

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine

PURUS SYNTHETIC BLEND 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

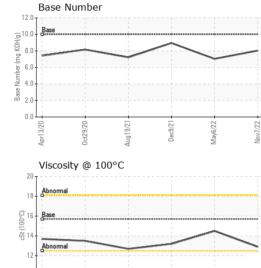
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| - / | | Apr2020 | Oct2020 Aug202 | Dec2021 May2022 | Nov2022 | |
|------------------|---------------|-------------|----------------|-----------------|-------------|-------------|
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | RW0004059 | RW0002828 | RW0002392 |
| Sample Date | | Client Info | | 07 Nov 2022 | 06 May 2022 | 09 Dec 2021 |
| Machine Age | mls | Client Info | | 1160735 | 1142320 | 1119923 |
| Oil Age | mls | Client Info | | 16000 | 16000 | 16000 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATIO | N | 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 | 94 | 60 | 22 |
| Chromium | ppm | ASTM D5185m | >20 | 3 | 3 | 1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 1 |
| Silver | ppm | ASTM D5185m | >3 | <1 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 2 | 1 |
| Lead | ppm | ASTM D5185m | >40 | 3 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 39 | 127 | 6 |
| Tin | ppm | ASTM D5185m | >15 | 2 | 2 | 1 |
| Antimony | ppm | ASTM D5185m | | | | |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 15 | 32 | 14 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 72 | 65 | 54 |
| Manganese | ppm | ASTM D5185m | | 2 | 1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 776 | 431 | 843 |
| Calcium | ppm | ASTM D5185m | | 1456 | 1450 | 1286 |
| Phosphorus | ppm | ASTM D5185m | | 1060 | 921 | 1048 |
| Zinc | ppm | ASTM D5185m | | 1346 | 1106 | 1203 |
| Sulfur | ppm | ASTM D5185m | | 3768 | 2688 | 2932 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 12 | 10 | 17 |
| Sodium | ppm | ASTM D5185m | | 2 | 1 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 2 | <1 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | >3 | 0.6 | 0.4 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 11.6 | 15.2 | 9.2 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.9 | 23.5 | 20.7 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 20.5 | 24.3 | 17.1 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10 | 8.04 | 7.04 | 8.96 |
| | | | | | | |



Apr13/20

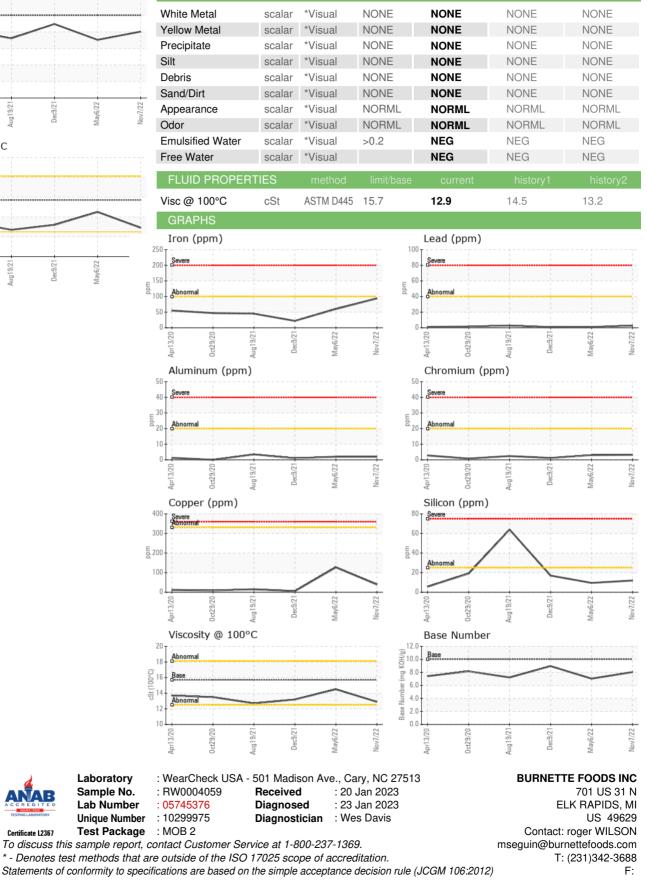
OIL ANALYSIS REPORT



Aug19/21.

Dec9/71

May6/22



Certificate L2367

Laboratory

Sample No.