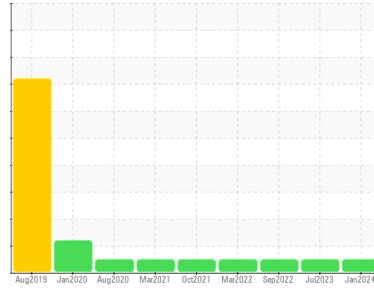


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DT665

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (36 mls)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 | |
|---------------|-------------|--------------------|--------------|-------------|-------|
| Sample Number | Client Info | PCA0111640 | PCA0095262 | PCA0076446 | |
| Sample Date | Client Info | 19 Jan 2024 | 28 Jul 2023 | 21 Sep 2022 | |
| Machine Age | mls | Client Info | 75000 | 75000 | 75000 |
| Oil Age | mls | Client Info | 46821 | 46821 | 46821 |
| Oil Changed | Client Info | N/A | N/A | N/A | |
| Sample Status | | NORMAL | NORMAL | NORMAL | |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|----------------|----------------|----------|----------|
| Fuel | WC Method >5 | <1.0 | <1.0 | <1.0 |
| Water | WC Method >0.2 | NEG | NEG | NEG |
| Glycol | WC Method | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 |
|----------|----------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185m >110 | 10 | 11 | 22 |
| Chromium | ppm ASTM D5185m >4 | <1 | <1 | <1 |
| Nickel | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Titanium | ppm ASTM D5185m | <1 | <1 | <1 |
| Silver | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >25 | 3 | 3 | 6 |
| Lead | ppm ASTM D5185m >45 | 0 | 0 | 0 |
| Copper | ppm ASTM D5185m >85 | <1 | <1 | <1 |
| Tin | ppm ASTM D5185m >4 | <1 | 0 | <1 |
| Vanadium | ppm ASTM D5185m | <1 | <1 | 0 |
| Cadmium | ppm ASTM D5185m | <1 | 0 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|----------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185m 2 | 6 | 2 | 4 |
| Barium | ppm ASTM D5185m 0 | 0 | 0 | 3 |
| Molybdenum | ppm ASTM D5185m 50 | 58 | 64 | 70 |
| Manganese | ppm ASTM D5185m 0 | <1 | <1 | <1 |
| Magnesium | ppm ASTM D5185m 950 | 929 | 954 | 958 |
| Calcium | ppm ASTM D5185m 1050 | 1084 | 1188 | 1183 |
| Phosphorus | ppm ASTM D5185m 995 | 1033 | 1025 | 1090 |
| Zinc | ppm ASTM D5185m 1180 | 1210 | 1300 | 1290 |
| Sulfur | ppm ASTM D5185m 2600 | 2889 | 3549 | 3883 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|---------------------|----------|----------|----------|
| Silicon | ppm ASTM D5185m >30 | 4 | 4 | 4 |
| Sodium | ppm ASTM D5185m | 2 | 2 | <1 |
| Potassium | ppm ASTM D5185m >20 | 1 | 3 | 5 |

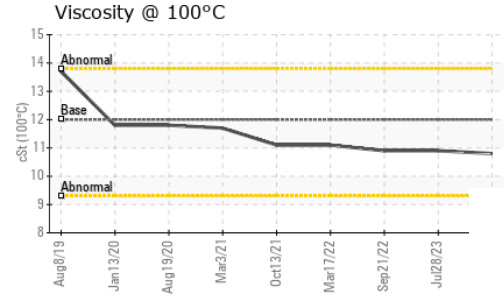
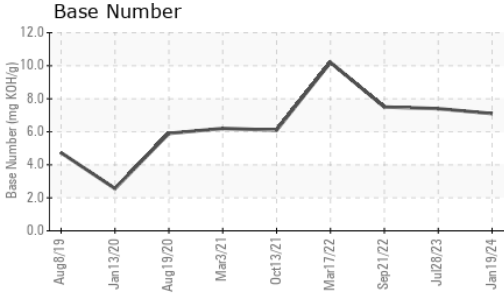
INFRA-RED

| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot % | % *ASTM D7844 >3 | 0.4 | 0.5 | 0.5 |
| Nitration | Abs/cm *ASTM D7624 >20 | 8.9 | 9.0 | 10.4 |
| Sulfation | Abs/.1mm *ASTM D7415 >30 | 19.8 | 19.1 | 21.9 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation | Abs/.1mm *ASTM D7414 >25 | 15.7 | 14.8 | 17.2 |
| Base Number (BN) | mg KOH/g ASTM D2896 | 7.1 | 7.4 | 7.5 |

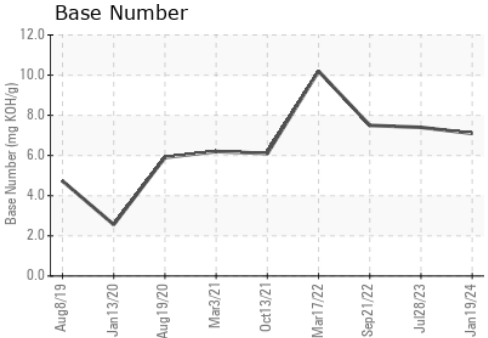
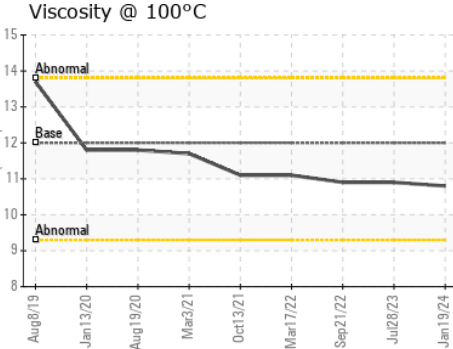
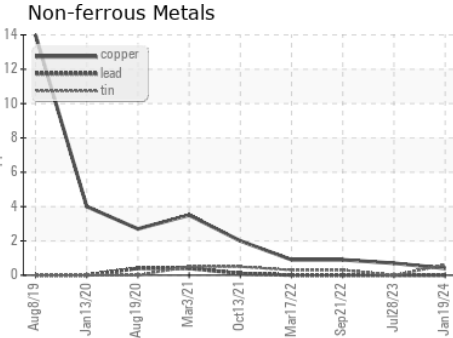
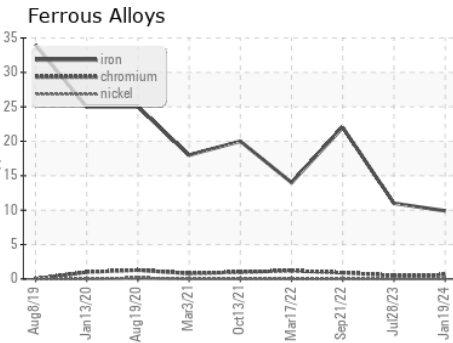
OIL ANALYSIS REPORT



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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 10.8 | 10.9 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0111640 **Received** : 31 Jan 2024
Lab Number : **06075374** **Diagnosed** : 01 Feb 2024
Unique Number : 10857465 **Diagnostician** : Wes Davis
Test Package : FLEET

NW WHITE & CO - BEAUFORT DIVISION
 1491 YENMASSEE HIGHWAY
 VARNVILLE, SC
 US 29944
 Contact: VINCENT BULLOCK
 bullockvince514@gmail.com

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)

T:
F: