



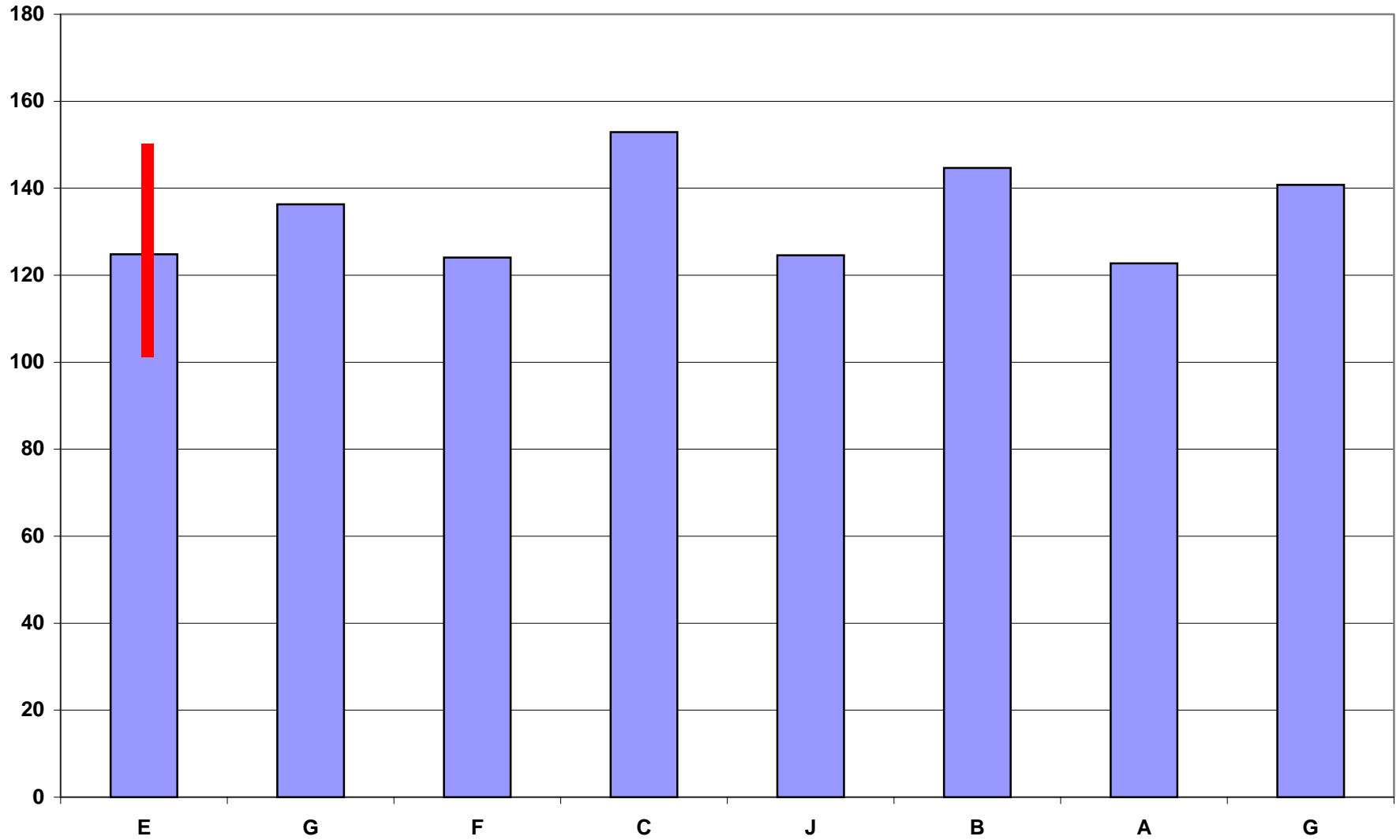
M11 EGR Test Piston Deposit Data

**Presentation to
HDEOCP
May 24, 2001
David M Stehouwer**

Piston Deposit Ratings: Data

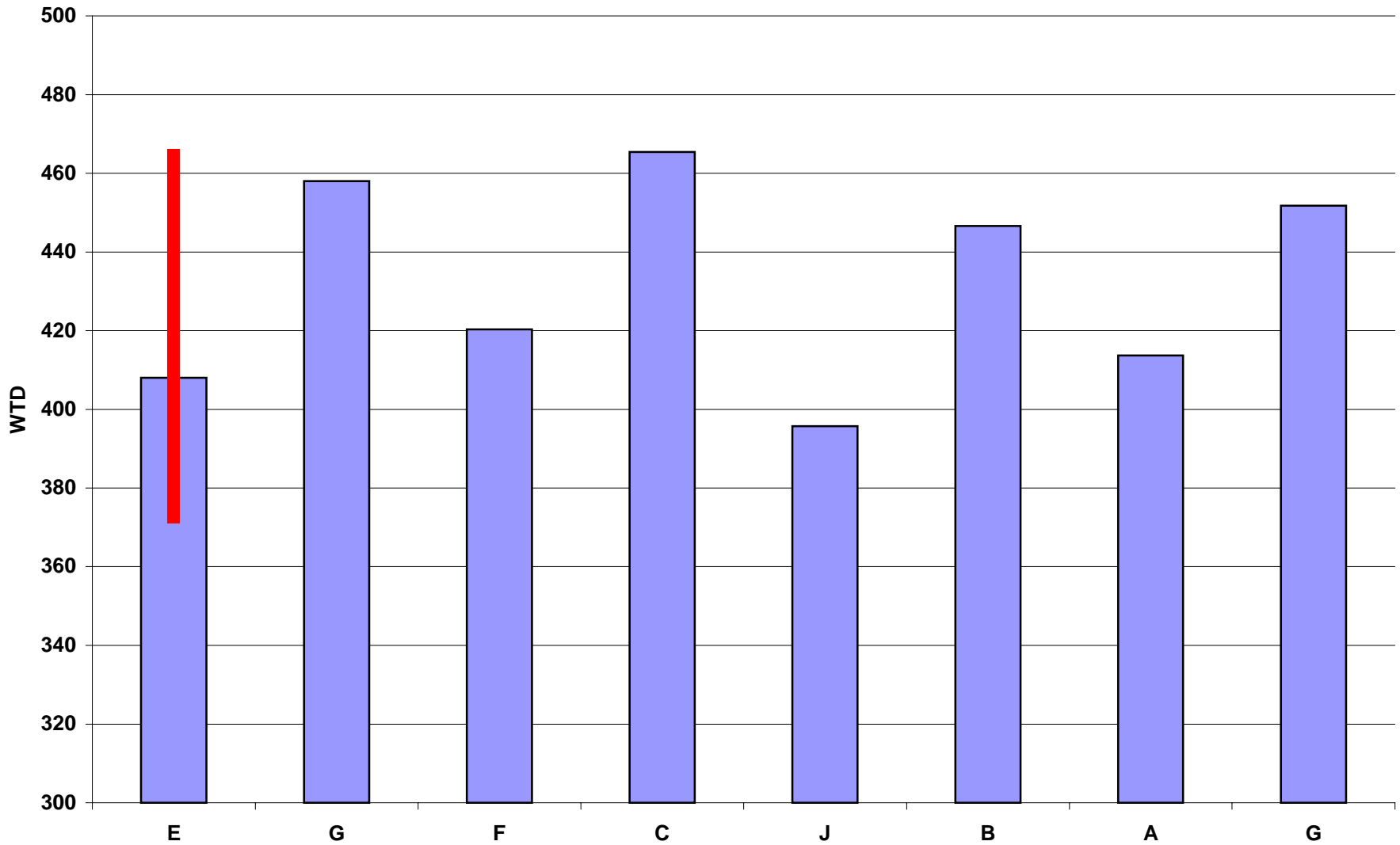
| Oil Code | CYLINDER AVERAGE | | | | | | | | | | | | | OIL CON. |
|----------------|------------------|--------|-------|-------|--------|--------|-------|-------|-----------|-------|----------|-----|-----|----------|
| | L1 | L2 | L3 | L4 | G1 | G2 | G3 | UC | OCG | UNWTD | WTD DMRT | TGC | TLC | |
| CMIR-38927 (E) | 25.112 | 23.402 | 1.738 | 1.5 | 51.125 | 35.625 | 1.51 | 5.35 | 3.603 | 149 | 467 | 51 | 25 | 28 |
| CMIR 38928 (E) | 20.147 | 17.907 | 2.223 | 1.5 | 38.292 | 28.513 | 1.617 | 7.071 | 7.223 | 124 | 413 | 38 | 17 | 26 |
| CMIR-38929 (E) | 25.25 | 24.018 | 2.022 | 1.5 | 47.333 | 36.155 | 1.6 | 2.75 | 2.95 | 144 | 467 | 47 | 25 | 40 |
