

OIL ANALYSIS REPORT

Sample Rating Trend







TOTE 48

Component New (Unused) Oil Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Fluid Condition

Viscosity of sample indicates oil is within 5W30 range.

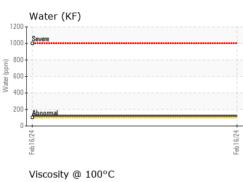
| | | method | iiiiii/base | current | Thistory I | nistoryz |
|---|--|---|-------------|--|--------------------------------------|------------------------------|
| Sample Number | | Client Info | | TLC0000769 | | |
| Sample Date | | Client Info | | 16 Feb 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >5 | 0 | | |
| Chromium | ppm | ASTM D5185m | >5 | 0 | | |
| Nickel | ppm | ASTM D5185m | >5 | 0 | | |
| Titanium | ppm | ASTM D5185m | | <1 | | |
| Silver | ppm | ASTM D5185m | >5 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >5 | 1 | | |
| Lead | ppm | ASTM D5185m | >5 | <1 | | |
| Copper | ppm | ASTM D5185m | | 0 | | |
| Tin | ppm | ASTM D5185m | >5 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| | | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| ADDITIVES Boron | ppm | method ASTM D5185m | limit/base | current 129 | history1 | history2 |
| | ppm ppm | | limit/base | | | |
| Boron | | ASTM D5185m | limit/base | 129 | | |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | limit/base | 129 0 | | |
| Boron Barium Molybdenum Manganese Magnesium | ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 784 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 | | |
| 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 | limit/base | 129 0 89 <1 303 1322 673 784 | | |
| 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 | | 129 0 89 <1 303 1322 673 784 2395 | | |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS | 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 | limit/base | 129 0 89 <1 303 1322 673 784 2395 current | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 784 2395 current 8 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium | ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 784 2395 current 8 < | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 784 2395 <u>current</u> 8 <1 1 | history1 | history2 |
| Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water | ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D5185m | limit/base | 129 0 89 <1 303 1322 673 784 2395 <u>current</u> 8 <1 1 0.012 | history1 | history2 |



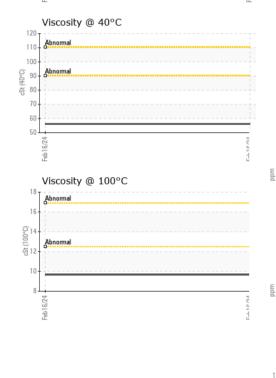
OIL ANALYSIS REPORT

* - 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)







| | | VISUAL | | method | limit/base | current | history1 | history2 |
|---|---------------|--|-------------------------------------|--|---|-------------|---------------|---|
| | | White Metal | scalar | *Visual | NONE | NONE | | |
| | | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | Precipitate | scalar | *Visual | NONE | NONE | | |
| | | Silt | scalar | *Visual | NONE | NONE | | |
| | | Debris | scalar | *Visual | NONE | NONE | | |
| | | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Feb16/24 - | Appearance | scalar | *Visual | NORML | NORML | | |
| | Feb1 | Odor | scalar | *Visual | NORML | NORML | | |
| | | Emulsified Water | scalar | *Visual | | NEG | | |
| | | Free Water | scalar | *Visual | | NEG | | |
| | | FLUID PROPER | | method | limit/base | current | history1 | history2 |
| | | Visc @ 40°C | cSt | ASTM D445 | | 56.17 | | |
| | | Visc @ 100°C | cSt | ASTM D445 | | 9.67 | | |
| | | Viscosity Index (VI) | Scale | ASTM D2270 | | 157 | | |
| | | SAMPLE IMAGE | | method | limit/base | current | history1 | history2 |
| | Feb16/24 - | SAIVIFLE IMAGE | 5 | method | IIIIII/Dase | | TIIStOLA | TIIStOF y2 |
| | Feb | Color | | | | a. | no image | no image |
| | | Bottom | | | | | no image | no image |
| | C.416DA | Ferrous Alloys | | | Feb16/24 | | | |
| | 1110.00 | Non-ferrous Meta | ls | | Fet | | | |
| | - | Viscosity @ 40°C | | | Feb16/24 | Acid Number | | |
| | | (J-00 + Abnormal (J-00 + NO 40 + FZ/91(9) | | | Feb 16/24 | .0 | | |
| TESTING LABORATORY U Certificate L2367 | ample report, | : WearCheck USA - 50 : TLC0000769 : 06099538 | Rece Teste Diagr ests: FT- | ived : 23 ed : 28 nosed : 28 IR, ICP-New(| , NC 27513 Feb 2024 Feb 2024 Feb 2024 - D Oil, KV100, | oug Bogart | Contact: MICH | SUPPLY PRO EMPIRE WA ATLANTA, GA US 3035 |

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