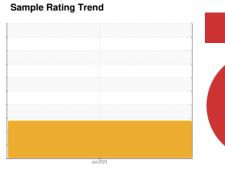


OIL ANALYSIS REPORT



Machine Id **Gmc 772**

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

| | | | | Jun 2024 | | |
|---|--|---|--|---|-------------------------------------|----------------------------|
| | | | | | | |
| SAMPLE INFOR | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | PCA0127658 | | |
| Sample Date | | Client Info | | 19 Jun 2024 | | |
| Machine Age | mls | Client Info | | 239753 | | |
| Oil Age | mls | Client Info | | 10000 | | |
| Oil Changed | | Client Info | | Changed | | |
| Sample Status | | | | SEVERE | | |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | | |
| Glycol | | WC Method | | NEG | | |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >100 | 16 | | |
| Chromium | ppm | ASTM D5185m | >20 | . c <1 | | |
| Nickel | ppm | ASTM D5185m | >4 | <1 | | |
| Titanium | ppm | ASTM D5185m | | 1 | | |
| Silver | ppm | ASTM D5185m | >3 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | | |
| Lead | ppm | ASTM D5185m | >40 | 4 | | |
| Copper | ppm | ASTM D5185m | >330 | 2 | | |
| Tin | ppm | ASTM D5185m | >15 | <1 | | |
| Vanadium | ppm | ASTM D5185m | | <1 | | |
| Cadmium | ppm | ASTM D5185m | | <1 | | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base 250 | current 29 | history1 | history2 |
| | ppm | | | | | |
| Boron | | ASTM D5185m | 250 | 29 | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | 250 10 | 29 0 | | |
| Boron Barium Molybdenum | ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 | 29 0 59 | | |
| Boron Barium Molybdenum Manganese | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 | 29 0 59 <1 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 | 29 0 59 <1 560 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 | 29 0 59 <1 560 1341 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 | 29 0 59 <1 560 1341 956 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 | 29 0 59 <1 560 1341 956 1162 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 | 29 0 59 <1 560 1341 956 1162 3600 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base | 29 0 59 <1 560 1341 956 1162 3600 current | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 | 29 0 59 <1 560 1341 956 1162 3600 current | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 | 29 0 59 <1 560 1341 956 1162 3600 current 9 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel | ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 17.8 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED | ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 17.8 current | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % | ppm | ASTM D5185m | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 ▲ 17.8 current 0.9 | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration | ppm | ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145 | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 17.8 current 0.9 9.0 | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI | ppm | ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7624 *ASTM D7624 *ASTM D7415 method | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30 limit/base | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 17.8 current 0.9 9.0 19.9 current | history1 history1 | history2 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation | ppm | ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145 | 250 10 100 450 3000 1150 1350 4250 limit/base >25 >158 >20 >5 limit/base >3 >20 >30 | 29 0 59 <1 560 1341 956 1162 3600 current 9 1 5 17.8 current 0.9 9.0 19.9 | history1 history1 history1 history1 | history2 history2 history2 |



OIL ANALYSIS REPORT





Certificate 12367

Sample No.

: PCA0127658 Lab Number : 06219025 Unique Number : 11097222

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Jun 2024 **Tested** : 27 Jun 2024 : 27 Jun 2024 - Wes Davis

Diagnosed Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

 st - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

5707 LANGWORTH OAKDALE, CA US 95361

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