| CMIR-38930 (E) | 23.873 | 21.27 | 1.942 | 1.5 | 36.958 | 27.908 | 1.5 | 3.875 | 1.64 | 120 | 409 | 37 | 23 | 24 |
| CMIR-38931 (E) | 21.128 | 12.32 | 1.903 | 1.44 | 32.093 | 28.877 | 1.563 | 5.7 | 4.2 | 109 | 372 | 32 | 20 | 24 |
| CMIR-38936 (E) | 23.692 | 16.598 | 2.338 | 1.462 | 42.737 | 30.915 | 1.365 | 9.792 | 5.375 | 134 | 426 | 43 | 22 | 16 |
| CMIR-38932 (E) | 20.717 | 11.035 | 3.355 | 1.4 | 29.375 | 26.192 | 1.65 | 6.175 | 3.925 | 104 | 383 | 29 | 18 | 30 |
| CMIR 38933 (E) | 22.04 | 15.022 | 2.165 | 1.5 | 50.167 | 28.8 | 1.35 | 6.225 | 5.55 | 133 | 423 | 50 | 20 | 38 |
| CMIR-38934 (E) | 21.985 | 17.368 | 1.675 | 1.412 | 37.442 | 30.125 | 1.43 | 6.65 | 6.8 | 125 | 396 | 37 | 20 | 37 |
| CMIR-38935 (E) | 22.415 | 14.797 | 1.92 | 1.057 | 43.742 | 31.26 | 1.09 | 6.15 | 7.19 | 130 | 381 | 43 | 21 | 35 |
| | | | | | | | | | Average E | 125 | 408 | 40 | 21 | 30 |
| CMIR-38961 (G) | 23.375 | 28.932 | 2.052 | 1.5 | 34.875 | 36.345 | 1.6 | 4.475 | 3.13 | 136 | 458 | 35 | 22 | 24 |
| CMIR-38962 (F) | 24.423 | 16.242 | 2.097 | 1.5 | 36.625 | 35.05 | 1.57 | 4.2 | 2.377 | 124 | 420 | 36 | 24 | 28 |
| CMIR-38965 (C) | 19.987 | 14.7 | 2.84 | 0.59 | 34.9 | 62.5 | 2 | 8.29 | 7.07 | 153 | 465 | 37 | 18 | 38 |
| CMIR-38966 (J) | 21.415 | 17.953 | 2.28 | 1.287 | 34 | 31.85 | 1.113 | 9.008 | 5.675 | 125 | 396 | 34 | 19 | 35 |
| CMIR-38967 (B) | 20.848 | 15.833 | 2.682 | 1.15 | 52.542 | 41 | 0.992 | 5.765 | 3.875 | 145 | 447 | 53 | 19 | 33 |
| CMIR-38968 (A) | 19.205 | 21.758 | 2.203 | 1.5 | 39.083 | 26.227 | 1.475 | 6.275 | 5.02 | 123 | 414 | 39 | 16 | 39 |
| CMIR-38969 (G) | 19.24 | 25.203 | 2.22 | 1.287 | 46.542 | 33.208 | 1.683 | 6.429 | 4.975 | 141 | 452 | 47 | 16 | 41 |

Unweighted Deposits All Oils



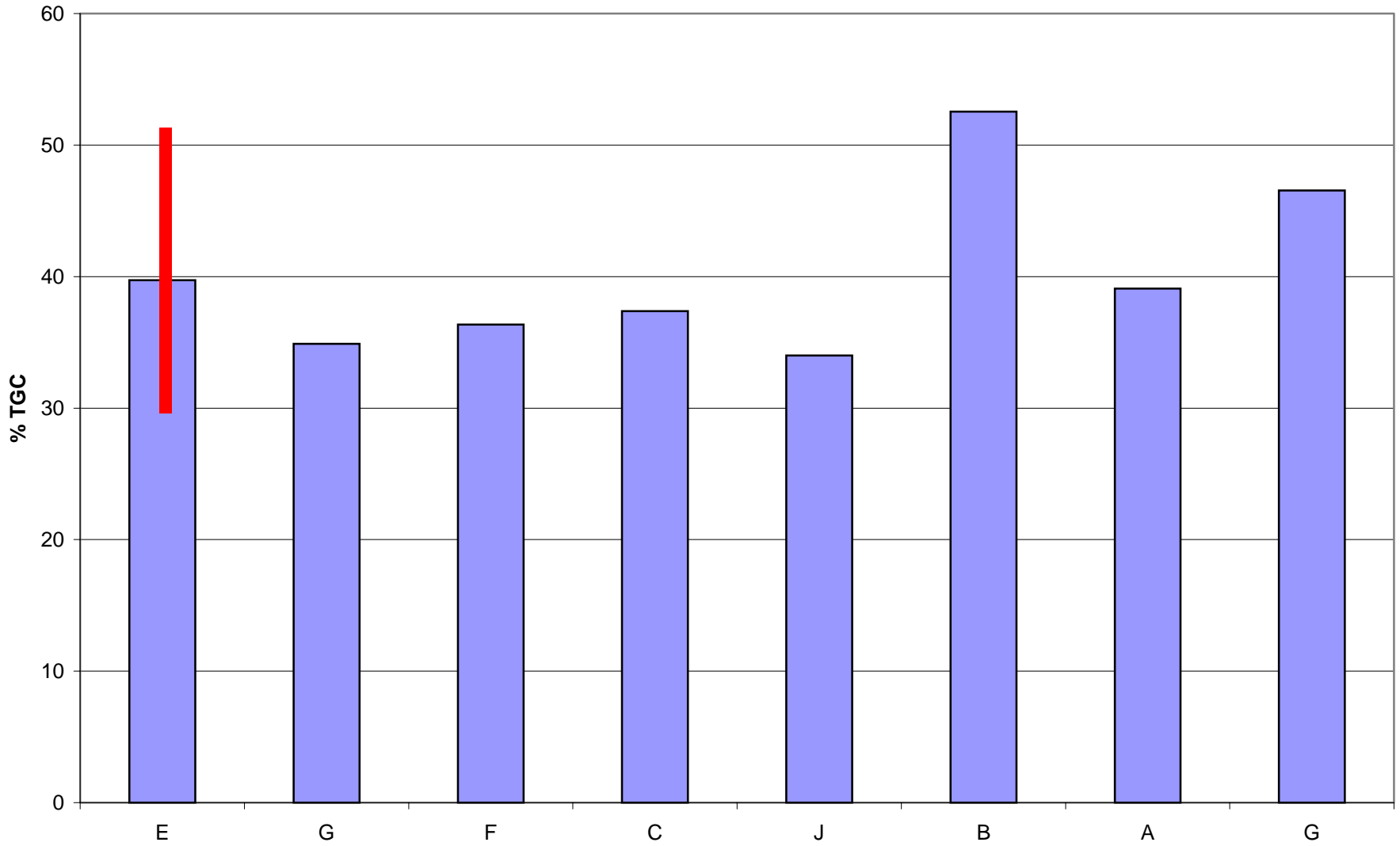
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WEIGHTED DEPOSITS ALL OILS



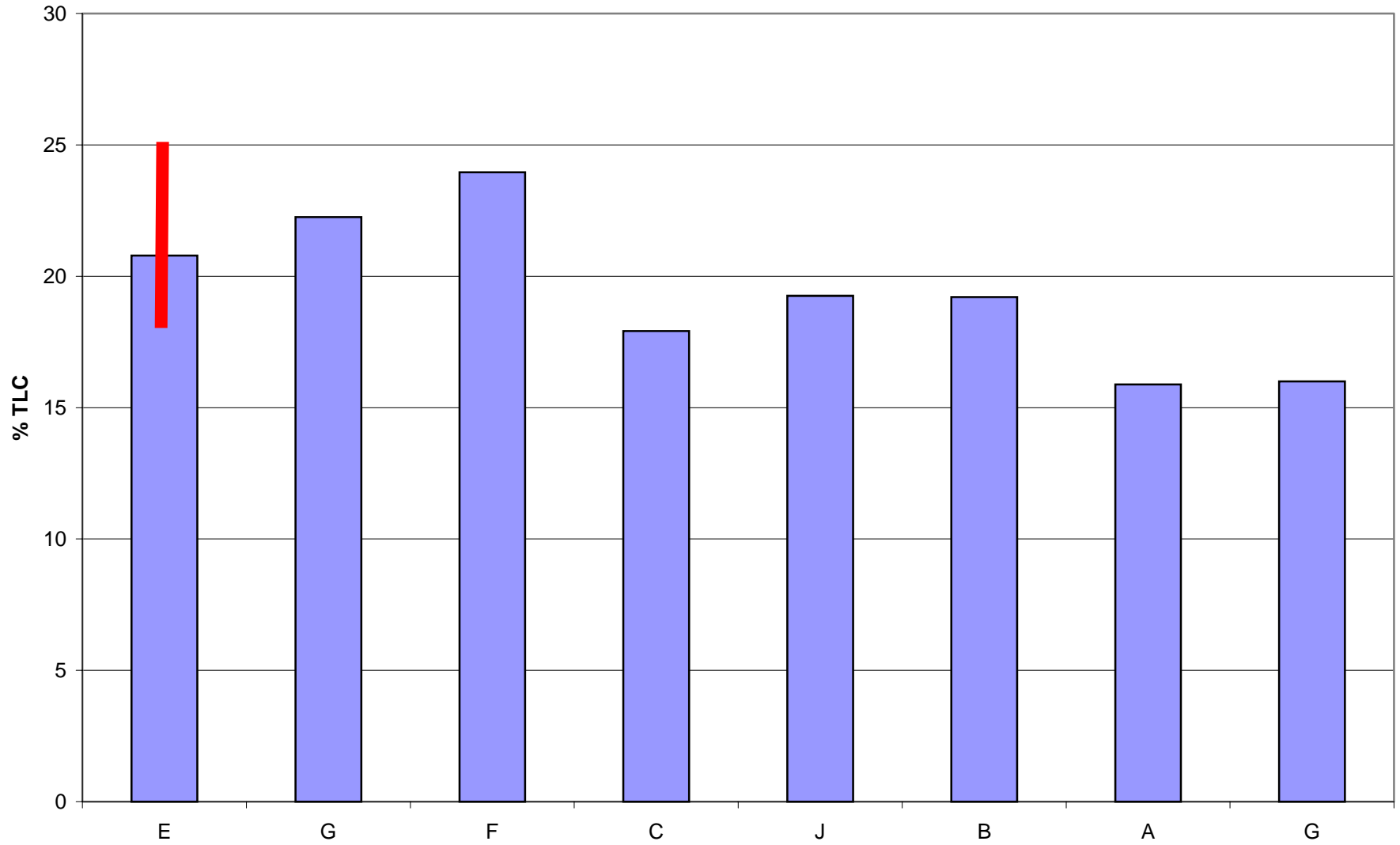
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TOP GROVE CARBON



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TOP LAND CARBON ALL OILS



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