

# OIL ANALYSIS REPORT

Sample Rating Trend



**DEGRADATION**



Machine Id  
**01**  
 Component  
**Diesel Engine**  
 Fluid  
**AMSOIL SYN XL 7500 SAE 5W20 (--- QTS)**

## DIAGNOSIS

### ▲ Recommendation

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

There is no indication of any contamination in the oil.

### ▲ Fluid Condition

The BN level is low. 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>PCA0071101</b>  | PCA0071109  | ---      |
| Sample Date        | Client Info |             |            | <b>18 Dec 2023</b> | 27 Oct 2023 | ---      |
| Machine Age        | mls         | Client Info |            | <b>60970</b>       | 55000       | ---      |
| Oil Age            | mls         | Client Info |            | <b>5100</b>        | 5300        | ---      |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Changed     | ---      |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

| CONTAMINATION |           | method | limit/base | current        | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel          | WC Method | >5     |            | <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 | >100       | <b>7</b>     | 6        | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | <1       | ---      |
| Nickel      | ppm | ASTM D5185m | >4         | <b>&lt;1</b> | <1       | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | ---      |
| Silver      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>3</b>     | 2        | ---      |
| Lead        | ppm | ASTM D5185m | >40        | <b>0</b>     | <1       | ---      |
| Copper      | ppm | ASTM D5185m | >330       | <b>36</b>    | 33       | ---      |
| Tin         | ppm | ASTM D5185m | >15        | <b>0</b>     | 0        | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

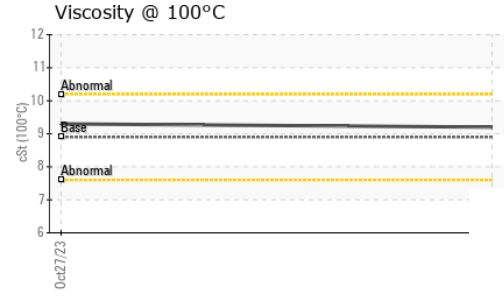
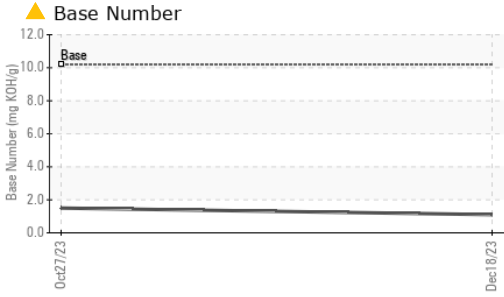
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>230</b>   | 157      | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>9</b>     | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>210</b>   | 186      | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>881</b>   | 808      | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>1190</b>  | 1075     | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>738</b>   | 648      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>783</b>   | 724      | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>3364</b>  | 2835     | ---      |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>9</b> | 8        | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>1</b> | 4        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>2</b> | 2        | ---      |

| INFRA-RED |          | method      | limit/base | current     | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 | >3         | <b>0.1</b>  | 0.1      | ---      |
| Nitration | Abs/cm   | *ASTM D7624 | >20        | <b>11.1</b> | 11.0     | ---      |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30        | <b>61.2</b> | 62.9     | ---      |

| FLUID DEGRADATION |          | method      | limit/base | current      | history1 | history2 |
|-------------------|----------|-------------|------------|--------------|----------|----------|
| Oxidation         | Abs/.1mm | *ASTM D7414 | >25        | <b>63.9</b>  | 64.4     | ---      |
| Base Number (BN)  | mg KOH/g | ASTM D2896  | 10.2       | <b>▲ 1.1</b> | ▲ 1.5    | ---      |

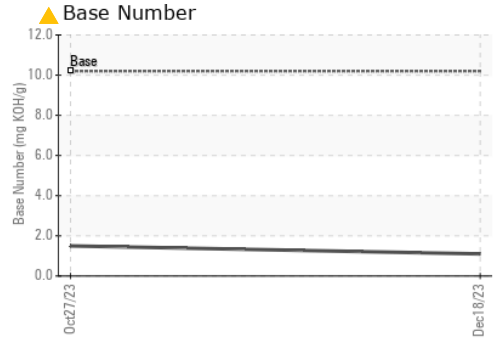
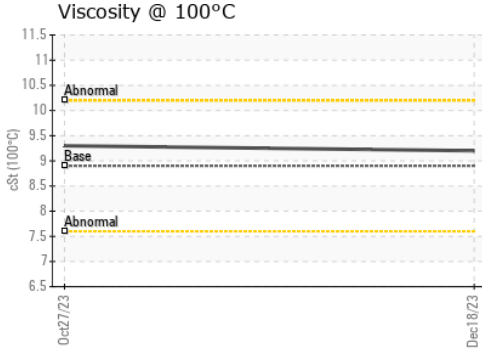
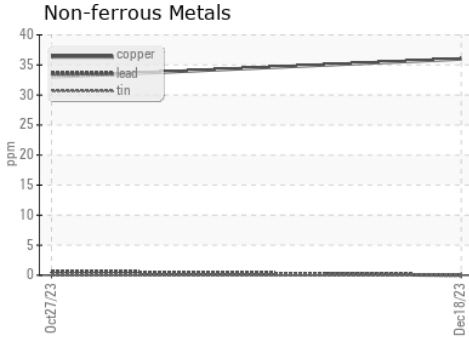
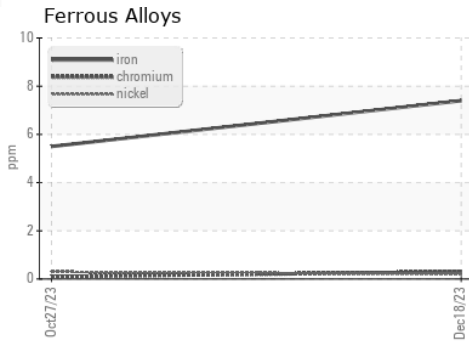
# OIL ANALYSIS REPORT



| 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 8.9 | <b>9.2</b> | 9.3      | ---      |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0071101 **Received** : 26 Dec 2023  
**Lab Number** : **06045395** **Diagnosed** : 28 Dec 2023  
**Unique Number** : 10806003 **Diagnostician** : Sean Felton  
**Test Package** : FLEET

**AMERICAN NATURAL SUPPLY**  
 12475 RTE 119 HWY N  
 ROCHESTER MILLS, PA  
 US 15771  
 Contact: SCOTT KINTER  
 skinter@americannatural.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: