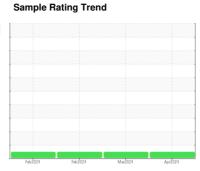


OIL ANALYSIS REPORT



(4827UA) 834031 Natural Gas Engine {not provided} (--- GAL





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Metal levels are typical for a new component breaking in.

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.

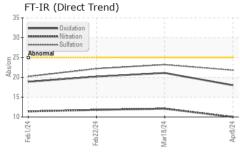
| .) | | Feb 202 | 4 Feb 2024 | Mar2024 A | or2024 | |
|-------------------|------------|-------------|------------|-------------|-------------|-------------|
| SAMPLE INFOR | RMATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | GFL0111882 | GFL0111899 | GFL0108281 |
| Sample Date | | Client Info | | 08 Apr 2024 | 18 Mar 2024 | 22 Feb 2024 |
| Machine Age | hrs | Client Info | | 759 | 622 | 467 |
| Oil Age | hrs | Client Info | | 759 | 622 | 467 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINA | TION | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| WEAR META | LS | method | limit/base | current | history1 | history2 |
| ron | ppm | ASTM D5185m | >50 | 41 | 41 | 42 |
| Chromium | ppm | ASTM D5185m | >4 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 2 | 1 | 0 |
| itanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >9 | 3 | 2 | 2 |
| _ead | ppm | ASTM D5185m | >30 | 2 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >35 | 17 | 18 | 20 |
| -in | ppm | ASTM D5185m | >4 | 2 | 1 | <1 |
| /anadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 2 | 6 | 8 |
| Barium | ppm | ASTM D5185m | | 5 | 3 | 13 |
| Molybdenum | ppm | ASTM D5185m | | 52 | 52 | 55 |
| Manganese | ppm | ASTM D5185m | | 12 | 13 | 13 |
| /lagnesium | ppm | ASTM D5185m | | 780 | 748 | 728 |
| Calcium | ppm | ASTM D5185m | | 1289 | 1228 | 1138 |
| Phosphorus | ppm | ASTM D5185m | | 733 | 623 | 661 |
| Zinc | ppm | ASTM D5185m | | 954 | 914 | 881 |
| Sulfur | ppm | ASTM D5185m | | 2628 | 2356 | 2394 |
| CONTAMINAL | NTS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >+100 | 31 | 36 | 40 |
| Sodium | ppm | ASTM D5185m | | 5 | 4 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 3 | 3 |
| INFRA-RED | | method | limit/base | current | history1 | history2 |
| Soot % | % | *ASTM D7844 | | 0.4 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.0 | 12.1 | 11.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.8 | 23.2 | 22.2 |
| FLUID DEGRA | DATION | method | limit/base | current | history1 | history2 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.0 | 21.1 | 20.2 |
| Paga Number (PNI) | ma 1/011/a | ACTM DOOGS | | E 7 | 2.6 | 0.6 |

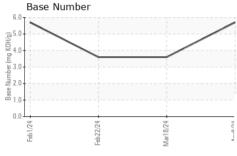
5.7

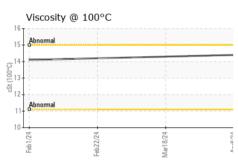
Base Number (BN) mg KOH/g ASTM D2896



OIL ANALYSIS REPORT



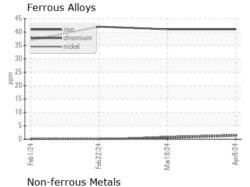


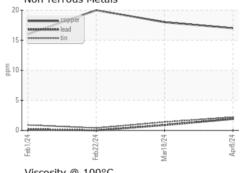


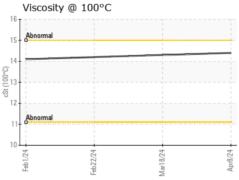
| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | 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 | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

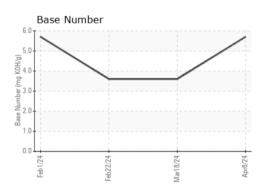
| FLUID PROP | ERHES | method | | history1 | history2 |
|--------------|-------|-----------|------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 14.4 | 14.3 | 14.2 |

GRAPHS













Certificate 12367

Laboratory Sample No.

: GFL0111882 Lab Number : 06143536 Unique Number : 10968344

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Apr 2024 **Tested**

: 10 Apr 2024 Diagnosed : 10 Apr 2024 - Wes Davis

GFL Environmental - 652 - Fredericksburg Hauling

10954 Houser Drive Fredericksburg, VA US 22408

Contact: WILLIAM MILO wmilo@gflenv.com T:

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)

F: