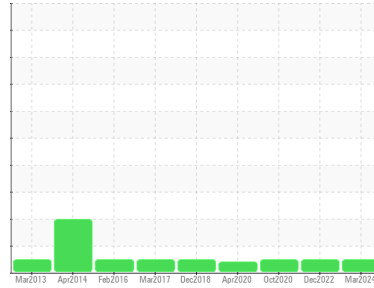


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**EVAPORATION [908199151]**  
 Machine Id  
**[EVAPORATION] TK-05205 TK-05205**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA PURITY FG AW HYDRAULIC 46 (--- QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

| method        | limit/base  | current            | history1    | history2    |
|---------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | <b>PCA0111067</b>  | PCA0058854  | PCA0026281  |
| Sample Date   | Client Info | <b>18 Mar 2024</b> | 16 Dec 2022 | 06 Oct 2020 |
| Machine Age   | hrs         | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | Filtered    |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

| method | limit/base      | current    | history1 | history2 |
|--------|-----------------|------------|----------|----------|
| Water  | WC Method >0.05 | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

| method   | limit/base          | current      | history1 | history2 |
|----------|---------------------|--------------|----------|----------|
| PQ       | ASTM D8184          | <b>15</b>    | 6        | 18       |
| Iron     | ppm ASTM D5185m >20 | <b>&lt;1</b> | 0        | <1       |
| Chromium | ppm ASTM D5185m >20 | <b>&lt;1</b> | 0        | 0        |
| Nickel   | ppm ASTM D5185m >20 | <b>&lt;1</b> | 0        | <1       |
| Titanium | ppm ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Silver   | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum | ppm ASTM D5185m >20 | <b>3</b>     | 1        | <1       |
| Lead     | ppm ASTM D5185m >20 | <b>&lt;1</b> | <1       | 0        |
| Copper   | ppm ASTM D5185m >20 | <b>2</b>     | 4        | 5        |
| Tin      | ppm ASTM D5185m >20 | <b>&lt;1</b> | <1       | 2        |
| Antimony | ppm ASTM D5185m     | <b>---</b>   | ---      | 0        |
| Vanadium | ppm ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |
| Cadmium  | ppm ASTM D5185m     | <b>&lt;1</b> | 0        | 0        |

## ADDITIVES

| method     | limit/base      | current      | history1 | history2 |
|------------|-----------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185m | <b>0</b>     | 0        | 0        |
| Barium     | ppm ASTM D5185m | <b>1</b>     | 0        | 0        |
| Molybdenum | ppm ASTM D5185m | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm ASTM D5185m | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm ASTM D5185m | <b>2</b>     | 0        | 0        |
| Calcium    | ppm ASTM D5185m | <b>5</b>     | <1       | 0        |
| Phosphorus | ppm ASTM D5185m | <b>449</b>   | 523      | 514      |
| Zinc       | ppm ASTM D5185m | <b>8</b>     | 10       | 11       |
| Sulfur     | ppm ASTM D5185m | <b>764</b>   | 508      | 437      |

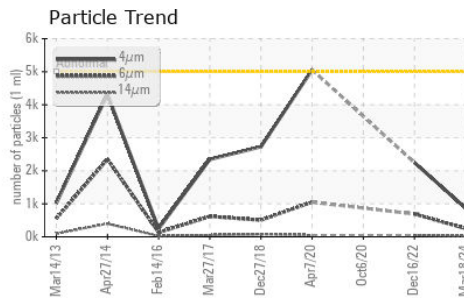
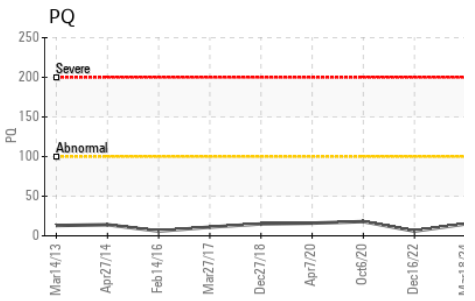
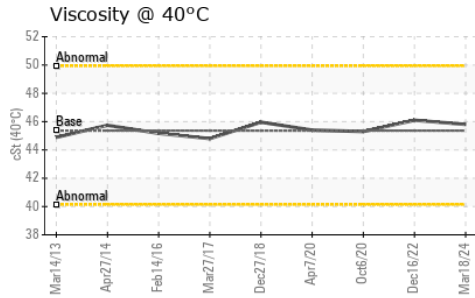
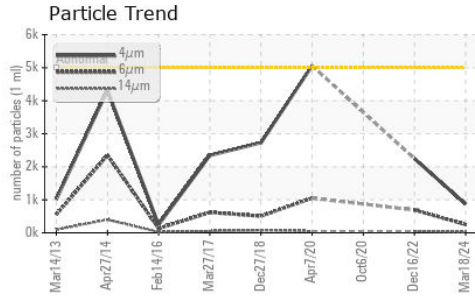
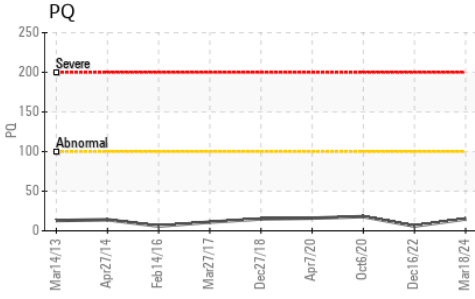
## CONTAMINANTS

| method    | limit/base          | current      | history1 | history2 |
|-----------|---------------------|--------------|----------|----------|
| Silicon   | ppm ASTM D5185m >15 | <b>&lt;1</b> | 2        | 1        |
| Sodium    | ppm ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Potassium | ppm ASTM D5185m >20 | <b>1</b>     | <1       | 2        |

