

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id

E13 - DURON 15W40 E13 DURON 15W40 Bulk Tank New (Unused) Oil

Fluid {not provided} (--- GAL)

Recommendation

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

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|----------|----------|
| Sample Number | | Client Info | | KFS0005269 | | |
| Sample Date | | Client Info | | 22 Apr 2024 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| CONTAMINATION | | method | limit/base | current | history1 | history2 |
| Water | | WC Method | | NEG | | |
| 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 | | 0 | | |
| Silver | ppm | ASTM D5185m | >5 | 0 | | |
| Aluminum | ppm | ASTM D5185m | >5 | 0 | | |
| Lead | ppm | ASTM D5185m | >5 | 0 | | |
| Copper | ppm | ASTM D5185m | >5 | 0 | | |
| Tin | ppm | ASTM D5185m | >5 | 0 | | |
| Vanadium | ppm | ASTM D5185m | | 0 | | |
| Cadmium | ppm | ASTM D5185m | | 0 | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 0 | | |
| Barium | ppm | ASTM D5185m | | 0 | | |
| Molybdenum | ppm | ASTM D5185m | | 55 | | |
| Manganese | ppm | ASTM D5185m | | 0 | | |
| Magnesium | ppm | ASTM D5185m | | 953 | | |
| Calcium | ppm | ASTM D5185m | | 1156 | | |
| Phosphorus | ppm | ASTM D5185m | | 1105 | | |
| Zinc | ppm | ASTM D5185m | | 1308 | | |
| Sulfur | ppm | ASTM D5185m | | 3832 | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >15 | 4 | | |
| Sodium | ppm | ASTM D5185m | | 0 | | |
| Potassium | ppm | ASTM D5185m | >20 | 0 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 2.03 | | |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 9.44 | | |



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| т, | | VISUAL | | method | limit/base | current | history1 | history2 |
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| | | 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 | | |
| Apr22/24 | Apr22/24 | Appearance | scalar | *Visual | NORML | NORML | | |
| Apr | Apı | Odor | scalar | *Visual | NORML | NORML | | |
| Viscosity @ 100°C | | Emulsified Water | scalar | *Visual | | NEG | | |
| | | Free Water | scalar | *Visual | | NEG | | |
| Abnormal | | FLUID PROPERT | TIES | method | limit/base | current | history1 | history2 |
| | | Visc @ 40°C | cSt | ASTM D445 | | 107.2 | | |
| | | Visc @ 100°C | cSt | ASTM D445 | | 14.22 | | |
| Abnormal | | Viscosity Index (VI) | Scale | ASTM D2270 | | 134 | | |
| | | SAMPLE IMAGES | S | method | limit/base | current | history1 | history2 |
| Viscosity @ 100°C | Apr22/24 | Color | | | | • | no image | no image |
| Abnormal | | Bottom | | | | | no image | no image |
| Abnormal D | | GRAPHS | | | | | | |
| | | Ferrous Alloys | | | | | | |
| Apr22/24 | 6166- | 10 8 1 10 10 | | | | | | |
| Ap | A. | chromium | | | | | | |
| Viscosity @ 40°C | | E 4 | | | | | | |
| Abnormal | | 2 | | | | | | |
| Abnormal | | 0 4 1 0 | | | 24 | | | |
| | | Apr22/24 | | | Apr22/24 | | | |
| | | ⊲ Non-ferrous Metal | s | | 4 | | | |
| | | | | | | | | |
| Abnormal | | 8 - copper | | | | | | |
| | | E 6tin | | | | | | |
| Apr22/24 | 1000 | 2 | | | | | | |
| de | V | | | | - | | | |
| | | 4pr22/24 | | | Apr22/24 | | | |
| | | | | | Ap | | | |
| | | Viscosity @ 40°C | | | | Acid Number | | |
| | | Abnormal | | | (B/2.9 HOX 2.0 |] | | |
| | 1JeU | 2 100 | | | Ĕ 1 G | - | | |
| | 11 10 | ±100 - Abnormal | | | and 1.0 Page 1.0 N 0.9 | | | |
| | | 90 - C | | | 2.0 Vi Vi Vi Vi Vi | | | |
| | | 525 | | | | | | \$61 |
| | | Apr22/24 | | | Apr22/24 | Apr22/24 | | ACCCon |
| Sam Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Contraction Co | ple No. Number e Number | WearCheck USA - 50 : KFS0005269 : 06158205 : 10993628 : IND 2 (Additional Tes | Recei Teste Diagr | ived : 23 ed : 25 nosed : 25 | r, NC 27513 3 Apr 2024 5 Apr 2024 Apr 2024 - Jonat | han Hester | 4805 SEC MUSCL | CONSTELLIL COND STREI E SHOALS, J US 356 Randy Nicho |

Report Id: CONMUSAL [WUSCAR] 06158205 (Generated: 04/25/2024 16:23:16) Rev: 1 Contact/Location: CONSTELLIUM - Randy Nichols - CONMUSAL