

OIL ANALYSIS REPORT

Sample Rating Trend



Area Active Machine Id 45 Component Diesel Engine

Fluid PETRO CANADA DURON SHP 15W40 (10 GAL)

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.

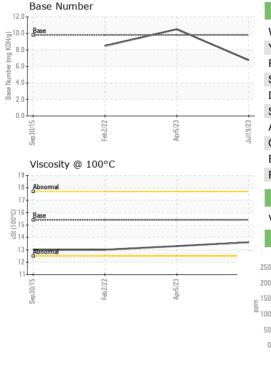
Fluid Condition

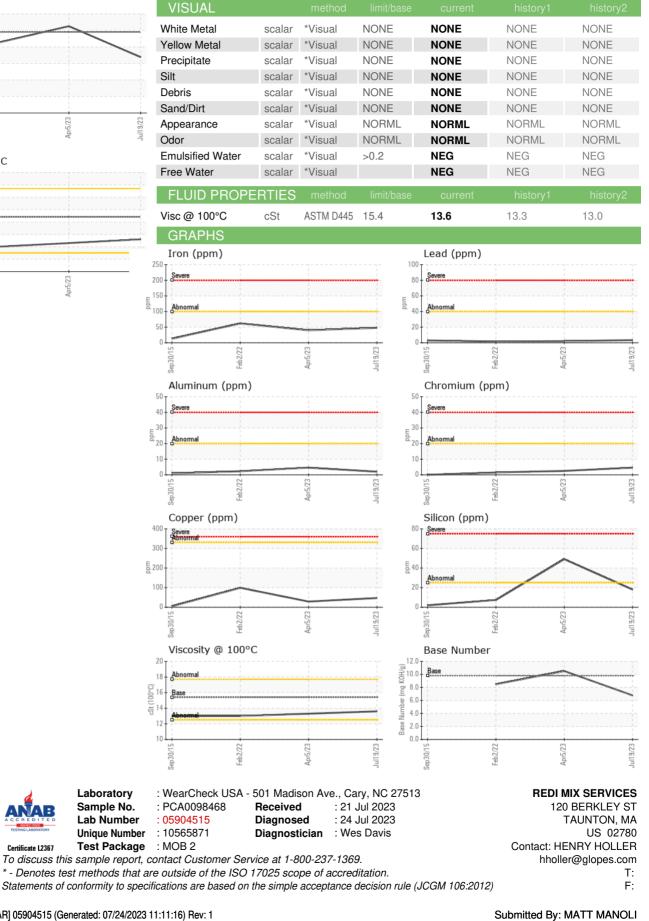
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
|---|---|--|--|---|---|--|
| Sample Number | | Client Info | | PCA0098468 | PCA0072082 | PCA0066648 |
| Sample Date | | Client Info | | 19 Jul 2023 | 05 Apr 2023 | 02 Feb 2022 |
| Machine Age | hrs | Client Info | | 26001 | 26001 | 26001 |
| Oil Age | hrs | Client Info | | 26001 | 26001 | 26001 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | ABNORMAL | 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 | 48 | 40 | 62 |
| Chromium | ppm | ASTM D5185m | >20 | 5 | 2 | 2 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 5 | 2 |
| Lead | ppm | ASTM D5185m | >40 | 3 | 2 | 2 |
| Copper | ppm | ASTM D5185m | >330 | 47 | 29 | 99 |
| Tin | ppm | ASTM D5185m | >15 | 2 | 2 | <1 |
| Antimony | ppm | ASTM D5185m | | | | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 0 | 4 | 9 | 29 |
| Barium | ppm | ASTM D5185m | 0 | 2 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 60 | 64 | 57 | 50 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 1010 | 964 | 883 | 651 |
| Calcium | ppm | ASTM D5185m | 1070 | 1142 | 1015 | 1442 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1034 | 923 | 773 |
| Zinc | ppm | ASTM D5185m | 1270 | 1276 | 1132 | 948 |
| Sulfur | | AOTH DELOF | | | | 0004 |
| Sullui | ppm | ASTM D5185m | 2060 | 3069 | 2927 | 2024 |
| CONTAMINAN | | method | 2060 limit/base | 3069 current | 2927 history1 | 2024 history2 |
| | | method | | | | |
| CONTAMINAN | TS | method | limit/base | current | history1 | history2 |
| CONTAMINAN Silicon | TS ppm | method ASTM D5185m | limit/base | current 18 | history1 ▲ 49 | history2 7 |
| CONTAMINAN Silicon Sodium | TS ppm ppm | method ASTM D5185m ASTM D5185m | limit/base >25 | current 18 0 | history1 49 5 | history2 7 7 |
| CONTAMINAN Silicon Sodium Potassium | TS ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m | limit/base >25 >20 | current 18 0 3 | history1 ▲ 49 5 <1 | history2 7 7 2 |
| CONTAMINAN Silicon Sodium Potassium INFRA-RED | TS ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m method | limit/base >25 >20 limit/base | current 18 0 3 current | history1 ▲ 49 5 <1 history1 | history2 7 7 2 history2 |
| CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % | TS ppm ppm ppm | method ASTM D5185m ASTM D5185m ASTM D5185m method | limit/base >25 >20 limit/base >3 | current 18 0 3 current 0.4 | history1 ▲ 49 5 <1 history1 0.2 | history2 7 7 2 history2 0.4 |
| CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration | TS ppm ppm ppm % Abs/cm Abs/.1mm | method ASTM D5185m ASTM D5185m ASTM D5185m • ASTM D7844 *ASTM D7824 | limit/base >25 >20 limit/base >3 >20 | current 18 0 3 current 0.4 8.7 | history1 ▲ 49 5 <1 history1 0.2 8.1 | history2 7 7 2 history2 0.4 10.7 |
| CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation | TS ppm ppm ppm % Abs/cm Abs/.1mm | method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415 | limit/base >25 >20 limit/base >3 >20 >30 | current 18 0 3 current 0.4 8.7 21.3 | history1 ▲ 49 5 <1 history1 0.2 8.1 20.3 | history2 7 2 history2 0.4 10.7 23.5 |
| CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE | TS ppm ppm ppm % Abs/cm Abs/cm Abs/1mm | method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7615 method | limit/base >25 >20 limit/base >3 >20 >30 limit/base | current 18 0 3 current 0.4 8.7 21.3 current | history1 ▲ 49 5 <1 history1 0.2 8.1 20.3 history1 | history2 7 7 2 history2 0.4 10.7 23.5 history2 |



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Certificate L2367

Laboratory

Sample No.