

HEAVY CRUDE OIL

N1402

TABLE 2: TBP DISTILLATION ANALYSIS (ASTM D2892 & ASTM D5236)

| Frac. No. | Boiling Range, °C | Yield, wt. % | Cumulative Yield, wt. % | Sp.Gr. @ 15.56/15.56 °C | Yield, vol. % | Cumulative Yield, vol. % |
|-----------|-------------------|--------------|-------------------------|-------------------------|---------------|--------------------------|
| 1 | IBP-15 | 1.30 | 1.30 | 0.5493 | 2.08 | 2.08 |
| 2 | 15-65 | 3.41 | 4.71 | 0.6504 | 4.61 | 6.69 |
| 3 | 65-100 | 4.03 | 8.74 | 0.7121 | 4.97 | 11.66 |
| 4 | 100-125 | 3.17 | 11.91 | 0.7412 | 3.76 | 15.42 |
| 5 | 125-150 | 3.73 | 15.64 | 0.7617 | 4.30 | 19.72 |
| 6 | 150-175 | 3.75 | 19.39 | 0.7801 | 4.22 | 23.94 |
| 7 | 175-200 | 3.26 | 22.65 | 0.7920 | 3.62 | 27.56 |
| 8 | 200-225 | 4.19 | 26.84 | 0.8081 | 4.56 | 32.12 |
| 9 | 225-250 | 3.54 | 30.38 | 0.8307 | 3.74 | 35.86 |
| 10 | 250-275 | 4.15 | 34.53 | 0.8443 | 4.32 | 40.18 |
| 11 | 275-300 | 3.56 | 38.09 | 0.8543 | 3.66 | 43.84 |
| 12 | 300-325 | 4.01 | 42.10 | 0.8749 | 4.03 | 47.87 |
| 13 | 325-350 | 3.95 | 46.05 | 0.8848 | 3.92 | 51.79 |
| 14 | 350-385 | 5.34 | 51.39 | 0.8939 | 5.25 | 57.04 |
| 15 | 385-425 | 5.71 | 57.10 | 0.9225 | 5.44 | 62.48 |
| 16 | 425-450 | 3.90 | 61.00 | 0.9305 | 3.68 | 66.16 |
| 17 | 450-475 | 3.61 | 64.61 | 0.9469 | 3.35 | 69.51 |
| 18 | 475-500 | 3.61 | 68.22 | 0.9624 | 3.30 | 72.81 |
| 19 | 500-530 | 3.38 | 71.60 | 0.9741 | 3.05 | 75.86 |
| 20 | 530-565 | 3.90 | 75.50 | 0.9819 | 3.49 | 79.35 |
| 21 | 565+ | 24.50 | 100.00 | 1.0423 | 20.65 | 100.00 |