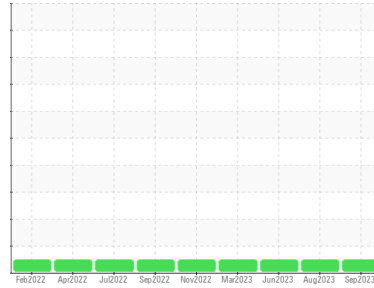


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[66478]**  
Machine Id  
**WL149**

Component  
**Front Differential**  
Fluid

**PETRO CANADA DURATRAN ALL-SEASON (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Pm4 performed. All oil samples taken. All oils, and all filters changed. )

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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>PCA0084276</b>  | PCA0084053  | PCA0084004  |
| Sample Date   | Client Info |             | <b>22 Sep 2023</b> | 01 Aug 2023 | 01 Jun 2023 |
| Machine Age   | hrs         | Client Info | <b>8861</b>        | 8481        | 8070        |
| Oil Age       | hrs         | Client Info | <b>1977</b>        | 1597        | 1186        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Oil Added   | Oil Added   |
| Sample Status |             |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >500 | <b>32</b>    | 27       | 19       |
| Chromium | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | <1       | <1       |
| Nickel   | ppm    | ASTM D5185m >10  | <b>0</b>     | 0        | <1       |
| Titanium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Silver   | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >25  | <b>0</b>     | 4        | 2        |
| Lead     | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >100 | <b>0</b>     | 0        | 0        |
| Tin      | ppm    | ASTM D5185m >10  | <b>0</b>     | <1       | 0        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>119</b>   | 123      | 127      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 2        |
| Molybdenum | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | 1        |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>28</b>    | 25       | 25       |
| Calcium    | ppm    | ASTM D5185m | <b>3373</b>  | 3727     | 3521     |
| Phosphorus | ppm    | ASTM D5185m | <b>1104</b>  | 1176     | 1132     |
| Zinc       | ppm    | ASTM D5185m | <b>1389</b>  | 1466     | 1390     |
| Sulfur     | ppm    | ASTM D5185m | <b>3362</b>  | 4161     | 4505     |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >75 | <b>13</b> | 13       | 12       |
| Sodium    | ppm    | ASTM D5185m     | <b>1</b>  | 1        | 0        |
| Potassium | ppm    | ASTM D5185m >20 | <b>0</b>  | 0        | <1       |

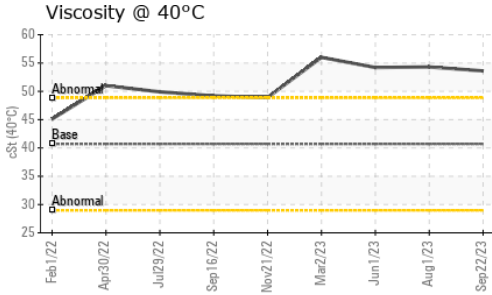
## VISUAL

|                  | 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 >.2   | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | NEG      | NEG      |

## FLUID PROPERTIES

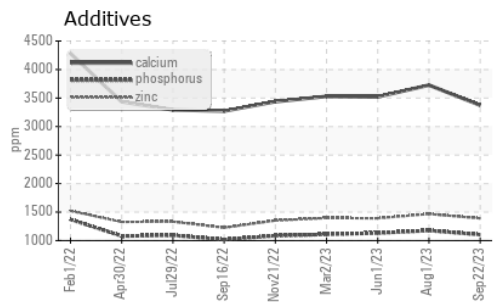
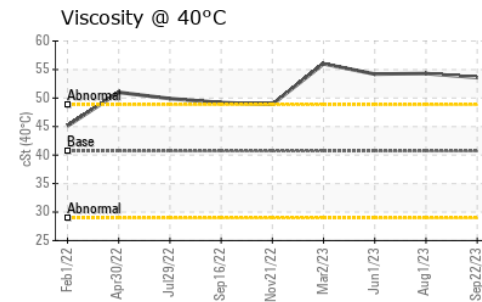
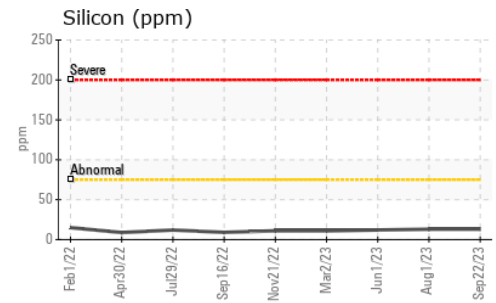
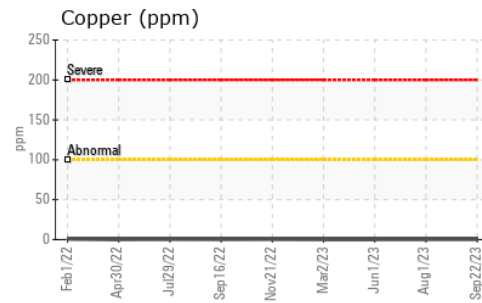
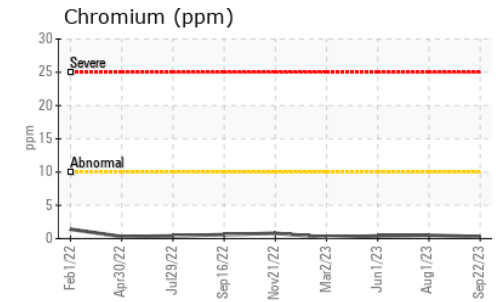
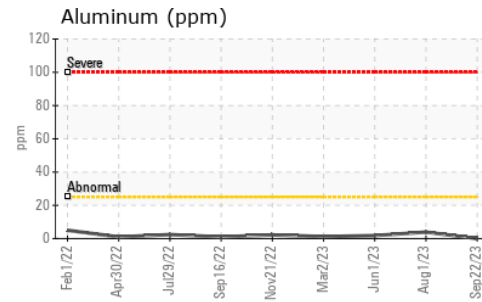
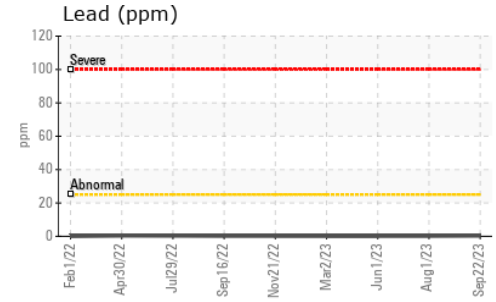
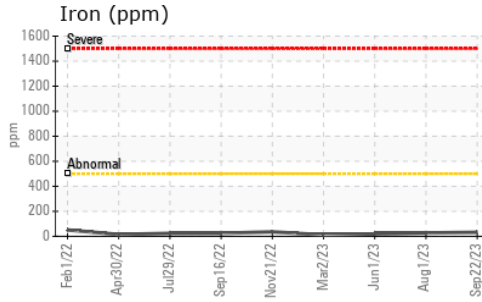
|             | method | limit/base     | current     | history1 | history2 |
|-------------|--------|----------------|-------------|----------|----------|
| Visc @ 40°C | cSt    | ASTM D445 40.7 | <b>53.6</b> | 54.3     | 54.2     |

# OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current  | history1 | history2 |
|---------------|--------|------------|----------|----------|----------|
| Color         |        |            | no image | no image | no image |
| Bottom        |        |            | no image | no image | no image |

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0084276  
**Lab Number** : 05969934  
**Unique Number** : 10681884  
**Test Package** : MOB 1

**Kemp Quarries - Pryor Stone - Pryor**  
 1050 E 520 Rd  
 Pryor, OK  
 US 74361

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)

Contact: pryor@pryorstone.com

T:

F: