OIL
DIAGNOSTICS
OIL ANALYSIS REPORT
Sample Rating Trend


## 20-82

## Diesel Engine

PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

| SAMPLE INFORMATION |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Number |  | Client Info |  | PCA0056869 | PCA0056949 | PCA0023978 |
| Sample Date |  | Client Info |  | 27 Dec 2023 | 30 Dec 2021 | 10 Apr 2021 |
| Machine Age his | hrs | Client Info |  | 6879 | 4811 | 4169 |
| Oil Age | hrs | Client Info |  | 675 | 642 | 416 |
| Oil Changed |  | Client Info |  | Changed | Changed | Changed |
| Sample Status |  |  |  | NORMAL | NORMAL | NORMAL |
| CONTAMINATION |  | method | limitbase | current | history1 | history2 |
| Water |  | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol |  | WC Method |  | NEG | NEG | NEG |
| WEAR METALS |  | method | limitbase | current | history1 | history2 |
| Iron p | ppm | ASTM D5185m | >100 | 53 | 70 | 54 |
| Chromium p | ppm | ASTM D5185m | >20 | 2 | 2 | 1 |
| Nickel p | ppm | ASTM D5185m | >4 | <1 | <1 | 2 |
| Titanium p | ppm | ASTM D5185m |  | 0 | <1 | <1 |
| Silver p | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Aluminum p | ppm | ASTM D5185m | >20 | 4 | 4 | 3 |
| Lead p | ppm | ASTM D5185m | >40 | 1 | 1 | 2 |
| Copper p | ppm | ASTM D5185m | >330 | 3 | 8 | 19 |
| Tin p | ppm | ASTM D5185m | >15 | <1 | 1 | <1 |
| Antimony p | ppm | ASTM D5185m |  | --- | <1 | <1 |
| Vanadium p | ppm | ASTM D5185m |  | 0 | 0 | <1 |
| Cadmium p | ppm | ASTM D5185m |  | 0 | 0 | 0 |


| ADDITIVES |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Boron | ppm | ASTM D5185m | 1 | 14 | 4 | 7 |
| Barium | ppm | ASTM D5185m | 1 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 60 | 48 | 63 | 68 |
| Manganese | ppm | ASTM D5185m | 1 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 1010 | 635 | 859 | 829 |
| Calcium | ppm | ASTM D5185m | 1070 | 1087 | 1235 | 1241 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 857 | 946 | 963 |
| Zinc | ppm | ASTM D5185m | 1270 | 1060 | 1241 | 1231 |
| Sulfur | ppm | ASTM D5185m | 2060 | 2441 | 2726 | 2595 |
| CONTAMINANTS |  | method | limitbase | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 4 | 4 | 3 |
| Sodium | ppm | ASTM D5185m |  | 0 | 1 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 2 | 3 |
| Fuel | \% | ASTM D3524 | >5 | 0.1 | $<1.0$ | <1.0 |
| INFRA-RED |  | method | limitbase | current | history1 | history2 |
| Soot \% | \% | *ASTM D7844 | >3 | 0.5 | 0.6 | 0.5 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.8 | 8.8 | 8.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 18.3 | 20.1 | 20.1 |
| FLUID DEGRADATION |  | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 12.9 | 15.6 | 15.4 |
| Base Number (BN) | mg KOHg | ASTM D2896 | 9.6 | 6.7 | 9.0 | --- |



Laboratory
Sample No. : PCA0056869 Recieved : 25 Jan 2024 Lab Number : $06070227 \quad$ Diagnosed : 29 Jan 2024 Unique Number : 10846904 Diagnostician : Wes Davis
Certificate L2367 Test Package : MOB 1 ( Additional Tests: FuelDilution, PercentFuel, TBN ) To discuss this sample report, contact Customer Service at 1-800-237-1369.
*- Denotes test methods that are outside of the ISO 17025 scope of accreditation.
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

JOHNSON DAVIS CONTRACTORS 604 HILBRATH DR LANTANA, FL

US 33462
Contact: GENE GARDNER ggardner@johnsondavis.com

