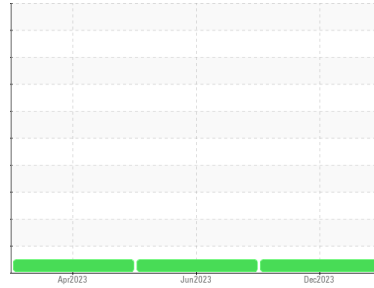




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
Q-1705B TROLLEY DRIVE GEARBOX BOP CRANE CENTER (S/N 10414049)

Component
Center Gearbox

Fluid
IRVING HDH SAE 75W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

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 INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | WC0764319 | WC0764308 | WC0764254 |
| Sample Date | Client Info | | | 14 Dec 2023 | 22 Jun 2023 | 16 Apr 2023 |
| Machine Age | yrs | Client Info | | 0 | 1 | 5 |
| Oil Age | yrs | Client Info | | 0 | 0 | 1 |
| Oil Changed | Client Info | | | Changed | N/A | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

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

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| PQ | | ASTM D8184* | | 0 | 9 | 0 |
| Iron | ppm | ASTM D5185(m) | >200 | 5 | 4 | 13 |
| Chromium | ppm | ASTM D5185(m) | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >15 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | 3 |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | <1 | 0 |
| Lead | ppm | ASTM D5185(m) | >100 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | <1 | 0 |
| Tin | ppm | ASTM D5185(m) | >25 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | >5 | 1 | 4 | 3 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |

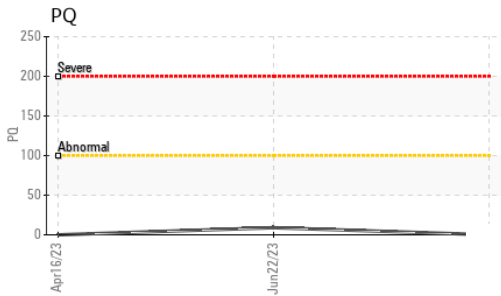
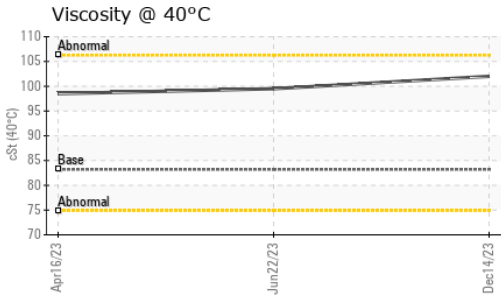
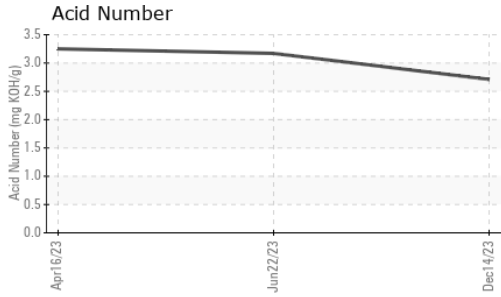
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | | 208 | 152 | 143 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | | 2 | 3 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | | 1168 | 1105 | 1103 |
| Zinc | ppm | ASTM D5185(m) | | 2 | 3 | 5 |
| Sulfur | ppm | ASTM D5185(m) | | 21642 | 22166 | 22170 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >50 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | 3 | <1 | <1 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 2.71 | 3.17 | 3.25 |



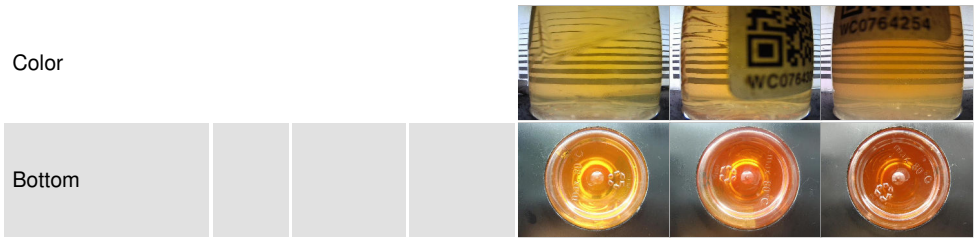
OIL ANALYSIS REPORT



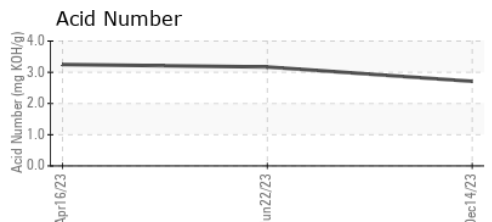
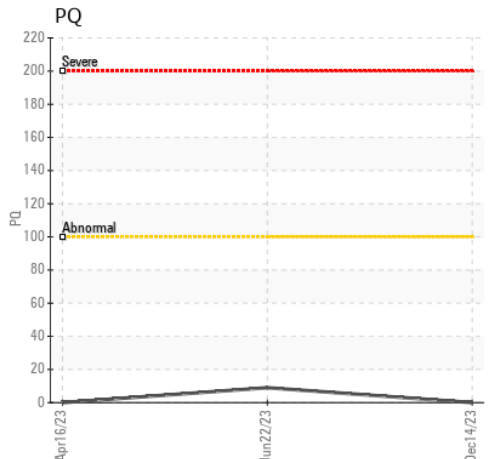
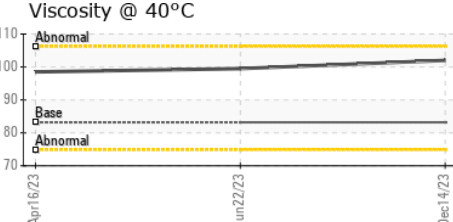
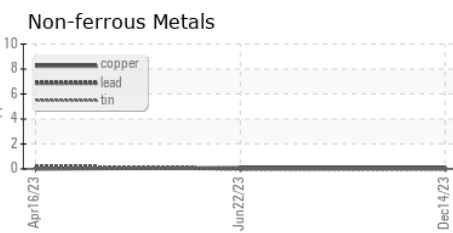
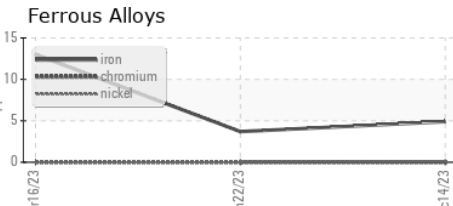
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 83.2 | 102 | 99.5 |

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0764319
Lab Number : 02606106
Unique Number : 5707192
Test Package : IND 2 (Additional Tests: TAN Man)
Received : 02 Jan 2024
Diagnosed : 02 Jan 2024
Diagnostician : Wes Davis

Parker Wellbore
 215 Water Street, Suite 802, PO Box 74
 St. John's, NL
 CA A1C 6C9
 Contact: HMDC Material Control Coordinator
 hmdc.material.control.coordinator@exxonmobil.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.