## FLUID CLEANLINESS

| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647 >5000       | <b>869</b>      | 2247     | ---      |
| Particles >6µm  | ASTM D7647 >1300       | <b>250</b>      | 691      | ---      |
| Particles >14µm | ASTM D7647 >160        | <b>19</b>       | 48       | ---      |
| Particles >21µm | ASTM D7647 >40         | <b>5</b>        | 10       | ---      |
| Particles >38µm | ASTM D7647 >10         | <b>0</b>        | 1        | ---      |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | 0        | ---      |
| Oil Cleanliness | ISO 4406 (c) >19/17/14 | <b>17/15/11</b> | 18/17/13 | ---      |

# OIL ANALYSIS REPORT

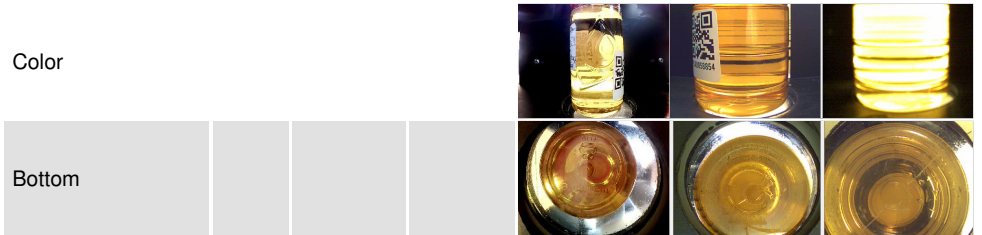


| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.26       | <b>0.31</b> | 0.30     | 0.243    |

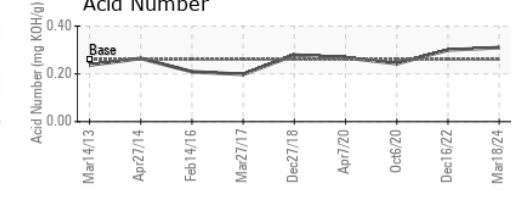
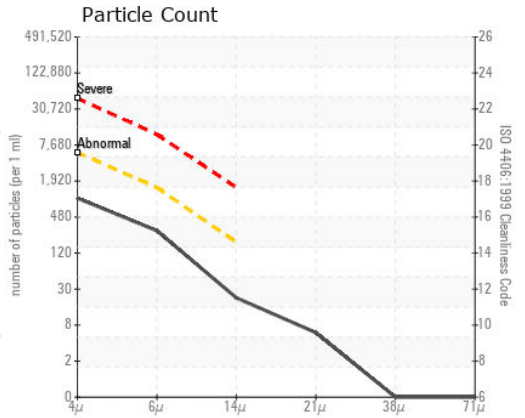
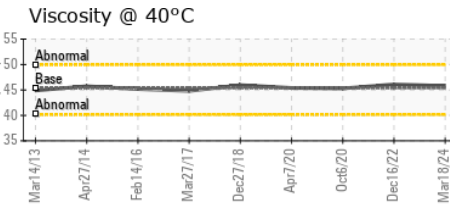
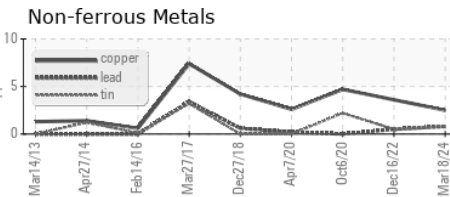
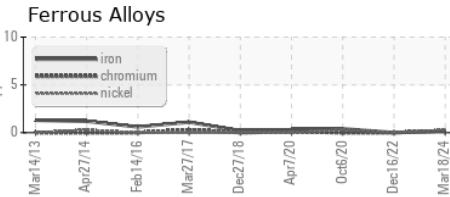
| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | VLITE    | NONE     |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual | >0.05      | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | NEG      | NEG      |

| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 45.36      | <b>45.8</b> | 46.1     | 45.3     |

| SAMPLE IMAGES |  | method | limit/base | current | history1 | history2 |
|---------------|--|--------|------------|---------|----------|----------|
|---------------|--|--------|------------|---------|----------|----------|



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0111067  
**Lab Number** : **06129333**  
**Unique Number** : 10943484  
**Test Package** : IND 2 ( Additional Tests: PQ )

**THE HERSHEY COMPANY**  
 WEST HERSHEY - TECHNICAL ASSURANCE, 1033 OLDE WEST CHOCOLATE  
 HERSHEY, PA  
 US 17033  
 Contact: CLINTON ZOHNER  
 clintzohner@hersheys.com  
 T: (717)374-4846  
 F: (717)374-4594

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)