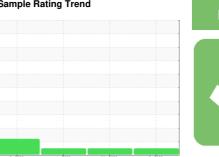


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



M124 (S/N 2KS14349)

Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

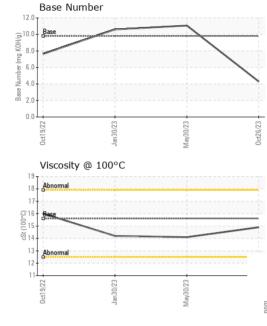
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| 15) | | Oct2023 | 2 Jan 2023 | May2023 0 | ct2023 | |
|---------------------------------------------------------------|----------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0098507 | PCA0098510 | PCA0083380 |
| Sample Date | | Client Info | | 26 Oct 2023 | 30 May 2023 | 30 Jan 2023 |
| Machine Age | mls | Client Info | | 23725 | 23194 | 22878 |
| Oil Age | mls | Client Info | | 23725 | 23194 | 22878 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Glycol | | WC Method | | NEG | NEG | NEG |
| WEAR METALS method limit/base current history1 history2 | | | | | | |
| Iron | ppm | ASTM D5185m | >100 | 121 | 4 | 52 |
| Chromium | ppm | ASTM D5185m | >20 | 2 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >40 | 10 | 0 | 3 |
| Copper | ppm | | >330 | 5 | 0 | 2 |
| Tin | | ASTM D5185m | >15 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | ppm | | | | | - |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 8 | 12 | 11 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 75 | 60 | 71 |
| Manganese | ppm | ASTM D5185m | | 1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1098 | 969 | 983 |
| Calcium | ppm | ASTM D5185m | | 1248 | 1065 | 1116 |
| Phosphorus | ppm | ASTM D5185m | | 1133 | 1053 | 1012 |
| Zinc | ppm | ASTM D5185m | | 1494 | 1272 | 1306 |
| Sulfur | ppm | ASTM D5185m | | 3435 | 3887 | 3409 |
| CONTAMINAN | ITS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 6 | 3 | 6 |
| Sodium | ppm | ASTM D5185m | | 47 | 4 | 59 |
| Potassium | ppm | ASTM D5185m | >20 | 30 | 2 | 6 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.1 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 12.4 | 5.0 | 10.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 25.5 | 18.0 | 21.8 |
| FLUID DEGRADATION method limit/base current history1 history2 | | | | | | |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 25.3 | 13.4 | 19.4 |
| Base Number (BN) | mg KOH/g | | | 4.30 | 11.07 | 10.60 |
| _ 1.00 . 10.71001 (D14) | 9 | 52000 | 5.0 | | , | . 0.00 |



OIL ANALYSIS REPORT



| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPE | RTIFS | method | limit/base | current | historv1 | historv2 |

| FLUID PROPE | 111120 | method | limit/l | oase current | history1 | history2 |
|-----------------------|-----------------------------------------|-----------|----------|------------------------------------|---------------------------------------|------------|
| Visc @ 100°C | cSt | ASTM D445 | 15.6 | 14.9 | 14.1 | 14.2 |
| GRAPHS | | | | | | |
| Iron (ppm) | | | | Lead (ppm) | | |
| 200 Severe | | | | Severe | | |
| 150 100 - Abnormal | | | | Abnormal | | |
| | *************************************** | | | 40 7 | | |
| 50 | | /_ | | 20 | | |
| Oct19/22 Jan30/23 | | May30/23 | 0ct26/23 | Oct19/22 | Jan30/23 | Oct26/23 |
| Aluminum (ppm) | | Ma | Õ | č Chromium (| _ | ŏ |
| 50 T | | | | 50 T | ppiny | |
| 40 Severe | | | | 40 - Severe | | |
| Abnormal | | | | Abnormal | | |
| 10 | | | | 10 | | |
| 0/22 | | 1/23 | 3/23 | 0/22 | | 1,573 |
| Oct19/22 Jan30/23 | | May30/23 | Oct26/23 | Oct19/22 | Jan30/23 | Oct26/23 |
| Copper (ppm) | | | | Silicon (ppm |) | |
| Severe Abriormal | | | | 60 | | |
| 200 | | | | E 40 | | |
| 100 | | | | Abnormal 20 | | |
| 0 | | | _ | 0 | | |
| Oct19/22 Jan30/23 | | May30/23 | 0ct26/23 | Oct19/22 | Jan30/23 | Oct26/23 - |
| Viscosity @ 100°C | | Ñ | 0 | Base Numbe | | 0 |
| 20 Abnormal | | | | | | |
| | | | | 0.8 g KO | · · · · · · · · · · · · · · · · · · · | |
| 16 Base Abnormal | | | | 6.0 | | |
| 12 | | | | Base (0) HOV (1) 10.0 Base 2.0 0.0 | | |
| Oct19/22 + | | 0/23 | 0ct26/23 | | Jan30/23 - | Oct26/23 |
| Oct19/22 Jan30/23 | | May30/23 | 0ct2 | Oct19/22 | Jan30/23 | 0ct2 |





Certificate L2367

Laboratory Sample No. Lab Number

: PCA0098507 : 05995102 Unique Number : 10723462 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 Oct 2023 Diagnosed

: 02 Nov 2023 Diagnostician : Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: GEORGE GEORGE@KOBYLUCKINC.COM T: (860)367-2002

KOBYLUCK TRUCKING

24 INDUSTRIAL DR

WATERFORD, CT

US 06385

* - 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)

Contact/Location: GEORGE ? - KOBWATCT