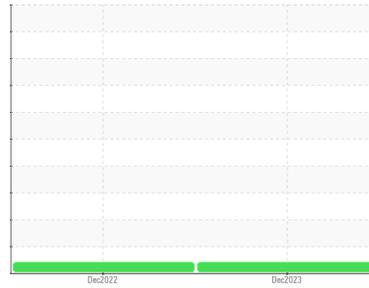




# OIL ANALYSIS REPORT

Sample Rating Trend



**VISCOSITY**



Machine Id  
**CRANE #6**

Component  
**Gearbox**

Fluid  
**MOBIL MOBILUBE HD 85W140 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as MOBIL MOBILUBE HD 85W140, however, a fluid match indicates that this fluid is ISO 460 Gear Oil. Please confirm the oil type and grade on your next sample. 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

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2 |
|---------------|-------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info |             | <b>WC0887214</b>   | WC0765204   | ---      |
| Sample Date   | Client Info |             | <b>09 Dec 2023</b> | 18 Dec 2022 | ---      |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | ---      |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | ---      |
| Sample Status |             |             | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

## CONTAMINATION

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

## WEAR METALS

|           | method | limit/base    | current | history1     | history2 |     |
|-----------|--------|---------------|---------|--------------|----------|-----|
| Iron      | ppm    | ASTM D5185(m) | >200    | <b>2</b>     | 2        | --- |
| Chromium  | ppm    | ASTM D5185(m) | >15     | <b>0</b>     | 0        | --- |
| Nickel    | ppm    | ASTM D5185(m) | >15     | <b>&lt;1</b> | <1       | --- |
| Titanium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Silver    | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Aluminum  | ppm    | ASTM D5185(m) | >25     | <b>&lt;1</b> | 0        | --- |
| Lead      | ppm    | ASTM D5185(m) | >100    | <b>0</b>     | 0        | --- |
| Copper    | ppm    | ASTM D5185(m) | >200    | <b>&lt;1</b> | 0        | --- |
| Tin       | ppm    | ASTM D5185(m) | >25     | <b>0</b>     | 0        | --- |
| Antimony  | ppm    | ASTM D5185(m) | >5      | <b>0</b>     | 0        | --- |
| Vanadium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Beryllium | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Cadmium   | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |

## ADDITIVES

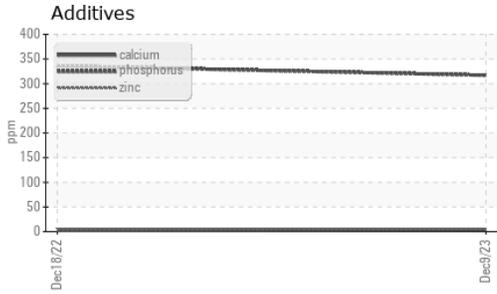
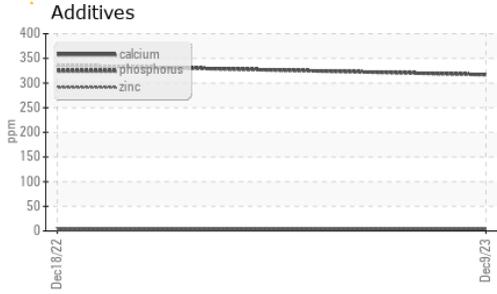
|            | method | limit/base    | current | history1     | history2 |     |
|------------|--------|---------------|---------|--------------|----------|-----|
| Boron      | ppm    | ASTM D5185(m) |         | <b>3</b>     | 4        | --- |
| Barium     | ppm    | ASTM D5185(m) |         | <b>4</b>     | 4        | --- |
| Molybdenum | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | --- |
| Manganese  | ppm    | ASTM D5185(m) |         | <b>0</b>     | <1       | --- |
| Magnesium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | <1       | --- |
| Calcium    | ppm    | ASTM D5185(m) |         | <b>4</b>     | 2        | --- |
| Phosphorus | ppm    | ASTM D5185(m) |         | <b>317</b>   | 336      | --- |
| Zinc       | ppm    | ASTM D5185(m) |         | <b>6</b>     | 5        | --- |
| Sulfur     | ppm    | ASTM D5185(m) |         | <b>9980</b>  | 10019    | --- |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | --- |

## CONTAMINANTS

|           | method | limit/base    | current | history1     | history2 |     |
|-----------|--------|---------------|---------|--------------|----------|-----|
| Silicon   | ppm    | ASTM D5185(m) | >50     | <b>1</b>     | 1        | --- |
| Sodium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | --- |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>2</b>     | <1       | --- |



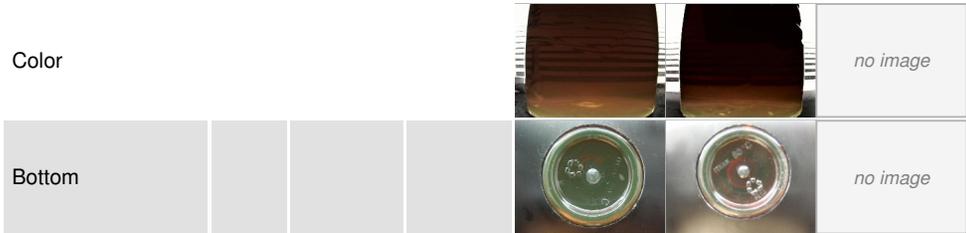
# OIL ANALYSIS REPORT



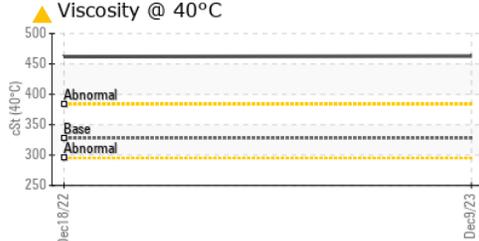
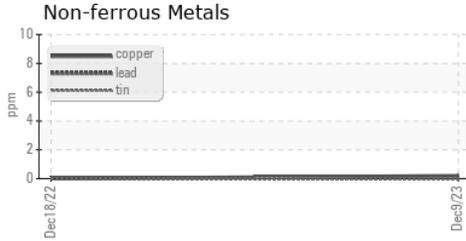
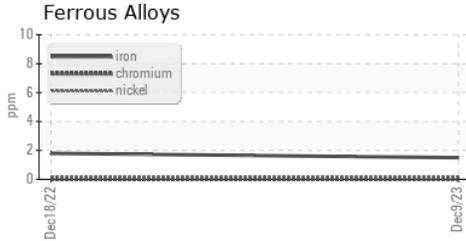
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | VLITE    |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
| 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) | 328 ▲ 463 | ▲ 462    | ---      |

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



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0887214  
**Lab Number** : 02605126  
**Unique Number** : 5698211  
**Test Package** : IND 1

**Continuous Colour Coat Limited**  
 1430 Martin Grove Rd  
 Rexdale, ON  
 CA M9W 4Y1  
 Contact: Parminder Singh  
 parminder.singh@materialsciencescorp.com  
 T: (416)743-7980  
 F: (416)743-7138

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.