



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
RONI
 Machine Id
182
 Component
Diesel Engine
 Fluid
PETRO CANADA 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 | | | WC0899423 | --- | --- |
| Sample Date | Client Info | | | 06 Mar 2024 | --- | --- |
| Machine Age | hrs Client Info | | | 0 | --- | --- |
| Oil Age | hrs Client Info | | | 0 | --- | --- |
| Oil Changed | Client Info | | | Not Chngd | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | | <1.0 | --- | --- |
| Water | WC Method | >0.2 | | NEG | --- | --- |
| Glycol | WC Method | | | NEG | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >100 | 51 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >4 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | >3 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >20 | 1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >40 | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >330 | 2 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >15 | <1 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | | 0 | --- | --- |

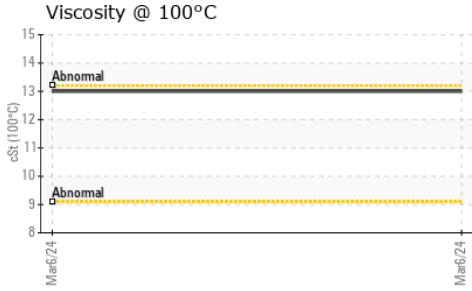
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 62 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 1013 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 1101 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 1034 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 1235 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 2585 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >25 | 2 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* | >3 | 0.5 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* | >20 | 9.0 | --- | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 19.7 | --- | --- |



OIL ANALYSIS REPORT



| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|--------|------------|---------|----------|----------|
|-------------------|--------|------------|---------|----------|----------|

| | | | | | | |
|-----------|----------|-------------|-----|-------------|-----|-----|
| Oxidation | Abs./1mm | ASTM D7414* | >25 | 16.3 | --- | --- |
|-----------|----------|-------------|-----|-------------|-----|-----|

| VISUAL | method | limit/base | current | history1 | history2 |
|--------|--------|------------|---------|----------|----------|
|--------|--------|------------|---------|----------|----------|

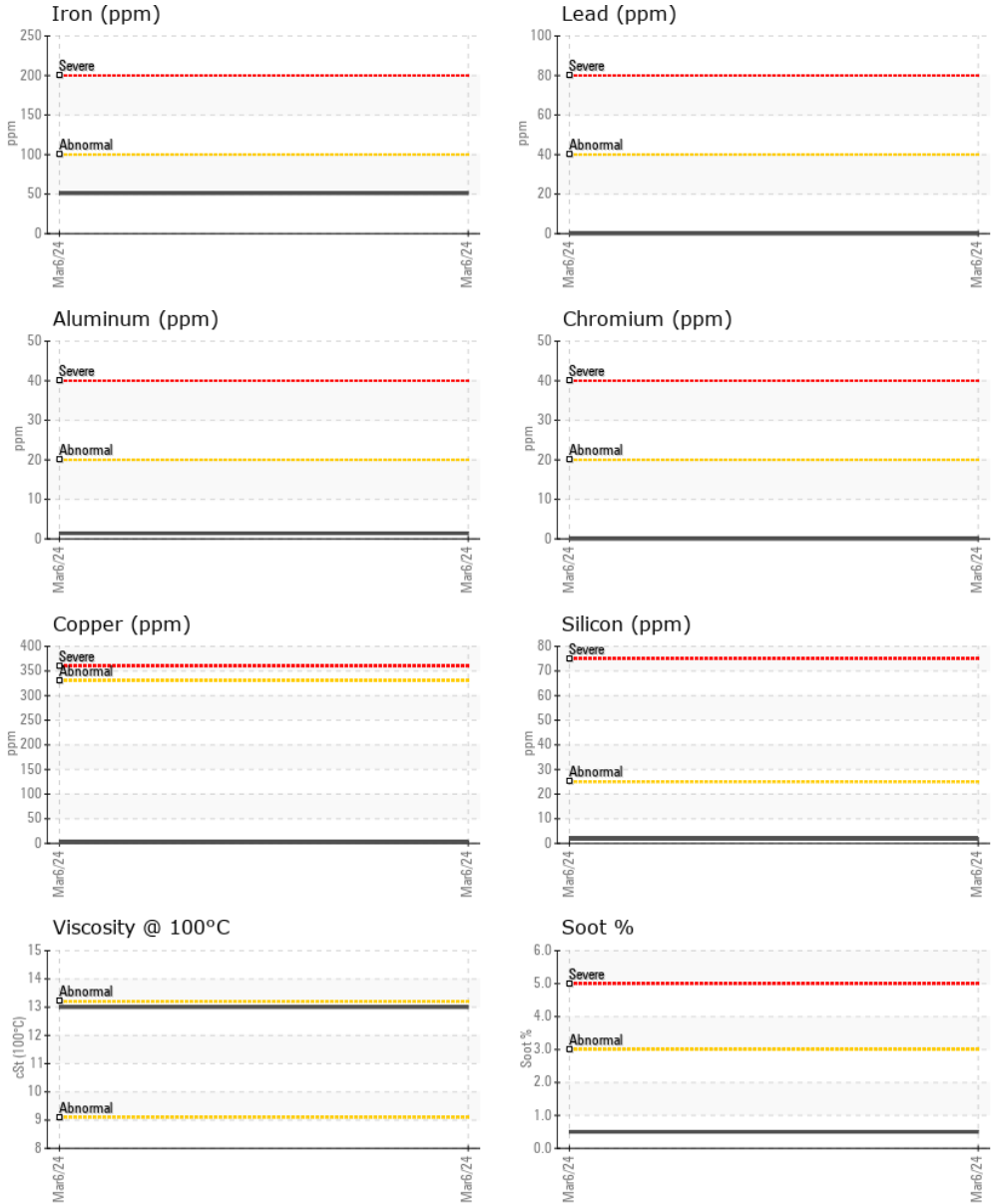
| | | | | | | |
|------------------|--------|---------|------|------------|-----|-----|
| Emulsified Water | scalar | Visual* | >0.2 | NEG | --- | --- |
|------------------|--------|---------|------|------------|-----|-----|

| | | | | | | |
|------------|--------|---------|--|------------|-----|-----|
| Free Water | scalar | Visual* | | NEG | --- | --- |
|------------|--------|---------|--|------------|-----|-----|

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
|------------------|--------|------------|---------|----------|----------|

| | | | | | | |
|--------------|-----|---------------|--|-------------|-----|-----|
| Visc @ 100°C | cSt | ASTM D7279(m) | | 13.0 | --- | --- |
|--------------|-----|---------------|--|-------------|-----|-----|

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0899423
Lab Number : **02624106**
Unique Number : 5749225
Test Package : MOBCE
Received : 25 Mar 2024
Tested : 25 Mar 2024
Diagnosed : 25 Mar 2024 - Wes Davis

RONI/IRON SHORE EXCAVATING LTD.
 100 MACINTOSH BLVD
 VAUGHAN, ON
 CA L4K 4P3
 Contact: Service Team
 service.team@roni.ca

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.

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F: