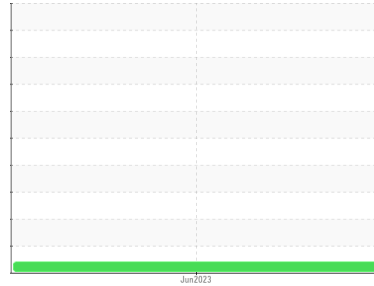


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

S-29

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX AW 68 (--- LTR)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type.

SAMPLE INFORMATION

| method | limit/base | current | history 1 | history 2 |
|---------------|-------------|--------------------|--------------|-----------|
| Sample Number | Client Info | PCA0056814 | --- | --- |
| Sample Date | Client Info | 29 Jun 2023 | --- | --- |
| Machine Age | hrs | Client Info | 18000 | --- |
| Oil Age | hrs | Client Info | 2000 | --- |
| Oil Changed | Client Info | Not Chngd | --- | --- |
| Sample Status | | ATTENTION | --- | --- |

WEAR METALS

| method | limit/base | current | history 1 | history 2 |
|----------|------------|-----------------|--------------|-----------|
| Iron | ppm | ASTM D5185m >20 | 5 | --- |
| Chromium | ppm | ASTM D5185m >10 | 3 | --- |
| Nickel | ppm | ASTM D5185m >10 | 0 | --- |
| Titanium | ppm | ASTM D5185m | <1 | --- |
| Silver | ppm | ASTM D5185m | 0 | --- |
| Aluminum | ppm | ASTM D5185m >10 | 0 | --- |
| Lead | ppm | ASTM D5185m >10 | <1 | --- |
| Copper | ppm | ASTM D5185m >75 | 22 | --- |
| Tin | ppm | ASTM D5185m >10 | 2 | --- |
| Vanadium | ppm | ASTM D5185m | <1 | --- |
| Cadmium | ppm | ASTM D5185m | 0 | --- |

ADDITIVES

| method | limit/base | current | history 1 | history 2 |
|------------|------------|-----------------|--------------|-----------|
| Boron | ppm | ASTM D5185m 0 | 1 | --- |
| Barium | ppm | ASTM D5185m 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m 0 | 4 | --- |
| Manganese | ppm | ASTM D5185m 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185m 0 | 45 | --- |
| Calcium | ppm | ASTM D5185m 50 | 145 | --- |
| Phosphorus | ppm | ASTM D5185m 330 | 340 | --- |
| Zinc | ppm | ASTM D5185m 430 | 389 | --- |
| Sulfur | ppm | ASTM D5185m 760 | 4039 | --- |

CONTAMINANTS

| method | limit/base | current | history 1 | history 2 |
|-----------|------------|-----------------|-----------|-----------|
| Silicon | ppm | ASTM D5185m >20 | 1 | --- |
| Sodium | ppm | ASTM D5185m | 2 | --- |
| Potassium | ppm | ASTM D5185m >20 | 1 | --- |

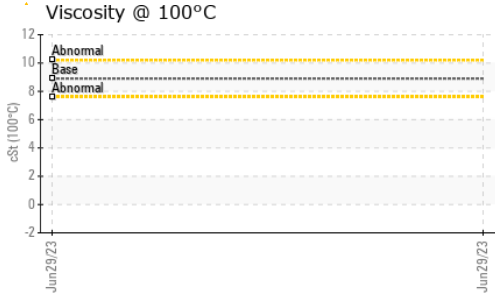
VISUAL

| method | limit/base | current | history 1 | history 2 |
|------------------|------------|---------------|--------------|-----------|
| White Metal | scalar | *Visual NONE | NONE | --- |
| Yellow Metal | scalar | *Visual NONE | NONE | --- |
| Precipitate | scalar | *Visual NONE | NONE | --- |
| Silt | scalar | *Visual NONE | NONE | --- |
| 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 >0.1 | NEG | --- |
| Free Water | scalar | *Visual | NEG | --- |

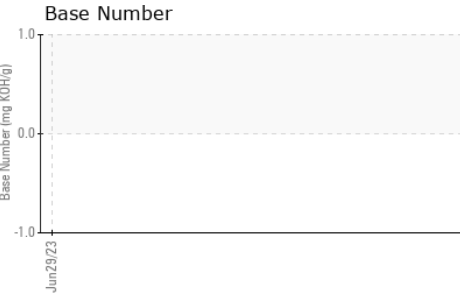
FLUID PROPERTIES

| method | limit/base | current | history 1 | history 2 |
|-------------|------------|----------------|----------------|-----------|
| Visc @ 40°C | cSt | ASTM D445 67.4 | ▲ 48.93 | --- |

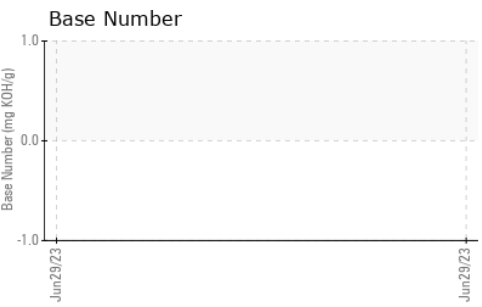
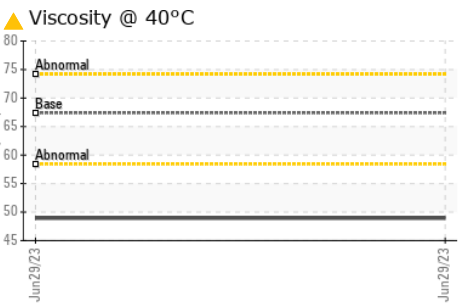
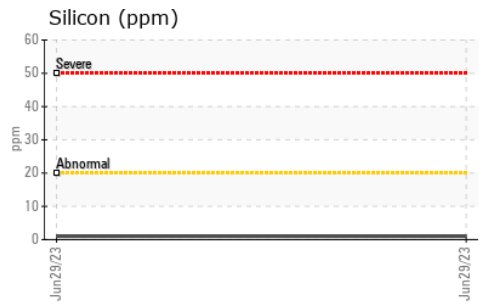
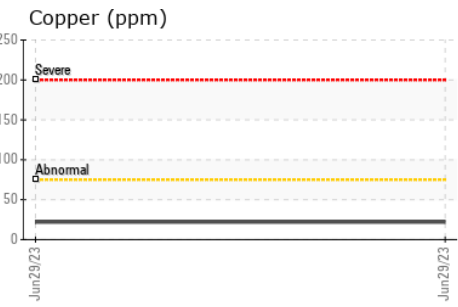
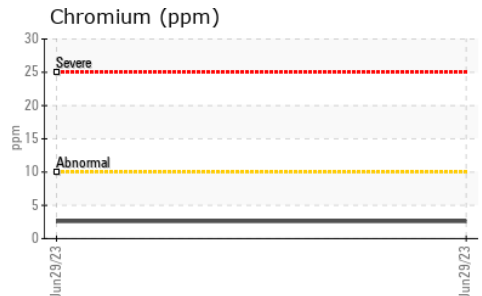
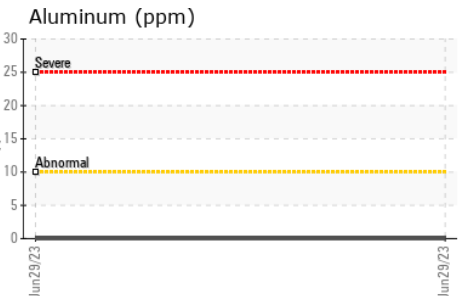
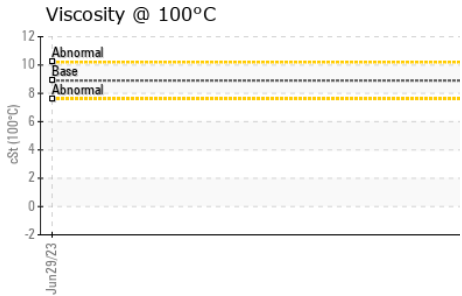
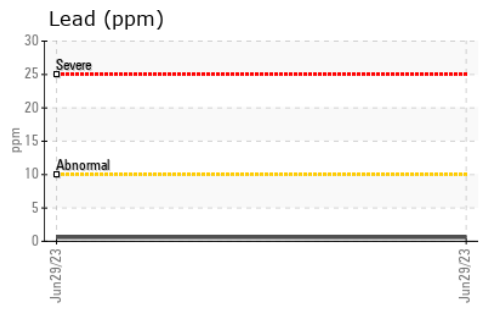
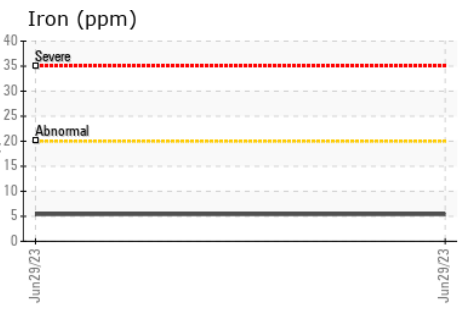
OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|----------|-----------|-----------|
| 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. : PCA0056814 **Received** : 05 Jul 2023
Lab Number : 05890733 **Diagnosed** : 12 Jul 2023
Unique Number : 10546543 **Diagnostician** : Jonathan Hester
Test Package : MOB 1 (Additional Tests: FT-IR, KV100, TBN)

TROPICAL SHIPPING
 50 PORT RD
 RIVIERA BEACH, FL
 US 33404
 Contact: B. BENSON
 bbenson@tropical.com
 T: (561)840-2918
 F:

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)