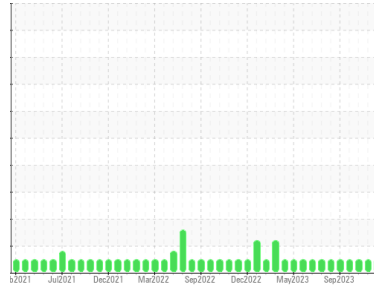
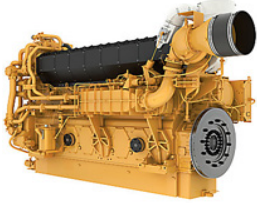


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**K600**  
Component  
**Natural Gas Compression Engine**  
Fluid  
**PETRO CANADA SENTRON LD 3000 (--- LTR)**

## 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>PC0089498</b>   | PC0085505   | PC0085495   |
| Sample Date   | Client Info |             | <b>19 Mar 2024</b> | 16 Feb 2024 | 17 Jan 2024 |
| Machine Age   | hrs         | Client Info | <b>31604</b>       | 30859       | 30149       |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| 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 | >4.0       | <b>&lt;1.0</b> | <1.0     | <1.0     |
| Water  | WC Method | >0.1       | <b>NEG</b>     | NEG      | NEG      |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | NEG      |

## WEAR METALS

|           | method | limit/base    | current | history1     | history2 |    |
|-----------|--------|---------------|---------|--------------|----------|----|
| Iron      | ppm    | ASTM D5185(m) | >14     | <b>2</b>     | 1        | <1 |
| Chromium  | ppm    | ASTM D5185(m) | >3      | <b>0</b>     | 0        | 0  |
| Nickel    | ppm    | ASTM D5185(m) | >5      | <b>0</b>     | 0        | 0  |
| Titanium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Silver    | ppm    | ASTM D5185(m) | >5      | <b>0</b>     | 0        | 0  |
| Aluminum  | ppm    | ASTM D5185(m) | >5      | <b>&lt;1</b> | 1        | 1  |
| Lead      | ppm    | ASTM D5185(m) | >8      | <b>0</b>     | 0        | 0  |
| Copper    | ppm    | ASTM D5185(m) | >5      | <b>&lt;1</b> | <1       | <1 |
| Tin       | ppm    | ASTM D5185(m) | >3      | <b>0</b>     | 0        | 0  |
| Antimony  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Vanadium  | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Beryllium | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |
| Cadmium   | ppm    | ASTM D5185(m) |         | <b>0</b>     | 0        | 0  |

## ADDITIVES

|            | method | limit/base    | current | history1     | history2 |      |
|------------|--------|---------------|---------|--------------|----------|------|
| Boron      | ppm    | ASTM D5185(m) | 5       | <b>1</b>     | <1       | <1   |
| Barium     | ppm    | ASTM D5185(m) | 1       | <b>0</b>     | 0        | 0    |
| Molybdenum | ppm    | ASTM D5185(m) | 2       | <b>0</b>     | <1       | 0    |
| Manganese  | ppm    | ASTM D5185(m) | 1       | <b>0</b>     | 0        | 0    |
| Magnesium  | ppm    | ASTM D5185(m) | 5       | <b>9</b>     | 7        | 7    |
| Calcium    | ppm    | ASTM D5185(m) | 1220    | <b>1430</b>  | 1327     | 1223 |
| Phosphorus | ppm    | ASTM D5185(m) | 298     | <b>286</b>   | 279      | 265  |
| Zinc       | ppm    | ASTM D5185(m) | 350     | <b>359</b>   | 331      | 304  |
| Sulfur     | ppm    | ASTM D5185(m) | 1995    | <b>2088</b>  | 2185     | 2148 |
| Lithium    | ppm    | ASTM D5185(m) |         | <b>&lt;1</b> | <1       | <1   |

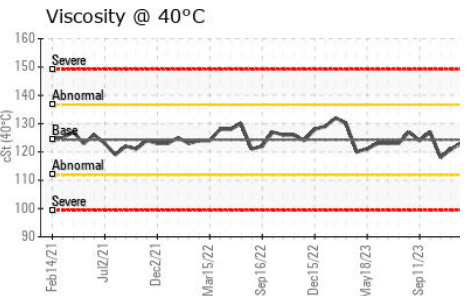
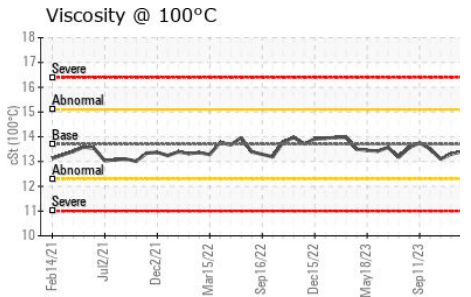
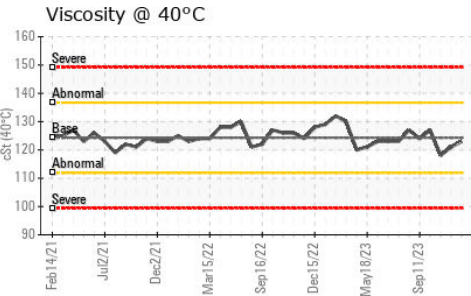
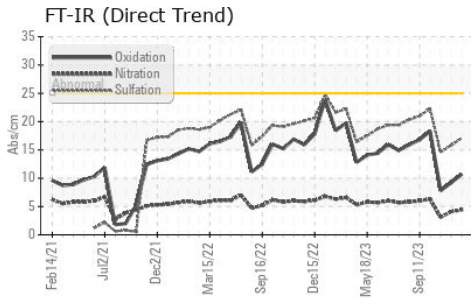
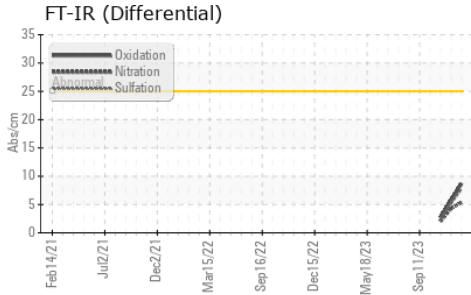
## CONTAMINANTS

|           | method | limit/base    | current | history1     | history2 |   |
|-----------|--------|---------------|---------|--------------|----------|---|
| Silicon   | ppm    | ASTM D5185(m) | >180    | <b>&lt;1</b> | 1        | 2 |
| Sodium    | ppm    | ASTM D5185(m) | >20     | <b>1</b>     | 1        | 1 |
| Potassium | ppm    | ASTM D5185(m) | >20     | <b>2</b>     | 3        | 4 |

## INFRA-RED

|                 | method   | limit/base  | current | history1    | history2 |      |
|-----------------|----------|-------------|---------|-------------|----------|------|
| Soot %          | %        | ASTM D7844* |         | <b>0</b>    | 0        | 0    |
| Nitration       | Abs/cm   | ASTM D7624* | >15     | <b>4.4</b>  | 4.1      | 3.1  |
| Nitration(Diff) | Abs/cm   | ASTM E2412* | < 25    | <b>5.4</b>  | 4.3      | 2    |
| Sulfation       | Abs./1mm | ASTM D7415* | >25     | <b>17.1</b> | 15.8     | 14.6 |
| Sulfation(Diff) | Abs/cm   | ASTM E2412* |         | <b>7.8</b>  | 5.2      | 2.3  |

# OIL ANALYSIS REPORT

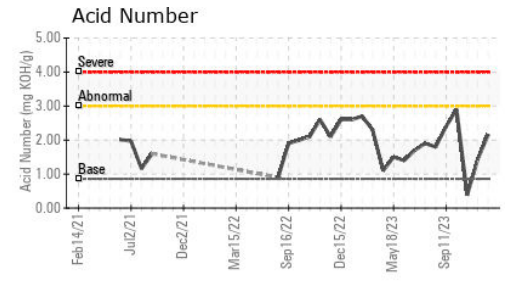
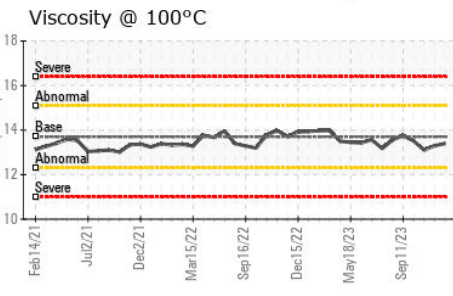
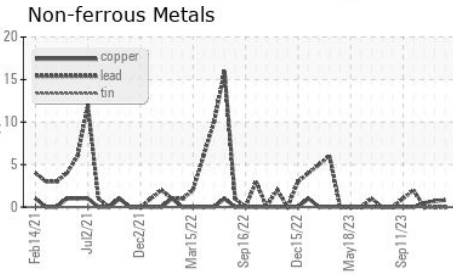
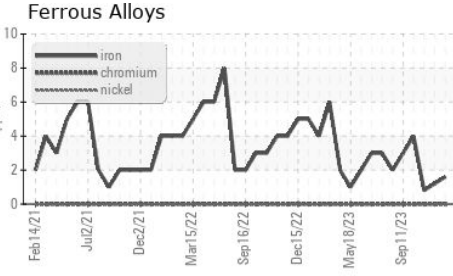


| FLUID DEGRADATION |          | method      | limit/base | current     | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation         | Abs./1mm | ASTM D7414* | >20        | <b>10.7</b> | 9.2      | 7.8      |
| Oxidation(Diff)   | Abs/cm   | ASTM E2412* | < 25       | <b>8.7</b>  | 5.8      | 2.6      |
| Acid Number (AN)  | mg KOH/g | ASTM D974*  | 0.86       | <b>2.16</b> | 1.43     | 0.38     |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Sand/Dirt        | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | Visual* | >0.1       | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | Visual* |            | <b>NEG</b>   | NEG      | NEG      |

| FLUID PROPERTIES     |       | method        | limit/base | current     | history1 | history2 |
|----------------------|-------|---------------|------------|-------------|----------|----------|
| Visc @ 40°C          | cSt   | ASTM D7279(m) | 124.3      | <b>123</b>  | 121      | 118      |
| Visc @ 100°C         | cSt   | ASTM D7279(m) | 13.7       | <b>13.4</b> | 13.3     | 13.1     |
| Viscosity Index (VI) | Scale | ASTM D2270*   | 106        | <b>104</b>  | 104      | 105      |

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0089498 **Received** : 01 Apr 2024  
**Lab Number** : **02625651** **Tested** : 01 Apr 2024  
**Unique Number** : 5750770 **Diagnosed** : 02 Apr 2024 - Bill Quesnel  
**Test Package** : GEO 2 ( Additional Tests: FT-IR, FT-IR(Diff), TAN Man )

**NuVista Energy**  
 10508 67 Ave, #201  
 Grande Prairie, AB  
 CA T8W 0K8  
 Contact: Eldon Weaver  
 eweaver@nvaenergy.com  
 T:  
 F:

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.