



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

Area

[70412]

Machine Id

CRN032

Component

Rear Right Final Drive

Fluid

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

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: New purchase PM-4 changed fluid)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | PCA0109353 | --- | --- |
| Sample Date | | Client Info | | 11 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 3980 | --- | --- |
| Oil Age | hrs | Client Info | | 3980 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | N/A | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

The copper level is abnormal. All other component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >500 | 430 | --- | --- |
| Chromium | ppm | ASTM D5185m | >10 | 2 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 2 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 11 | --- | --- |
| Lead | ppm | ASTM D5185m | >25 | 5 | --- | --- |
| Copper | ppm | ASTM D5185m | >50 | 158 | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | 2 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

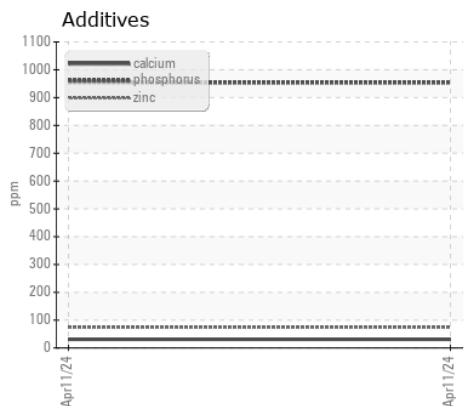
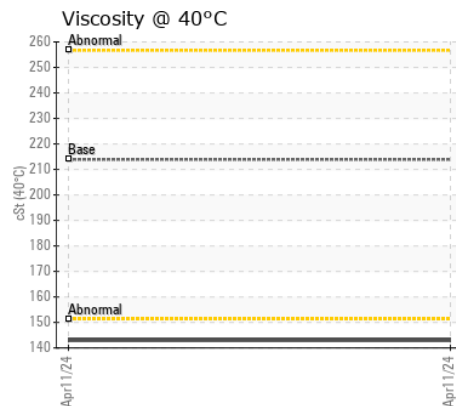
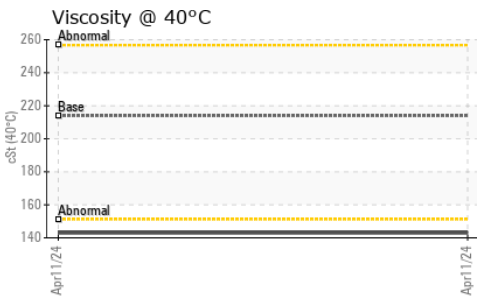
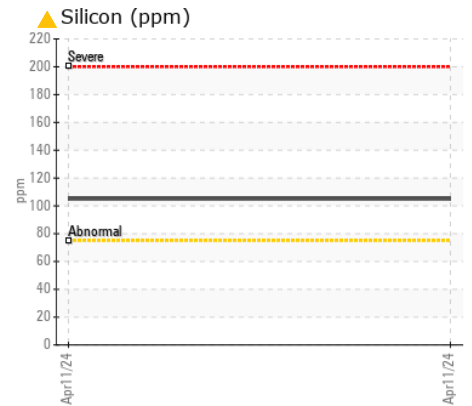
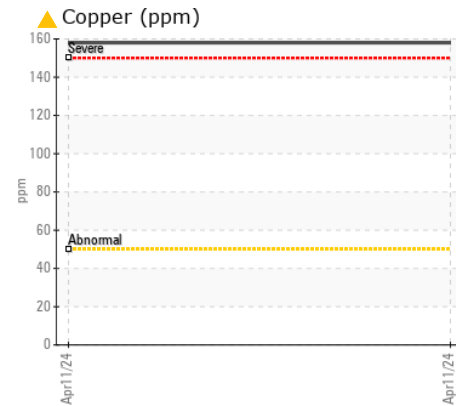
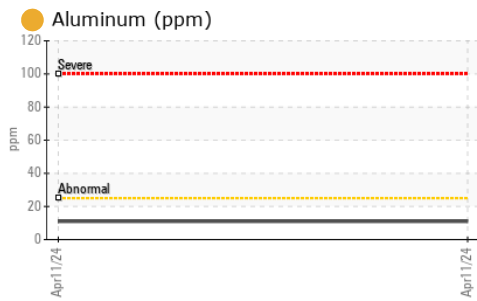
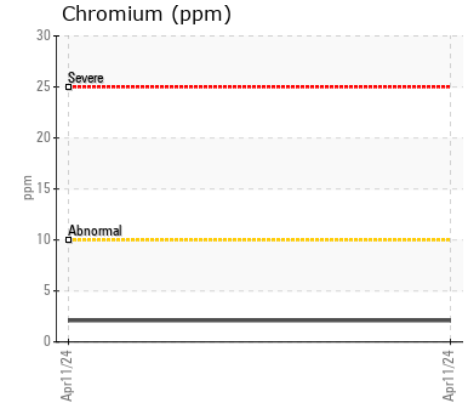
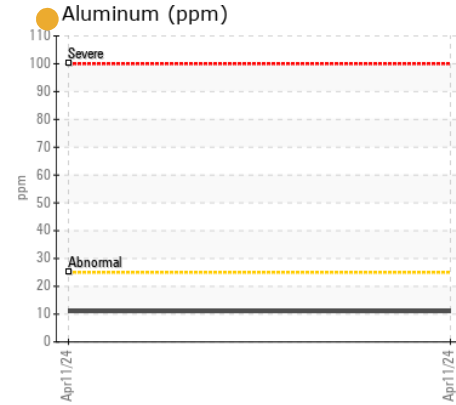
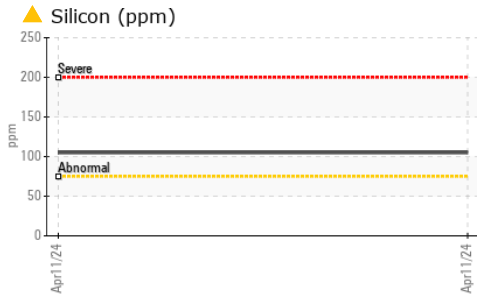
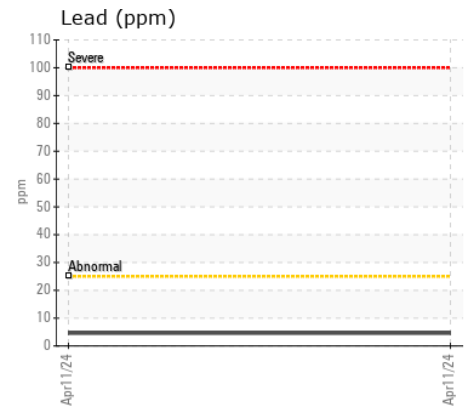
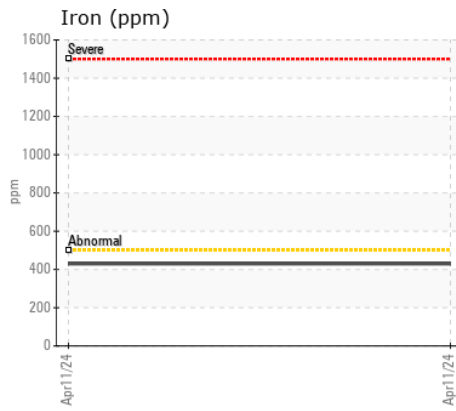
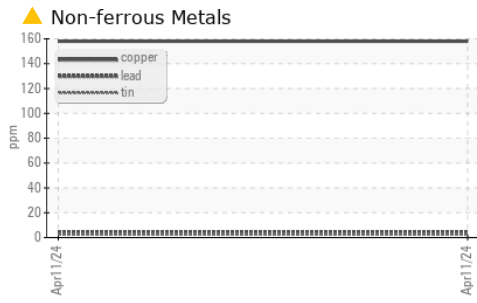
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >75 | 105 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 3 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Silt | scalar | *Visual | NONE | LIGHT | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- | --- |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-------|-------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 3 | --- | --- |
| Boron | ppm | ASTM D5185m | 2 | 122 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | 5 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0 | 6 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 9 | 5 | --- | --- |
| Calcium | ppm | ASTM D5185m | 3114 | 31 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1099 | 954 | --- | --- |
| Zinc | ppm | ASTM D5185m | 1245 | 74 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 7086 | 24695 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 213.9 | 143 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : PCA0109353
 Lab Number : 06156356
 Unique Number : 10991779
 Test Package : MOB 1

Received : 22 Apr 2024
 Tested : 23 Apr 2024
 Diagnosed : 24 Apr 2024 - Sean Felton

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)

T:
 F: