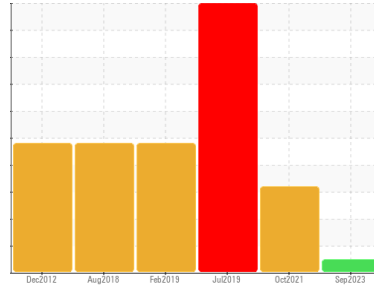


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / PRYOR STONE [66330]**  
Machine Id  
**TTT004**  
Component  
**Rear Left Final Drive**  
Fluid  
**PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: PM-4 changed fluid )

### 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>PCA0086488</b>  | PCA0011225  | PCA1430917  |
| Sample Date   | Client Info |             | <b>20 Sep 2023</b> | 08 Oct 2021 | 23 Jul 2019 |
| Machine Age   | hrs         | Client Info | <b>5685</b>        | 5517        | 4737        |
| Oil Age       | hrs         | Client Info | <b>5685</b>        | 4737        | 0           |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | N/A         |
| Sample Status |             |             | <b>NORMAL</b>      | ABNORMAL    | SEVERE      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >800 | <b>160</b>   | ▲ 849    | ● 527    |
| Chromium | ppm    | ASTM D5185m >10  | <b>1</b>     | 5        | 2        |
| Nickel   | ppm    | ASTM D5185m >5   | <b>&lt;1</b> | 2        | 1        |
| Titanium | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | 2        | 0        |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | <1       | 0        |
| Aluminum | ppm    | ASTM D5185m >75  | <b>11</b>    | ▲ 20     | 10       |
| Lead     | ppm    | ASTM D5185m >10  | <b>&lt;1</b> | <1       | 0        |
| Copper   | ppm    | ASTM D5185m >75  | <b>0</b>     | 3        | 1        |
| Tin      | ppm    | ASTM D5185m >8   | <b>0</b>     | <1       | 1        |
| Antimony | ppm    | ASTM D5185m >50  | <b>---</b>   | <1       | ---      |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | <1       | 0        |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | <1       | 0        |

## ADDITIVES

|            | method | limit/base       | current     | history1 | history2 |
|------------|--------|------------------|-------------|----------|----------|
| Boron      | ppm    | ASTM D5185m 2    | <b>4</b>    | 15       | 7        |
| Barium     | ppm    | ASTM D5185m 0    | <b>0</b>    | 0        | 1        |
| Molybdenum | ppm    | ASTM D5185m 0    | <b>0</b>    | 2        | 3        |
| Manganese  | ppm    | ASTM D5185m 0    | <b>3</b>    | 12       | 0        |
| Magnesium  | ppm    | ASTM D5185m 9    | <b>22</b>   | 22       | 33       |
| Calcium    | ppm    | ASTM D5185m 3114 | <b>3239</b> | 2912     | 2366     |
| Phosphorus | ppm    | ASTM D5185m 1099 | <b>1128</b> | 1008     | 844      |
| Zinc       | ppm    | ASTM D5185m 1245 | <b>1396</b> | 1207     | 1069     |
| Sulfur     | ppm    | ASTM D5185m 7086 | <b>5683</b> | 7819     | ---      |

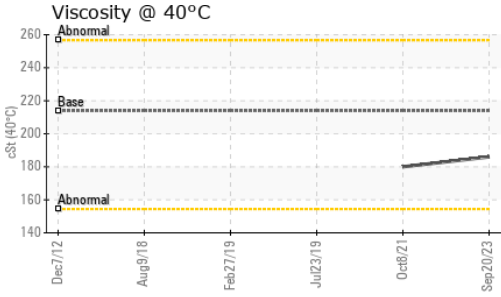
## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >400 | <b>95</b>    | ▲ 157    | ● 94     |
| Sodium    | ppm    | ASTM D5185m      | <b>2</b>     | 5        | 5        |
| Potassium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | 7        | 5        |

## VISUAL

|                  | method | limit/base    | current      | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Yellow Metal     | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Precipitate      | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Silt             | scalar | *Visual NONE  | <b>MODER</b> | NONE     | ---      |
| Debris           | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Sand/Dirt        | scalar | *Visual NONE  | <b>NONE</b>  | NONE     | ---      |
| Appearance       | scalar | *Visual NORML | <b>NORML</b> | NORML    | ---      |
| Odor             | scalar | *Visual NORML | <b>NORML</b> | NORML    | ---      |
| Emulsified Water | scalar | *Visual >0.2  | <b>NEG</b>   | NEG      | ---      |
| Free Water       | scalar | *Visual       | <b>NEG</b>   | NEG      | ---      |

# OIL ANALYSIS REPORT

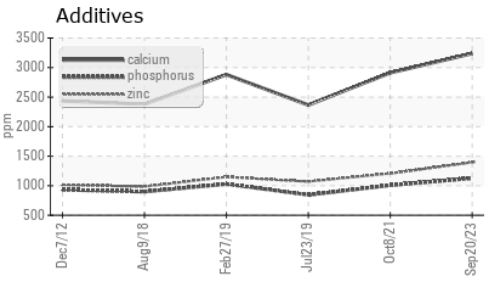
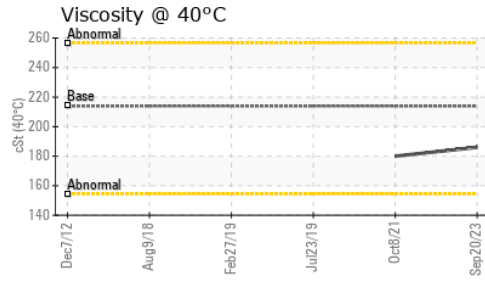
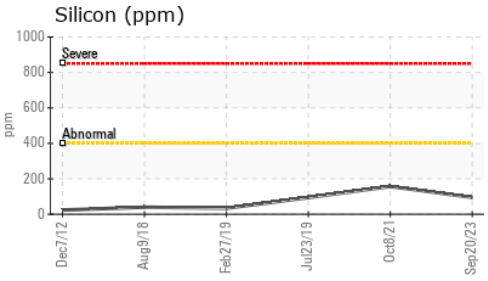
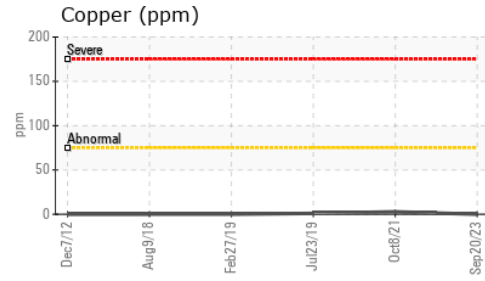
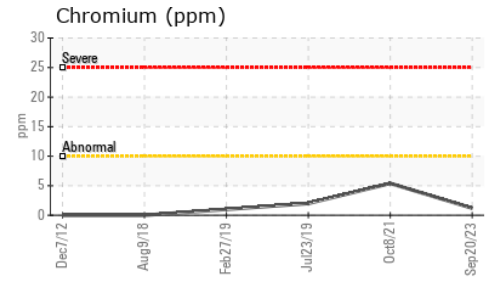
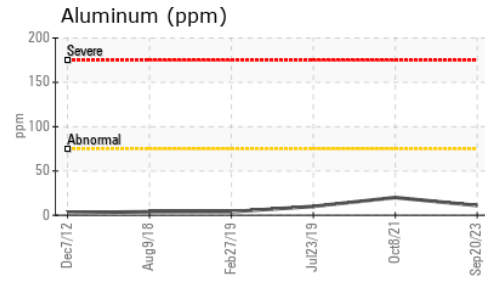
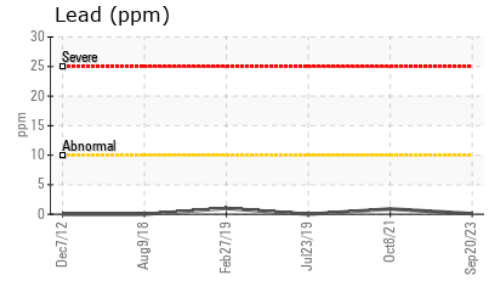
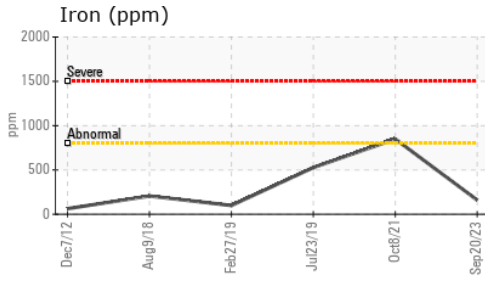


| FLUID PROPERTIES |     | method    | limit/base | current    | history1 | history2 |
|------------------|-----|-----------|------------|------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 213.9      | <b>186</b> | 180      | ---      |

| 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.** : PCA0086488  
**Lab Number** : 05966727  
**Unique Number** : 10673278  
**Test Package** : MOB 1

**Kemp Quarries - Pryor Stone - Pryor**  
 1050 E 520 Rd  
 Pryor, OK  
 US 74361  
 Contact:  
 pryor@pryorstone.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)