

KEMMP QUARRIES / PRYOR STONE [65429] OHT066

## Component Fluid PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)



## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Pm3 performed. All oil samples taken. Engine oil, 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 | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample Number |  | Client Info |  | PCA0084304 | PCA0084016 | PCA0070307 |
| Sample Date |  | Client Info |  | 02 Nov 2023 | 22 May 2023 | 30 Dec 2022 |
| Machine Age | hrs | Client Info |  | 63909 | 63506 | 62432 |
| Oil Age | hrs | Client Info |  | 1577 | 1074 | 62432 |
| Oil Changed |  | Client Info |  | Oil Added | Oil Added | Oil Added |
| Sample Status |  |  |  | NORMAL | NORMAL | NORMAL |
| WEAR METALS |  | method | limitbase | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >500 | 7 | 2 | 6 |
| Chromium | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >13 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >103 | 0 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m |  | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m |  | 0 | 0 | 0 |


| ADDITIVES |  | method | limit/base | current |  | history1 | history2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Boron | ppm | ASTM D5185m | 2 | $\mathbf{0}$ | 0 | 0 |  |
| Barium | ppm | ASTM D5185m | 0 | $\mathbf{0}$ | 2 | 0 |  |
| Molybdenum | ppm | ASTM D5185m | 0 | $\mathbf{0}$ | 0 | $<1$ |  |
| Manganese | ppm | ASTM D5185m | 0 | $\mathbf{0}$ | 0 | 0 |  |
| Magnesium | ppm | ASTM D5185m | 9 | $\mathbf{9}$ | $<1$ | 4 |  |
| Calcium | ppm | ASTM D5185m | 3114 | $\mathbf{2 6 5 0}$ | 110 | 859 |  |
| Phosphorus | ppm | ASTM D5185m | 1099 | $\mathbf{7 9 3}$ | 347 | 531 |  |
| Zinc | ppm | ASTM D5185m | 1245 | $\mathbf{9 4 7}$ | 461 | 625 |  |
| Sulfur | ppm | ASTM D5185m | 7086 | $\mathbf{3 5 7 7}$ | 1008 | 2507 |  |


| CONTAMINANTS | method | limitbase | current |  | history1 | history2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Silicon | ppm | ASTM D5185m | $>100$ | $\mathbf{1 8}$ | $<1$ | 3 |
| Sodium | ppm | ASTM D5185m |  | $<\mathbf{1}$ | 0 | $<1$ |
| Potassium | ppm | ASTM D5185m | $>20$ | $\mathbf{0}$ | $<1$ | 0 |


| VISUAL |  | method | limitbase | current | history1 | history2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White Metal | scalar | *Visual | NONE | NONE | NONE | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >. 2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual |  | NEG | NEG | NEG |
| FLUID PROPERTIES |  | method | limitbase | current | history1 | history2 |
| Visc @ $40^{\circ} \mathrm{C}$ | cSt | ASTM D445 | 213.9 | 160 | 67.3 | 84.7 |

OIL
DIAGNOSTICS

## OIL ANALYSIS REPORT




| Laboratory | $:$ WearCheck USA | 501 Madison Ave., Cary, NC 27513 |  |
| :--- | :--- | :--- | :--- |
| Sample No. | $:$ PCA0084304 | Received | $: 13$ Nov 2023 |
| Lab Number | $: 06006591$ | Diagnosed | $: 15$ Nov 2023 |
| Unique Number | $: 10740353$ | Diagnostician | $:$ Don Baldridge |

Certificate L2367 Test Package: MOB 1
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) Sample No. ab Number Unique Number : 10740353 Diagnostician : Don Baldridge
: WearCheck USA - 501 Madison Ave., Cary, NC 27513
: PCA0084304 Received : 13 Nov 2023 Diagnosed : 15 Nov 2023

