



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |



Area
KEMP QUARRIES / RVM-BUTTERFIELD [68553]
Machine Id
WL081
Component
Rear Differential
Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: PM-1 sampled fluid)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PCA0108662 | PCA0087074 | PCA0085777 |
| Sample Date | | Client Info | | 07 May 2024 | 08 Nov 2023 | 01 Jun 2023 |
| Machine Age | hrs | Client Info | | 42798 | 42315 | 41808 |
| Oil Age | hrs | Client Info | | 42798 | 42315 | 41808 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | Changed | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >500 | 8 | 18 | 17 |
| Chromium | ppm | ASTM D5185m | >3 | <1 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | 0 | 0 | 2 |
| Lead | ppm | ASTM D5185m | >13 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >103 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m | >5 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

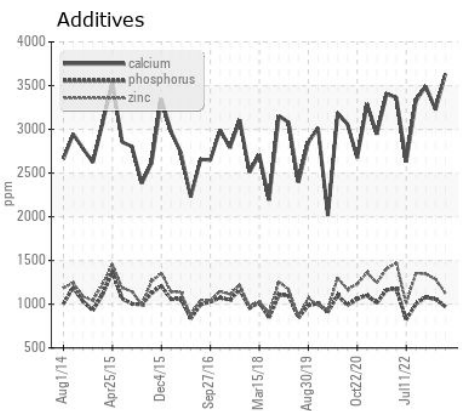
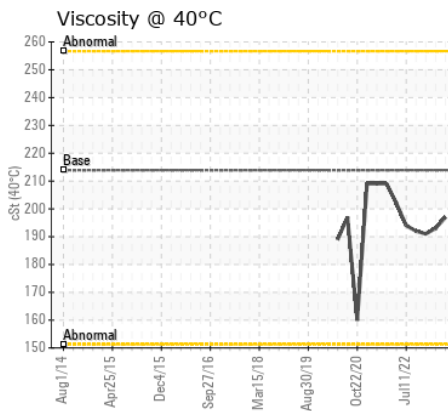
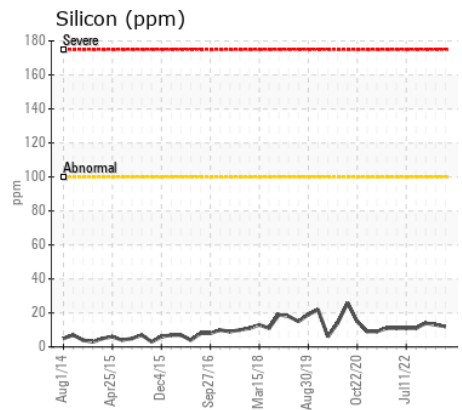
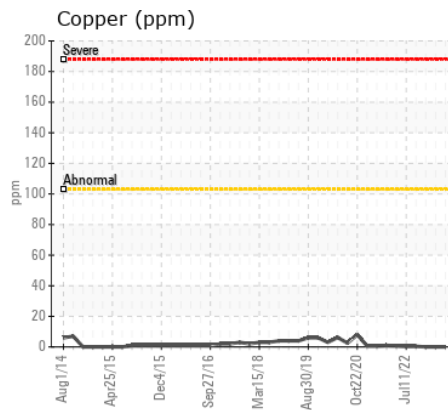
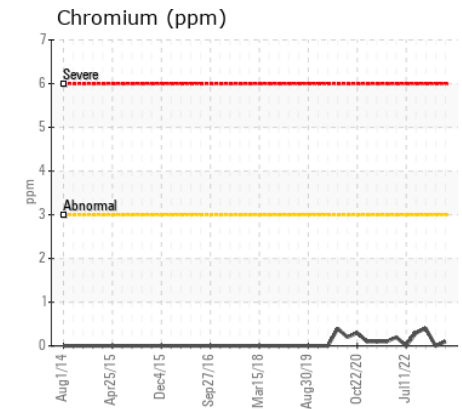
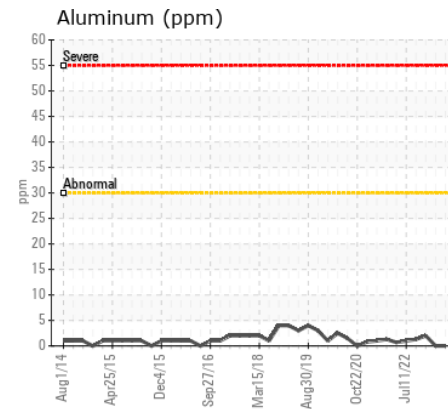
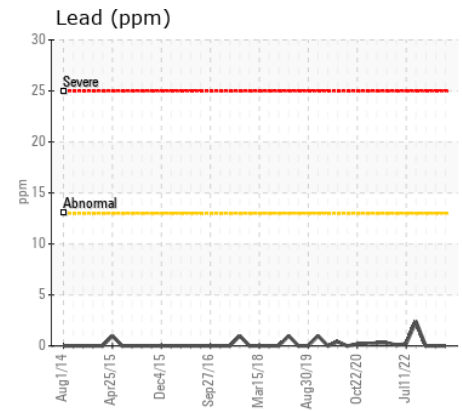
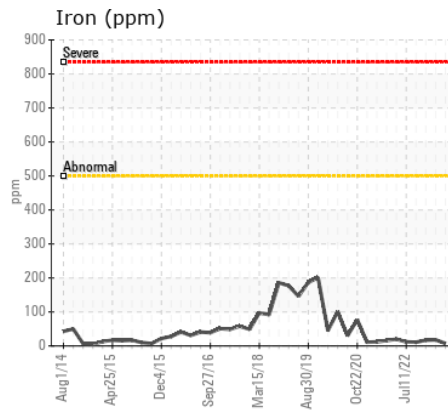
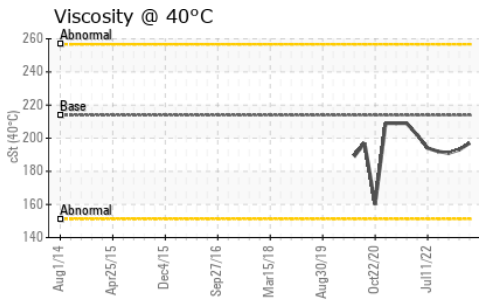
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >100 | 12 | 13 | 14 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | 1 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| 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 |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | <1 | 2 | 2 |
| Boron | ppm | ASTM D5185m | 2 | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185m | 0 | 1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 1 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 9 | 19 | 20 | 24 |
| Calcium | ppm | ASTM D5185m | 3114 | 3634 | 3225 | 3493 |
| Phosphorus | ppm | ASTM D5185m | 1099 | 973 | 1058 | 1080 |
| Zinc | ppm | ASTM D5185m | 1245 | 1125 | 1287 | 1344 |
| Sulfur | ppm | ASTM D5185m | 7086 | 4793 | 4363 | 5720 |
| Visc @ 40°C | cSt | ASTM D445 | 213.9 | 197 | 193 | 191 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : PCA0108662
 Lab Number : 06177983
 Unique Number : 11029309
 Test Package : MOB 1

Kemp Quarries - RVM-Butterfield
 8651 Farm Rd 2115
 Purdy, MO
 US 65734
 Contact: LEE DUCHANOIS
 lduchanois@kempquarries.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)

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F: