



### Crude Oil General Properties Analysis (Light Crude Oil)

| Characteristics                    | Units              | Result  | Test Method |
|------------------------------------|--------------------|---------|-------------|
| Specific Gravity @ 15.56 /15.56 °C | -                  | 0.8575  | ASTM D5002  |
| API Gravity                        | °API               | 33.5    | ASTM D5002  |
| Sulfur Content (Total)             | wt.%               | 1.45    | ASTM D4294  |
| H <sub>2</sub> S Content           | ppm                | 61      | IP 570      |
| Mercaptan Content                  | ppm                | 118     | UOP 163     |
| Nitrogen Content (Total)           | wt.%               | 0.18    | ASTM D 5762 |
| Water & Sediment                   | Vol.%              | < 0.05  | ASTM D4007  |
| Water Content                      | Vol.%              | < 0.025 | ASTM D4006  |
| Salt Content                       | PTB                | 9       | ASTM D3230  |
| Kinematic Viscosity@10 °C          | mm <sub>2</sub> /s | 16.51   | ASTM D445   |
| Kinematic Viscosity@20 °C          | mm <sub>2</sub> /s | 10.78   | ASTM D445   |
| Kinematic Viscosity@40 °C          | mm <sub>2</sub> /s | 5.73    | ASTM D445   |
| Pour Point (Upper)                 | °C                 | -9      | ASTM D5853  |
| Reid Vapor Pressure                | Psi                | 8.15    | ASTM D323   |
| Asphaltene Content                 | wt.%               | 1.3     | IP 143      |
| Wax Content                        | wt.%               | 6.2     | BP 237      |
| Drop Melting Point of Wax          | °C                 | 54      | IP 133      |
| Conradson Carbon Residue           | wt.%               | 4.24    | ASTM D189   |
| Total Acid Number                  | mg KOH/g           | 0.10    | UOP 565     |
| Nickel Content                     | mg KOH/g           | 8       | ASTM D5863  |
| Vanadium Content                   | mg/kg              | 41      | ASTM D5863  |
| Iron Content                       | mg/kg              | 1       | ASTM D5863  |
| Lead Content                       | mg/kg              | <1      | ASTM D5863  |
| Sodium Content                     | mg/kg              | 7       | ASTM D5863  |
| Zinc Content                       | mg/kg              | <1      | ASTM D5863  |
| Copper Content                     | mg/kg              | <1      | ASTM D5863  |