



Crude **FLOTTA GOLD**

Country United Kingdom

TBP  
DISTILLATION

|                                |       |            |           |      |      |      |      |      |      |
|--------------------------------|-------|------------|-----------|------|------|------|------|------|------|
| Density at 15°C, kg/m3         | 843.1 | Assay Date | 23-Feb-21 | °C   | wt%  | vol% | °C   | wt%  | vol% |
| °API                           | 36.3  |            |           | 080  | 8.3  | 11.2 | 460  | 74.9 | 78.3 |
| Bbl/mt                         | 7.474 |            |           | 090  | 9.6  | 12.7 | 480  | 77.6 | 80.8 |
| Acidity, mg KOH/g              | 0.10  |            |           | 100  | 11.0 | 14.3 | 500  | 80.1 | 83.0 |
| Sulphur, wt%                   | 0.63  |            |           | 120  | 14.6 | 18.4 | 520  | 82.4 | 85.1 |
| Hydrogen Sulphide, mg/kg       | 1     |            |           | 140  | 18.7 | 22.9 | 540  | 84.5 | 87.0 |
| Mercaptan Sulphur, mg/kg       | 13    |            |           | 160  | 22.4 | 26.9 | 560  | 86.5 | 88.7 |
| Viscosity, cSt at 10 °C        | 10.8  |            |           | 180  | 25.4 | 30.1 | 580  | 88.2 | 90.2 |
| 50 °C                          | 3.6   |            |           | 200  | 28.4 | 33.3 |      |      |      |
| Pour Point, °C                 | -15   |            |           | 220  | 31.7 | 36.7 |      |      |      |
| Total Nitrogen, wt%            | 0.11  |            |           | 240  | 35.3 | 40.3 |      |      |      |
| Wax, wt%                       | -     |            | wt%       | vol% | 260  | 39.1 | 44.1 |      |      |
| Wax Appearance Temperature, °C | -     |            |           |      | 280  | 42.9 | 48.0 |      |      |
| RVP at 37.8 °C, kPa            | -     | Ethane     | 0.0       | 0.0  | 300  | 46.9 | 51.9 |      |      |
| Water, vol%                    | -     | Propane    | 0.8       | 1.4  | 320  | 50.8 | 55.7 |      |      |
| NaCl, mg/kg                    | -     | Iso-Butane | 0.4       | 0.5  | 340  | 54.7 | 59.5 |      |      |
| Nickel, mg/kg                  | 4.6   | n-Butane   | 1.5       | 2.2  | 360  | 58.4 | 63.1 |      |      |
| Vanadium, mg/kg                | 6.8   |            |           |      | 380  | 62.1 | 66.5 |      |      |
| Iron, mg/kg                    | 1.6   |            |           |      | 400  | 65.6 | 69.8 |      |      |
| Mercury, µg/kg                 | -     |            |           |      | 420  | 68.9 | 72.8 |      |      |
|                                |       |            |           |      | 440  | 72.0 | 75.7 |      |      |

PROPERTIES OF TBP CUTS

| LIGHT NAPHTHA     | Cuts    | Yield | Yield | Den 15°C | S    | RSH     | RON      | MON     |        |           | Napht. | Aro.    | RVP      |          |       |        |
|-------------------|---------|-------|-------|----------|------|---------|----------|---------|--------|-----------|--------|---------|----------|----------|-------|--------|
|                   | °C      | wt%   | vol % | kg/m3    | wt%  | mg/kg   | clear    | clear   |        |           | vol%   | vol%    | kPa      |          |       |        |
|                   | 15-65   | 4.2   | 5.5   | 647      | 0.00 | 3       | 72.0     | 70.6    |        |           | 6.9    | 0.4     | -        |          |       |        |
|                   | 15-80   | 5.6   | 7.2   | 661      | 0.00 | 5       | 69.0     | 67.3    |        |           | 13.0   | 1.3     | -        |          |       |        |
| HEAVY NAPHTHA     | Cuts    | Yield | Yield | Den 15°C | S    | RSH     |          |         |        |           | Napht. | Aro.    |          |          |       |        |
|                   | °C      | wt%   | vol % | kg/m3    | wt%  | mg/kg   |          |         |        |           | vol%   | vol%    |          |          |       |        |
|                   | 80-150  | 12.3  | 13.8  | 749      | 0.00 | 12      |          |         |        |           | 45.7   | 8.2     |          |          |       |        |
| 80-175            | 16.3    | 18.1  | 757   | 0.01     | 12   |         |          |         |        | 46.1      | 9.3    |         |          |          |       |        |
| 100-150           | 9.7     | 10.7  | 756   | 0.01     | 12   |         |          |         |        | 47.1      | 8.9    |         |          |          |       |        |
| KEROSENE          | Cuts    | Yield | Yield | Den 15°C | S    | RSH     | Smoke    | Acidity | Cetane | Freez. Pt |        | Aro.    | Visc cSt |          |       | Flash  |
|                   | °C      | wt%   | vol % | kg/m3    | wt%  | mg/kg   | Pt mm    | mgKOH/g | Index  | °C        |        | vol%    | 50°C     |          |       | Point  |
|                   | 150-230 | 12.8  | 13.5  | 801      | 0.08 | 14      | 25       | 0.03    | 40.3   | -57       |        | 16.4    | 1.0      |          |       | 56.1   |
|                   | 175-230 | 8.9   | 9.2   | 809      | 0.10 | 15      | 23       | 0.03    | 41.6   | -51       |        | 18.0    | 1.1      |          |       | 69.8   |
| 150-250           | 16.5    | 17.2  | 807   | 0.11     | 14   | 24      | 0.03     | 42.3    | -51    |           | 17.5   | 1.1     |          |          | 59.4  |        |
| GASOIL            | Cuts    | Yield | Yield | Den 15°C | S    |         | Anilin   |         | Cetane | Cloud Pt  | CFPP   | Pour Pt | Visc cSt | Visc cSt | UOPK  | Flash  |
|                   | °C      | wt%   | vol % | kg/m3    | wt%  |         | Point °C |         | Index  | C         | C      | C       | 50°C     | 100°C    |       | Point  |
|                   | 175-400 | 40.9  | 40.5  | 849      | 0.44 |         | 67       |         | 50.1   | -1        | -6     | -10     | 2.8      | 1.3      | 11.8  | 83.6   |
|                   | 230-400 | 32.1  | 31.3  | 861      | 0.53 |         | 70       |         | 52.9   | 2         | 0      | -2      | 3.9      | 1.7      | 11.8  | 106.7  |
| 230-375           | 27.7    | 27.2  | 856   | 0.49     |      | 69      |          | 53.1    | -3     | -5        | -7     | 3.3     | 1.5      | 11.8     | 105.0 |        |
| VACUUM DISTILLATE | Cuts    | Yield | Yield | Den 15°C | S    | Conrad. | Anilin   | Ni      | Va     | Total N   | Bas N  | Pour Pt | Visc cSt | Visc cSt | UOPK  | Asp C7 |
|                   | °C      | wt%   | vol % | kg/m3    | wt%  | wt%     | Point °C | mg/kg   | mg/kg  | wt%       | mg/kg  | C       | 100°C    | 150°C    |       | wt %   |
|                   | 375-550 | 24.3  | 22.2  | 920      | 0.95 | 0.2     | 84       | 0       | 0      | 0.15      | 459    | 40      | 9.1      | 3.4      | 11.9  | 0.1    |
|                   | 375-565 | 25.7  | 23.4  | 922      | 0.97 | 0.3     | 85       | 0       | 0      | 0.15      | 483    | 40      | 9.7      | 3.6      | 11.9  | 0.1    |
|                   | 375-580 | 27.0  | 24.6  | 924      | 0.98 | 0.4     | 85       | 0       | 1      | 0.16      | 507    | 41      | 10.4     | 3.8      | 11.9  | 0.1    |
| 400-580           | 22.7    | 20.5  | 929   | 1.02     | 0.4  | 86      | 1        | 1       | 0.18   | 564       | 44     | 13.1    | 4.5      | 11.9     | 0.1   |        |
| RESIDUE           | Cuts    | Yield | Yield | Den 15°C | S    | Conrad. | Acidity  | Ni      | Va     | Total N   |        | Pour Pt | Visc cSt | Visc cSt | Pene  | Asp C7 |
|                   | °C      | wt%   | vol % | kg/m3    | wt%  | wt%     | mgKOH/g  | mg/kg   | mg/kg  | wt%       |        | C       | 100°C    | 150°C    | mm/10 | wt%    |
|                   | > 375   | 38.8  | 34.3  | 949      | 1.25 | 5.5     | 0.2      | 12      | 18     | 0.28      |        | 35      | 28       | 8        | -     | 0.8    |
|                   | > 550   | 14.5  | 12.1  | 1001     | 1.76 | 14.5    | 0.2      | 31      | 47     | 0.51      |        | 49      | 597      | 62       | 207   | 2.1    |
|                   | > 565   | 13.1  | 10.9  | 1007     | 1.81 | 15.9    | 0.2      | 34      | 51     | 0.53      |        | 50      | 862      | 78       | 170   | 2.3    |
| > 580             | 11.8    | 9.8   | 1012  | 1.86     | 17.4 | 0.2     | 38       | 56      | 0.56   |           | 51     | 1290    | 102      | 144      | 2.5   |        |

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TOTAL DTS / AM

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