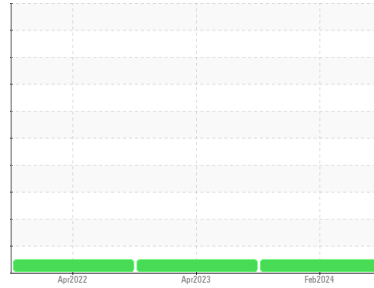




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**GENERAC PONTIAC GEN 02 - 3001934357**

Component  
**Diesel Engine**

Fluid  
**NAPA Motor Oil 15W40 (16 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### 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>WC0894355</b>   | WC0771482   | WC0663159   |
| Sample Date   | Client Info |             | <b>15 Feb 2024</b> | 17 Apr 2023 | 20 Apr 2022 |
| Machine Age   | hrs         | Client Info | <b>293</b>         | 268         | 236         |
| Oil Age       | hrs         | Client Info | <b>15</b>          | 22          | 27          |
| Oil Changed   | Client Info |             | <b>Not Changed</b> | Not Changed | Not Changed |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

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

## WEAR METALS

|          | method | limit/base  | current | history1 | history2 |    |
|----------|--------|-------------|---------|----------|----------|----|
| Iron     | ppm    | ASTM D5185m | >250    | <b>2</b> | 3        | 4  |
| Chromium | ppm    | ASTM D5185m | >10     | <b>0</b> | 0        | <1 |
| Nickel   | ppm    | ASTM D5185m | >5      | <b>0</b> | 0        | 1  |
| Titanium | ppm    | ASTM D5185m |         | <b>0</b> | 0        | <1 |
| Silver   | ppm    | ASTM D5185m | >3      | <b>0</b> | 0        | 0  |
| Aluminum | ppm    | ASTM D5185m | >35     | <b>1</b> | 0        | 2  |
| Lead     | ppm    | ASTM D5185m | >100    | <b>0</b> | <1       | 3  |
| Copper   | ppm    | ASTM D5185m | >60     | <b>1</b> | 2        | 3  |
| Tin      | ppm    | ASTM D5185m | >5      | <b>0</b> | 0        | 1  |
| Vanadium | ppm    | ASTM D5185m |         | <b>0</b> | 0        | <1 |
| Cadmium  | ppm    | ASTM D5185m |         | <b>0</b> | 0        | 0  |

## ADDITIVES

|            | method | limit/base  | current | history1    | history2 |      |
|------------|--------|-------------|---------|-------------|----------|------|
| Boron      | ppm    | ASTM D5185m |         | <b>54</b>   | 202      | 280  |
| Barium     | ppm    | ASTM D5185m |         | <b>0</b>    | 0        | 0    |
| Molybdenum | ppm    | ASTM D5185m |         | <b>33</b>   | 80       | 98   |
| Manganese  | ppm    | ASTM D5185m |         | <b>0</b>    | <1       | <1   |
| Magnesium  | ppm    | ASTM D5185m |         | <b>50</b>   | 296      | 646  |
| Calcium    | ppm    | ASTM D5185m |         | <b>2106</b> | 1697     | 1570 |
| Phosphorus | ppm    | ASTM D5185m |         | <b>927</b>  | 823      | 882  |
| Zinc       | ppm    | ASTM D5185m |         | <b>1122</b> | 1064     | 1142 |
| Sulfur     | ppm    | ASTM D5185m |         | <b>3701</b> | 3262     | 2825 |

## CONTAMINANTS

|           | method | limit/base  | current | history1     | history2 |   |
|-----------|--------|-------------|---------|--------------|----------|---|
| Silicon   | ppm    | ASTM D5185m | >35     | <b>5</b>     | 6        | 8 |
| Sodium    | ppm    | ASTM D5185m |         | <b>&lt;1</b> | 0        | 2 |
| Potassium | ppm    | ASTM D5185m | >20     | <b>1</b>     | 2        | 1 |

## INFRA-RED

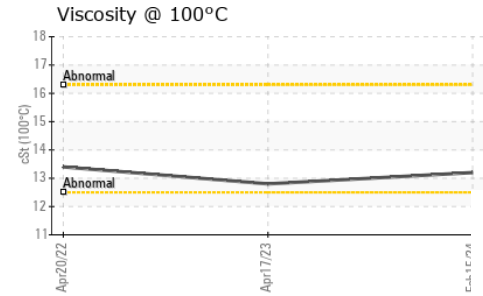
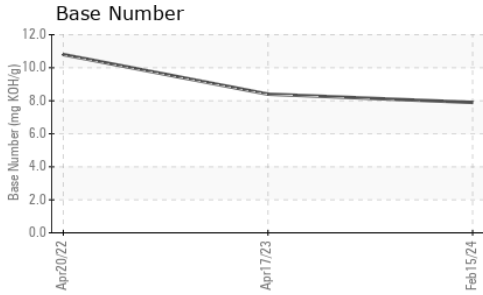
|           | method   | limit/base  | current | history1    | history2 |      |
|-----------|----------|-------------|---------|-------------|----------|------|
| Soot %    | %        | *ASTM D7844 | >3      | <b>0.1</b>  | 0.1      | 0.1  |
| Nitration | Abs/cm   | *ASTM D7624 | >20     | <b>6.0</b>  | 6.4      | 6.3  |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30     | <b>16.2</b> | 18.5     | 21.7 |

## FLUID DEGRADATION

|                  | method   | limit/base  | current | history1    | history2 |      |
|------------------|----------|-------------|---------|-------------|----------|------|
| Oxidation        | Abs/.1mm | *ASTM D7414 | >25     | <b>10.8</b> | 13.7     | 15.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896  |         | <b>7.9</b>  | 8.4      | 10.8 |



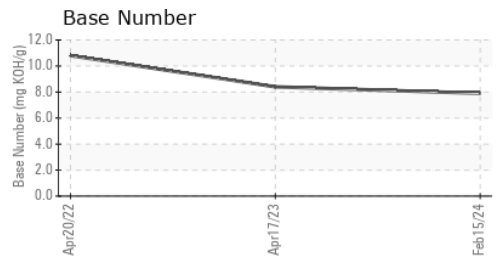
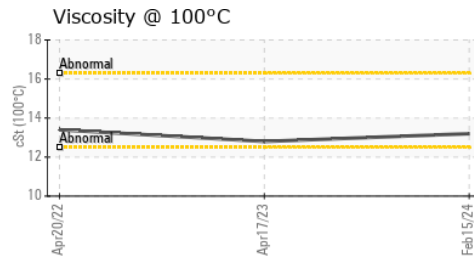
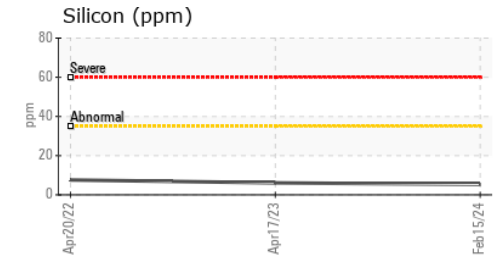
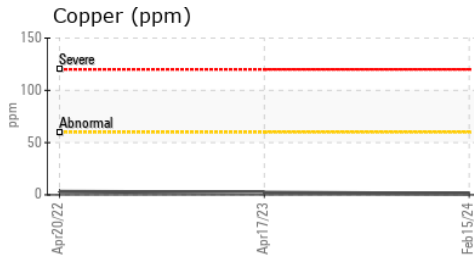
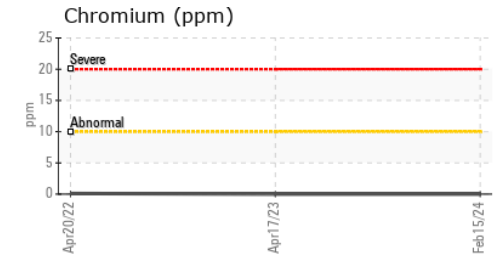
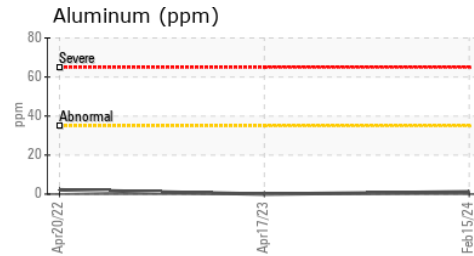
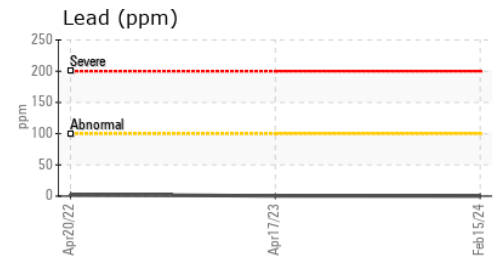
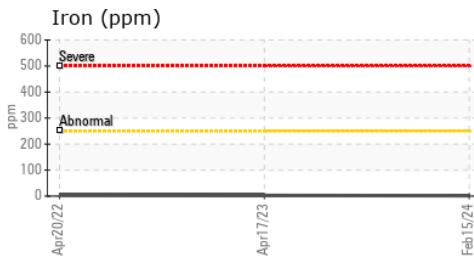
# OIL ANALYSIS REPORT



| PARAMETER        | 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     | LIGHT    |
| 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 @ 100°C     | cSt    | ASTM D445  | 13.2    | 12.8     | 13.4     |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0894355 **Received** : 27 Feb 2024  
**Lab Number** : 06101335 **Tested** : 28 Feb 2024  
**Unique Number** : 10899565 **Diagnosed** : 28 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**NATIONAL POWER CORP**  
 4541 PRESLYN DR  
 RALEIGH, NC  
 US 27616  
 Contact: BRANDON RICE  
 brandon.rice@natpow.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: (919)790-9714