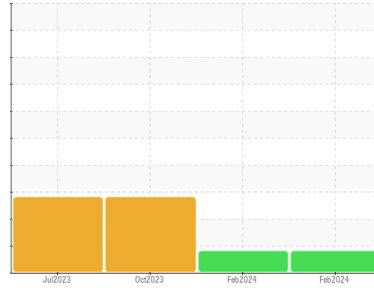


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
G.LOPES CONSTRUCTION INC./OFF-ROAD
 Machine Id
L-63
 Component
Hydraulic System
 Fluid
PETRO CANADA DURATRAN (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | PCA0109639 | PCA0098334 | PCA0098626 |
| Sample Date | Client Info | | 15 Feb 2024 | 14 Feb 2024 | 18 Oct 2023 |
| Machine Age | hrs | Client Info | 1924 | 1924 | 1513 |
| Oil Age | hrs | Client Info | 1924 | 1924 | 1513 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ATTENTION | ATTENTION | ATTENTION |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | 4 | 4 | 4 |
| Chromium | ppm | ASTM D5185m >10 | 1 | 1 | <1 |
| Nickel | ppm | ASTM D5185m >10 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >10 | 2 | 2 | 2 |
| Lead | ppm | ASTM D5185m >10 | 1 | <1 | <1 |
| Copper | ppm | ASTM D5185m >75 | 3 | 3 | 4 |
| Tin | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 110 | 0 | 0 | ▲ 0 |
| Barium | ppm | ASTM D5185m 0.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 0.0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m 1 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 13 | 7 | 7 | 1 |
| Calcium | ppm | ASTM D5185m 3610 | 200 | 201 | ▲ 214 |
| Phosphorus | ppm | ASTM D5185m 1192 | 713 | 701 | ▲ 744 |
| Zinc | ppm | ASTM D5185m 1455 | 895 | 894 | 930 |
| Sulfur | ppm | ASTM D5185m 2641 | 1677 | 1677 | ▲ 1787 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >20 | 4 | 4 | 4 |
| Sodium | ppm | ASTM D5185m | 2 | 2 | 2 |
| Potassium | ppm | ASTM D5185m >20 | 3 | 3 | <1 |

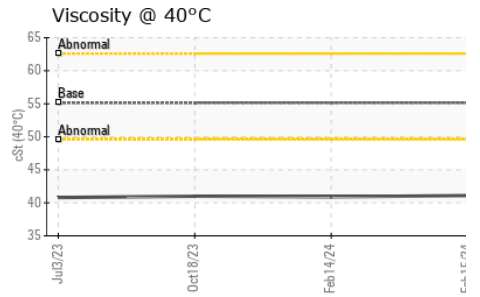
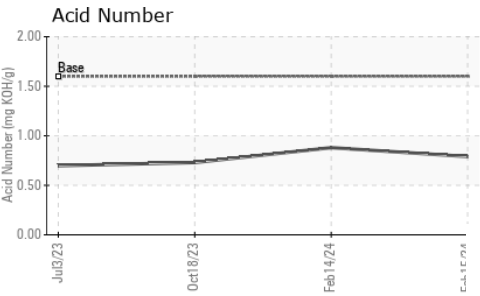
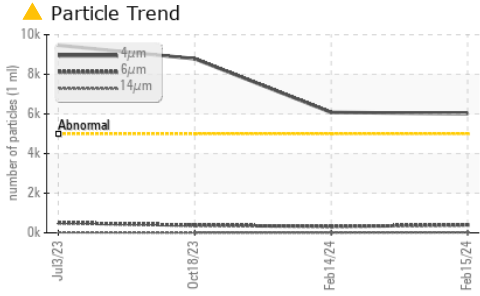
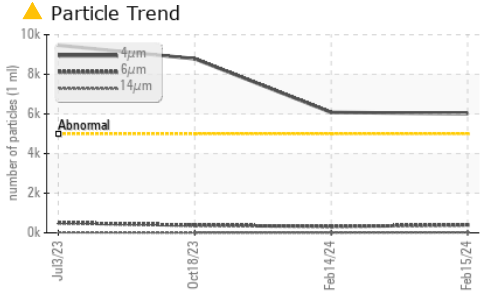
FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 | >5000 | ▲ 6016 | ▲ 6078 | ▲ 8787 |
| Particles >6µm | ASTM D7647 | >1300 | 394 | 320 | 380 |
| Particles >14µm | ASTM D7647 | >160 | 22 | 12 | 12 |
| Particles >21µm | ASTM D7647 | >40 | 5 | 3 | 3 |
| Particles >38µm | ASTM D7647 | >10 | 0 | 0 | 0 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 20/16/12 | ▲ 20/15/11 | ▲ 20/16/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 1.6 | 0.79 | 0.88 | 0.73 |

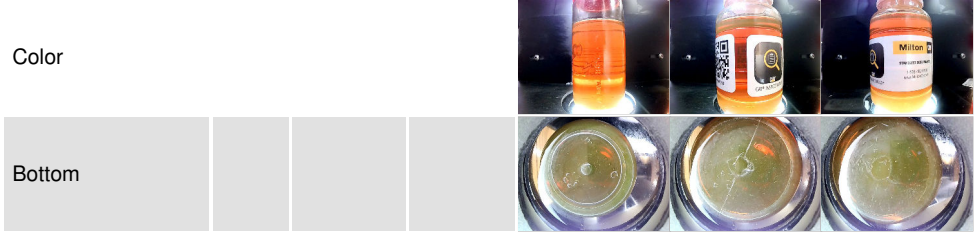
OIL ANALYSIS REPORT



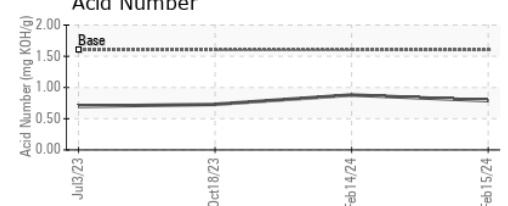
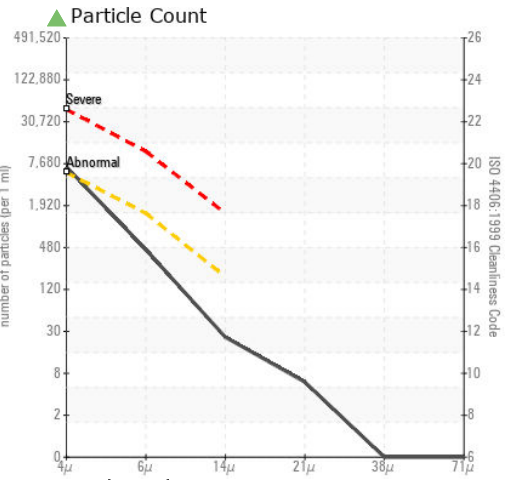
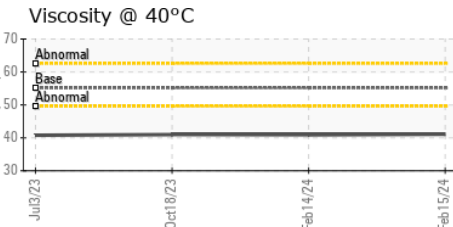
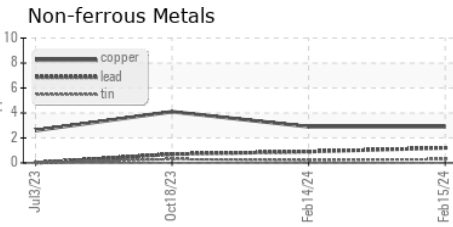
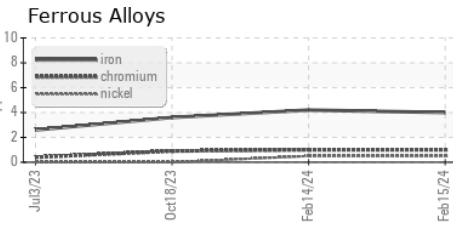
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|-------------|
| Visc @ 40°C | cSt | ASTM D445 | 55.14 | 41.1 | 40.9 ▲ 41.0 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109639
Lab Number : 06092993
Unique Number : 10885846
Test Package : MOB 2

Received : 19 Feb 2024
Tested : 20 Feb 2024
Diagnosed : 21 Feb 2024 - Don Baldrige

G LOPES CONSTRUCTION
 565 WINTHROP ST
 TAUNTON, MA
 US 02780
 Contact: BUTCH MCGRATH
 bmcgrath@glopes.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: