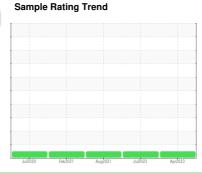


OIL ANALYSIS REPORT

\$COF [98169659] **6420 WEST**

Component Gearbox

GEAR OIL ISO 460 (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

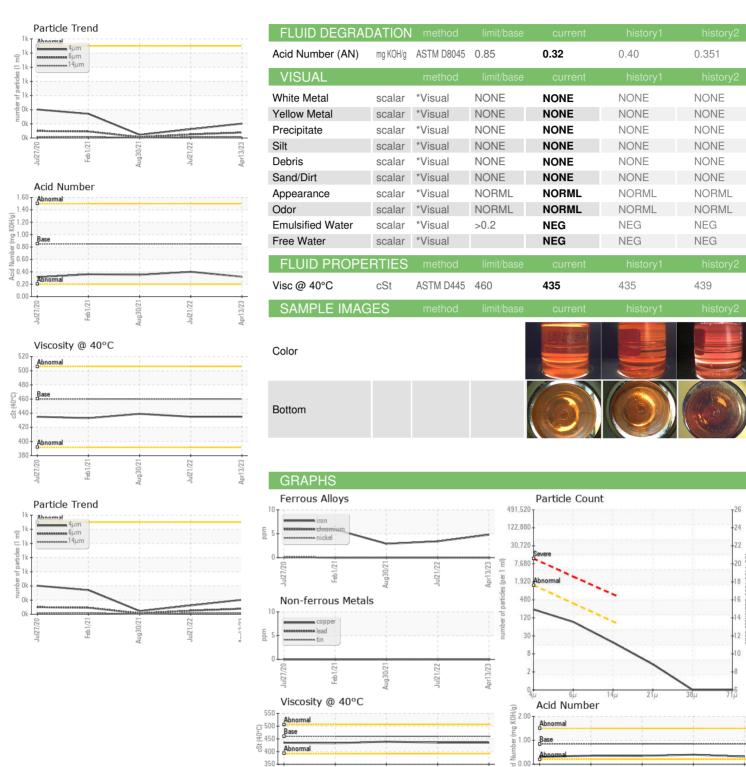
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFOR | AOLTAM | method | limit/base | current | history1 | history2 |
|---|--|--|---|--|--|--|
| Sample Number | WATION | Client Info | — III III Dasc | PCA0088318 | PCA0073945 | PCA0056508 |
| Sample Date | | Client Info | | 13 Apr 2023 | 21 Jul 2022 | 30 Aug 2021 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Filtered | Filtered | Filtered |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINAT | ION | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| WEAR METAL | S | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >200 | 5 | 3 | 3 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 3 | 3 | 3 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | >5 | | | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 0 | history1 2 | history2 0 |
| | ppm | | | | | |
| Boron | | ASTM D5185m | 50 | 0 | 2 | 0 |
| Boron Barium Molybdenum Manganese | ppm | ASTM D5185m ASTM D5185m | 50 15 15 | 0 0 0 <1 | 2 | 0 |
| Boron Barium Molybdenum | ppm | ASTM D5185m ASTM D5185m ASTM D5185m | 50 15 | 0 0 0 | 2 0 0 0 | 0 0 0 <1 0 |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 15 15 50 | 0 0 0 <1 0 | 2 0 0 0 0 0 | 0 0 0 <1 0 |
| 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 | 50 15 15 50 50 350 | 0 0 0 <1 0 3 292 | 2 0 0 0 0 0 1 231 | 0 0 0 <1 0 2 316 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | 50 15 15 50 50 350 100 | 0 0 0 <1 0 3 292 | 2 0 0 0 0 0 1 231 8 | 0 0 0 <1 0 2 316 |
| 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 | 50 15 15 50 50 350 | 0 0 0 <1 0 3 292 | 2 0 0 0 0 0 1 231 | 0 0 0 <1 0 2 316 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN | ppm 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 ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base | 0 0 0 <1 0 3 292 | 2 0 0 0 0 1 231 8 302 history1 | 0 0 0 <1 0 2 316 12 292 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur | ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base | 0 0 0 <1 0 3 292 10 387 current | 2 0 0 0 0 1 231 8 302 history1 | 0 0 0 <1 0 2 316 12 292 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base >50 | 0 0 0 <1 0 3 292 10 387 | 2 0 0 0 0 1 231 8 302 history1 <1 | 0 0 0 <1 0 2 316 12 292 history2 0 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium | ppm | ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base >50 | 0 0 0 <1 0 3 292 10 387 current | 2 0 0 0 0 1 231 8 302 history1 | 0 0 0 <1 0 2 316 12 292 history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI | ppm | ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base >50 >20 | 0 0 0 0 <1 0 3 292 10 387 current 0 0 | 2 0 0 0 0 1 231 8 302 history1 <1 0 | 0 0 0 <1 0 2 316 12 292 history2 0 0 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm | ppm | ASTM D5185m Method ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base >50 | 0 0 0 0 <1 0 3 292 10 387 current 0 0 0 | 2 0 0 0 0 1 231 8 302 history1 <1 0 history1 | 0 0 0 <1 0 2 316 12 292 history2 0 0 0 history2 46 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm | ppm | ASTM D5185m METHOD ASTM D5185m | 50 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 | 0 0 0 0 0 3 292 10 387 current 0 0 current 203 77 | 2 0 0 0 0 1 231 8 302 history1 <1 <1 0 history1 124 51 | 0 0 0 0 <1 0 2 316 12 292 history2 0 0 0 history2 46 13 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm | ppm | ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 | 50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 | 0 0 0 0 0 3 292 10 387 | 2 0 0 0 0 1 231 8 302 history1 <1 <1 0 history1 124 51 15 | 0 0 0 <1 0 2 316 12 292 history2 0 0 0 history2 46 13 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm | ppm | ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 | 50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 >20 | 0 0 0 0 0 3 292 10 387 | 2 0 0 0 0 1 231 8 302 history1 <1 <1 0 history1 124 51 15 6 | 0 0 0 <1 0 2 316 12 292 history2 0 0 0 0 history2 46 13 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >21µm Particles >38µm | ppm | ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 | 50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 >20 >4 | 0 0 0 0 3 292 10 387 current 0 0 current 203 77 16 3 0 | 2 0 0 0 0 1 231 8 302 history1 <1 0 history1 124 51 15 6 1 | 0 0 0 0 2 316 12 292 history2 0 0 0 history2 46 13 2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium FLUID CLEANI Particles >4µm Particles >6µm Particles >14µm Particles >21µm | ppm | ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 | 50 15 15 15 50 50 350 100 12500 limit/base >50 >20 limit/base >1300 >320 >80 >20 >4 | 0 0 0 0 0 3 292 10 387 | 2 0 0 0 0 1 231 8 302 history1 <1 <1 0 history1 124 51 15 6 | 0 0 0 <1 0 2 316 12 292 history2 0 0 0 0 history2 46 13 2 |



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: PCA0088318 : 05835211

Tested Unique Number: 10454014 Diagnosed

Feb1/21

Received : 02 May 2023 : 03 May 2023

Jul21/22

: 04 May 2023 - Jonathan Hester

Apr13/23

KraftHeinz - Springfield - Plant 8311 PCA

2035 E BENNETT SPRINGFIELD, MO US 65804

Contact: Service Manager

Test Package : IND 2 (Additional Tests: PrtCount) 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)

Aug30/21

T: F: