



OIL ANALYSIS REPORT

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

Area
KEMP QUARRIES / RIVER VALLEY ARKOMA

Machine Id
WL152

Component
Front Right Final Drive

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

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number | | Client Info | | PCA0086965 | PCA0086358 | --- |
| Sample Date | | Client Info | | 15 Apr 2024 | 13 Jun 2023 | --- |
| Machine Age | hrs | Client Info | | 31696 | 31129 | --- |
| Oil Age | hrs | Client Info | | 51 | 31129 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Not Chngd | Changed | --- |
| Filter Changed | | Client Info | | N/A | N/A | --- |
| Sample Status | | | | NORMAL | ABNORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-------|-----|
| Iron | ppm | ASTM D5185m | >500 | 18 | 125 | --- |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Nickel | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | --- |
| Silver | ppm | ASTM D5185m | | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 3 | --- |
| Lead | ppm | ASTM D5185m | >25 | 2 | 14 | --- |
| Copper | ppm | ASTM D5185m | >50 | 19 | ▲ 156 | --- |
| Tin | ppm | ASTM D5185m | >10 | 1 | ▲ 11 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

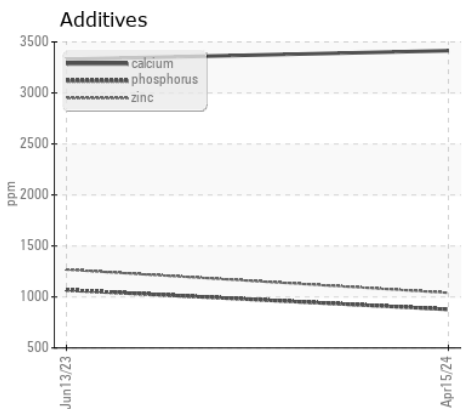
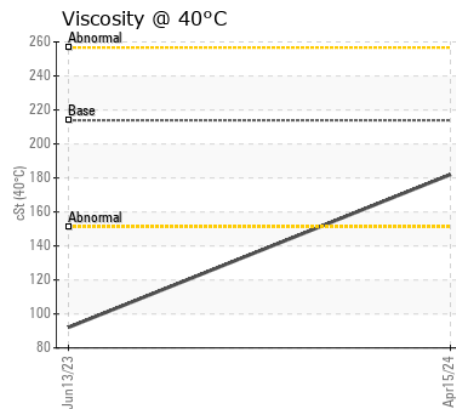
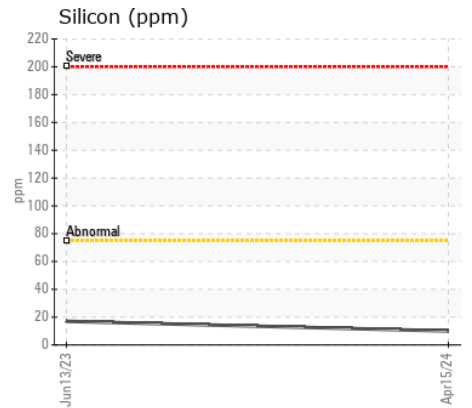
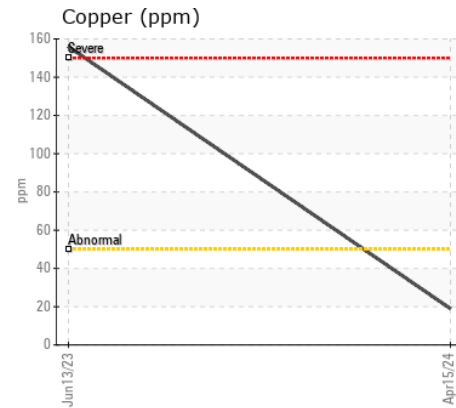
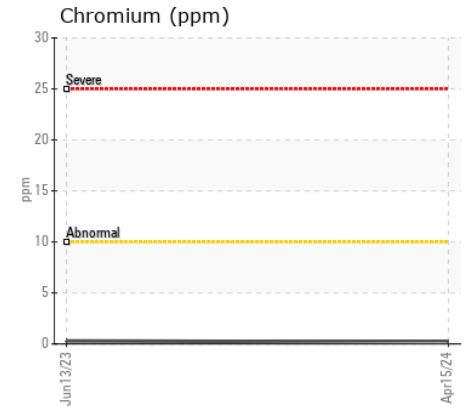
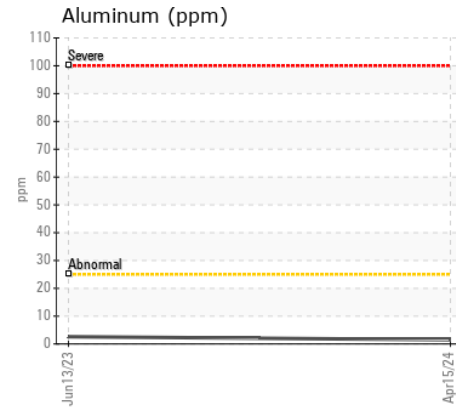
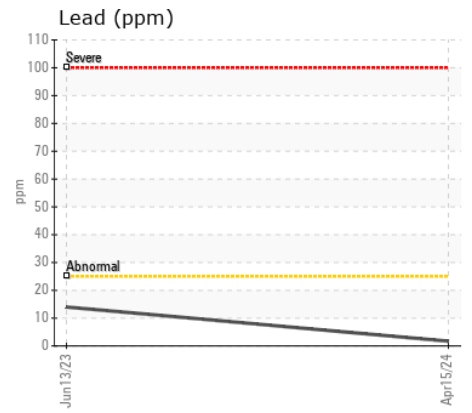
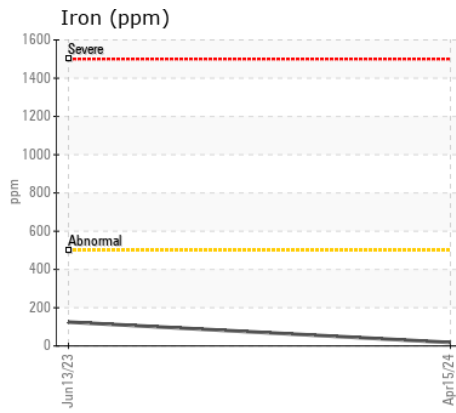
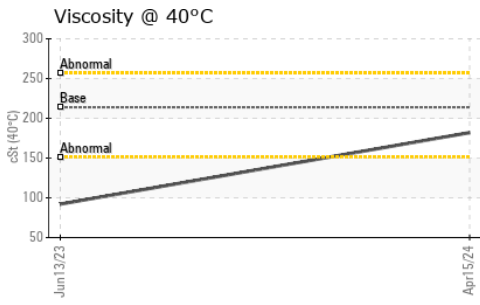
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-------|-----|
| Silicon | ppm | ASTM D5185m | >75 | 10 | 17 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 1 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG | --- |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-------|------|--------|-----|
| Sodium | ppm | ASTM D5185m | | 0 | 1 | --- |
| Boron | ppm | ASTM D5185m | 2 | 0 | 0 | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 1 | <1 | --- |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 1 | --- |
| Magnesium | ppm | ASTM D5185m | 9 | 17 | 19 | --- |
| Calcium | ppm | ASTM D5185m | 3114 | 3414 | 3330 | --- |
| Phosphorus | ppm | ASTM D5185m | 1099 | 878 | 1068 | --- |
| Zinc | ppm | ASTM D5185m | 1245 | 1040 | 1268 | --- |
| Sulfur | ppm | ASTM D5185m | 7086 | 4646 | 7980 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 213.9 | 182 | ● 92.1 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0086965
Lab Number : 06155360
Unique Number : 10990783
Test Package : MOB 1

Received : 19 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Wes Davis

Kemp Quarries - River Valley - Arkoma
 12971 HWY 9a
 Shawnee, OK
 US 74804
 Contact:

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)

arkomashop@kempquarries.net

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