 0.00 | POTTERS | B32 & B33 |
| GB15 | Jun-20 | Aug-9 | MJ-H-51023-1 | | | Pass | 98.2* | 87.4 | 23.9 | 1.3 | 0.00 | POTTERS | B34 |
| GB16 | Jun-23 | Aug-9 | MJ-H-60223-2 | 82.3 | 77.1 | Pass | 100.0 | 91.1 | 23.4 | 2.5 | 0.00 | POTTERS | B36 & B37 |
| GB17 | Jul-3 | Aug-9 | MJ-H-60123-2 | | | Pass | 100.0 | 94.7 | 33.1 | 1.5 | 0.00 | POTTERS | B40 & B41 |
| GB18 | Jul-3 | Aug-9 | MJ-H-61423-1 | 84.5 | 79.5 | Pass | 100.0 | 91.3 | 25.2 | 2.8 | 0.00 | POTTERS | B42 & B43 |
| GB19 | Jul-12 | Aug-9 | MJ-H-42123-1 | | | Pass | 100.0 | 94.6 | 26.3 | 3.9 | 0.0 | POTTERS | B46 & B47 |
| GB20 | Jul-13 | Aug-9 | MJ-H-601253 | 76.4 | 72.0 | Pass | 98.3* | 87.9 | 23.2 | 8.0 | 0.0 | POTTERS | B50 & B51 |
| | Spec | ification | | Min. 75 | Min. 70 | Pass | 100 | 75-95 | 15-35 | 0-5 | 0 | | |

| * Indicates result outside tolerance limits. | | 11 | | |
|--|--------------|------|-------|--|
| Test not required by Alberta Transportation | PER: | 11-0 | Aug-9 | |
| | Reviewed By: | W | DATE | |
| | | | | |

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| 2023 | 2023 | 2023 | | | | | 800 | 630 | 315 | 160 | 80 | | |
| GB21 | Sep-20 | Oct-19 | MJ-H-60623-2 | 83.1 | 77.9 | Pass | 100.0 | 97.1* | 35.2* | 3.5 | 0.0 | POTTERS | B138 & B139 |
| | | | | | | | | | | | | | |
| Specification | | | Min. 75 | Min. 70 | Pass | 100 | 75-95 | 15-35 | 0-5 | 0 | | | |

| * Indicates result outside tolerance limits. | | 111 | - |
|--|---|--------------------------------------|-------------------|
| Test not required by Alberta Transportation | PER: | 14 | Oct-19 |
| | Reviewed By: | M | DATE |
| Reporting of these results constitutes a testing service only. End | gineering Interpretation or evaluation of | the test results is provided only or | n written request |

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