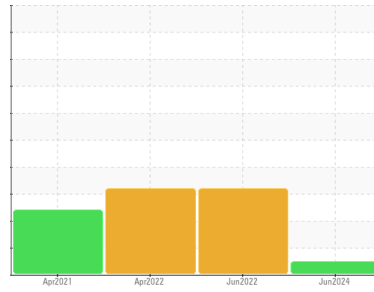




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
E-156
 Component
Right Final Drive
 Fluid
PHILLIPS 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | WC0900337 | WC0663509 | WC0663490 |
| Sample Date | Client Info | | | 19 Jun 2024 | 13 Jun 2022 | 22 Apr 2022 |
| Machine Age | hrs | Client Info | | 8547 | 5667 | 5353 |
| Oil Age | hrs | Client Info | | 559 | 1232 | 918 |
| Oil Changed | Client Info | | | Changed | Changed | Not Changed |
| Sample Status | | | | NORMAL | ABNORMAL | ABNORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.2 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >500 | 288 | ▲ 539 | 182 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 3 | 1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 3 | 2 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 5 | ● 40 | ● 25 |
| Lead | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >50 | <1 | 1 | <1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | >5 | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | <1 | 0 |

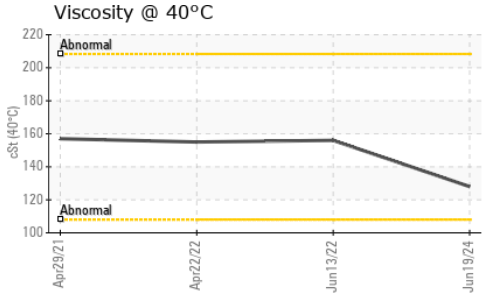
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 2 | 5 | 5 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | <1 | 1 | 1 |
| Manganese | ppm | ASTM D5185m | | 1 | 4 | 2 |
| Magnesium | ppm | ASTM D5185m | | 5 | 13 | 10 |
| Calcium | ppm | ASTM D5185m | | 73 | 2347 | 2588 |
| Phosphorus | ppm | ASTM D5185m | | 372 | 855 | 942 |
| Zinc | ppm | ASTM D5185m | | 86 | 1013 | 1080 |
| Sulfur | ppm | ASTM D5185m | | 13804 | 6898 | 6441 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >75 | 40 | ▲ 192 | ▲ 101 |
| Sodium | ppm | ASTM D5185m | | <1 | 2 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 4 | 2 |

| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | LIGHT | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | ▲ HEAVY |
| 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |



OIL ANALYSIS REPORT

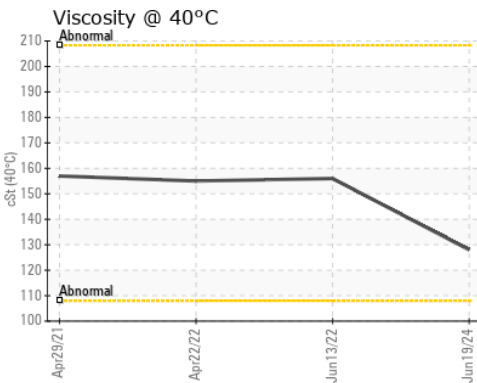
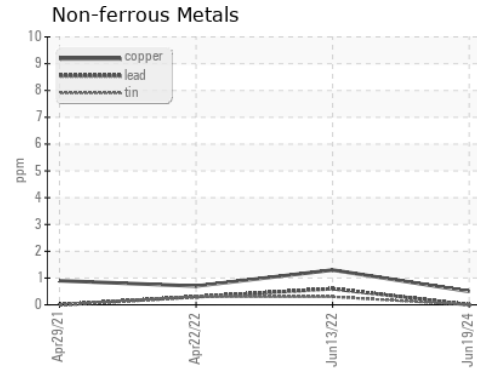
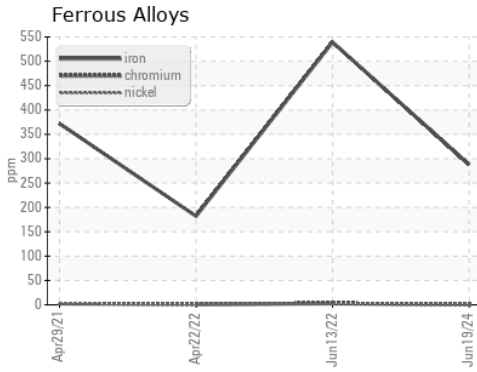


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 128 | 156 | 155 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

| | | | | | | |
|--------|--|--|--|----------|----------|----------|
| Color | | | | no image | no image | no image |
| Bottom | | | | no image | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0900337
Lab Number : 06220102
Unique Number : 11098299
Test Package : CONST

Received : 25 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Wes Davis

DUKE LAZZARA
 4201 FAYETTEVILLE RD
 RALEIGH, NC
 US 27603
 Contact: BRANDON BYRUM
 b.byrum@dukellazzara.com

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)

T:
F: