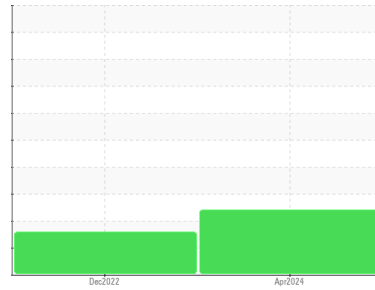




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**292203 HUSQVARNA SOFT CUT SAW**  
 Component  
**Gasoline Engine**  
 Fluid  
**MOBIL 1 FORMULA 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2 |
|---------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info |             | <b>SBP0005758</b>  | SBP0002294  | ---      |
| Sample Date   | Client Info |             | <b>05 Apr 2024</b> | 08 Dec 2022 | ---      |
| Machine Age   | hrs         | Client Info | <b>109</b>         | 42          | ---      |
| Oil Age       | hrs         | Client Info | <b>67</b>          | 42          | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | ---      |
| Sample Status |             |             | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >4.0       | <b>&lt;1.0</b> | <1.0     | ---      |
| Water  | WC Method | >0.2       | <b>NEG</b>     | NEG      | ---      |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | ---      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >150 | <b>70</b>    | 24       | ---      |
| Chromium | ppm    | ASTM D5185m >20  | <b>6</b>     | 2        | ---      |
| Nickel   | ppm    | ASTM D5185m >5   | <b>1</b>     | <1       | ---      |
| Titanium | ppm    | ASTM D5185m      | <b>1</b>     | 0        | ---      |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | ---      |
| Aluminum | ppm    | ASTM D5185m >40  | <b>11</b>    | 9        | ---      |
| Lead     | ppm    | ASTM D5185m >50  | <b>&lt;1</b> | 1        | ---      |
| Copper   | ppm    | ASTM D5185m >155 | <b>9</b>     | 27       | ---      |
| Tin      | ppm    | ASTM D5185m >10  | <b>10</b>    | 6        | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | ---      |
| Cadmium  | ppm    | ASTM D5185m      | <b>&lt;1</b> | 0        | ---      |

## ADDITIVES

|            | method | limit/base  | current     | history1 | history2 |
|------------|--------|-------------|-------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>10</b>   | 144      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>1</b>    | 6        | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>55</b>   | 65       | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>2</b>    | 3        | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>913</b>  | 600      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>1112</b> | 942      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>939</b>  | 622      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>1181</b> | 805      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>2887</b> | 2942     | ---      |

## CONTAMINANTS

|           | method | limit/base       | current     | history1 | history2 |
|-----------|--------|------------------|-------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >30  | <b>▲ 35</b> | ▲ 55     | ---      |
| Sodium    | ppm    | ASTM D5185m >400 | <b>5</b>    | 4        | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>4</b>    | <1       | ---      |

## INFRA-RED

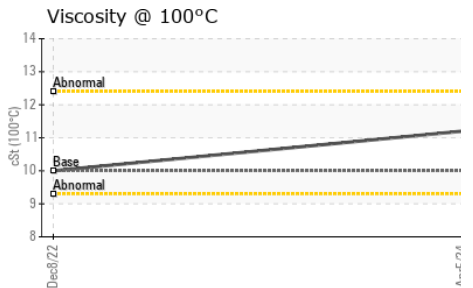
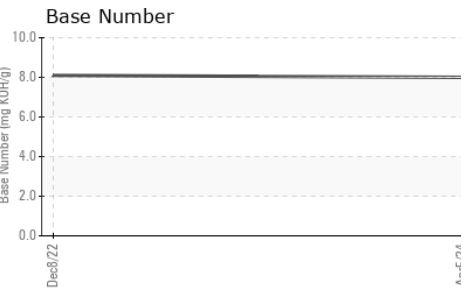
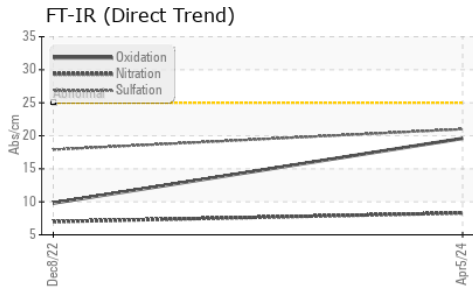
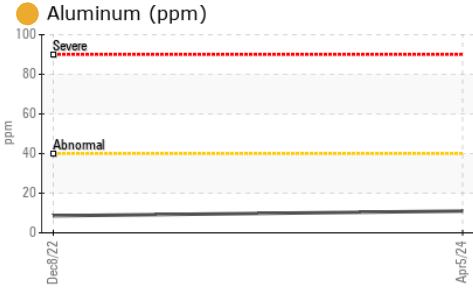
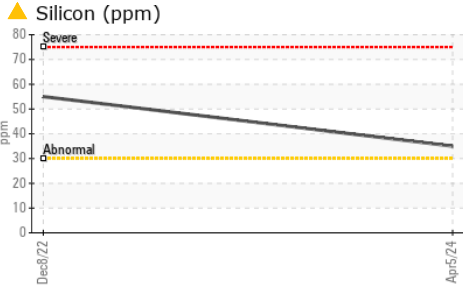
|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844     | <b>0.1</b>  | 0.1      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>8.3</b>  | 7.0      | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>21.0</b> | 17.9     | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>19.6</b> | 9.8      | ---      |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>8.0</b>  | 8.1      | ---      |



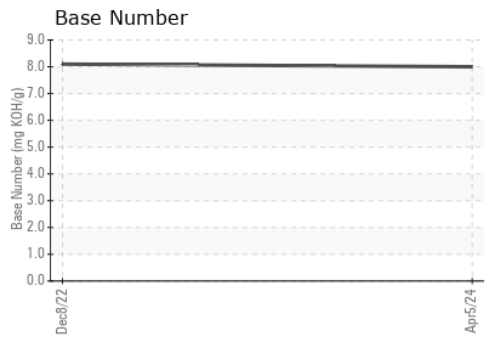
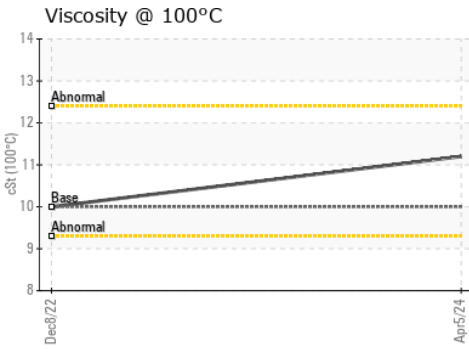
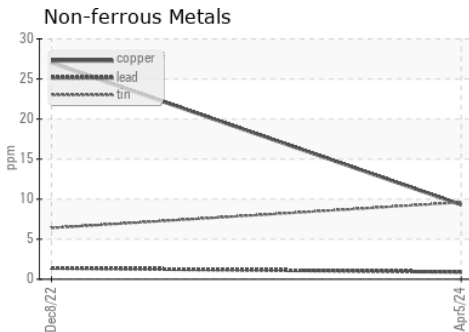
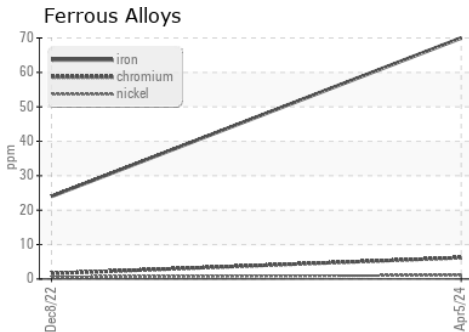
# OIL ANALYSIS REPORT



| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| 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     | ---      |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| 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 D445  | 10.0    | 11.2     | 10.0     |

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0005758      **Received** : 09 Apr 2024  
**Lab Number** : 06143528      **Tested** : 10 Apr 2024  
**Unique Number** : 10968336      **Diagnosed** : 12 Apr 2024 - Jonathan Hester  
**Test Package** : FLEET

**Constructors Inc. - 603659**  
 1815 Y Street  
 Lincoln, NE  
 US 68508  
 Contact: Loren Michael  
 LorenM@constructorslincoln.com  
 T: (402)434-2157  
 F:

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)