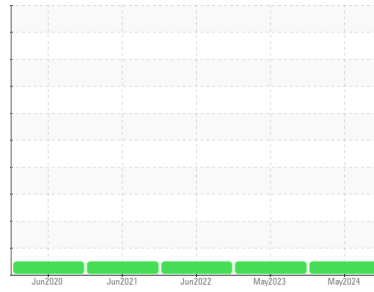


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
ELGIN
 Machine Id
NISSEI PRESS 13 H
 Component
Hydraulic System
 Fluid
PETRO CANADA ENVIRON AW 46 (--- GAL)

DIAGNOSIS

Recommendation

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

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | PCA0125332 | PCA0097201 | PCA0077114 |
| Sample Date | Client Info | | | 13 May 2024 | 13 May 2023 | 28 Jun 2022 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 4000 | 4000 |
| Oil Changed | Client Info | | | N/A | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

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

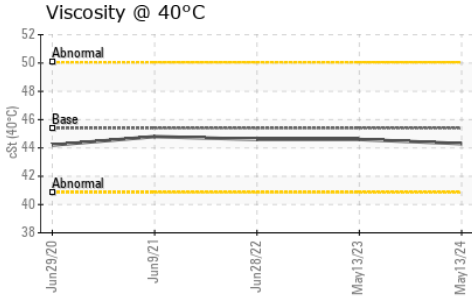
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 7 | 10 | 9 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >20 | 29 | 27 | 26 |
| Tin | ppm | ASTM D5185m | >20 | 1 | <1 | 1 |
| Antimony | ppm | ASTM D5185m | | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | 1 |
| Barium | ppm | ASTM D5185m | 0 | 8 | 5 | 14 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | 2 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 44 | 36 | 36 |
| Phosphorus | ppm | ASTM D5185m | 650 | 607 | 617 | 510 |
| Zinc | ppm | ASTM D5185m | 0 | 71 | 75 | 73 |
| Sulfur | ppm | ASTM D5185m | 1280 | 4243 | 4816 | 4155 |

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

| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| 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 | >0.05 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

OIL ANALYSIS REPORT

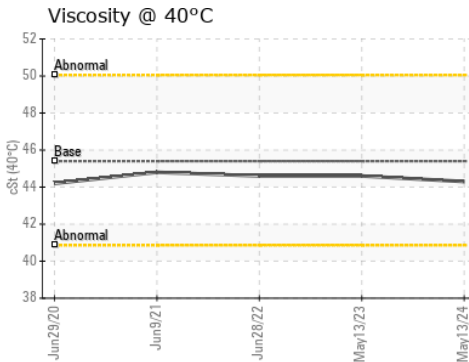
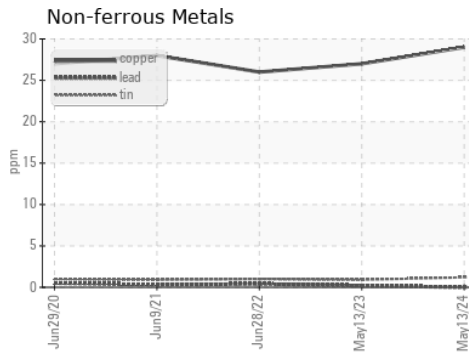
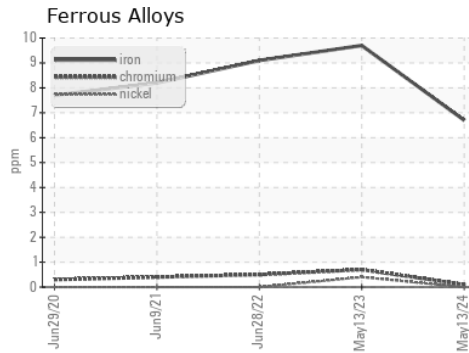


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|-------------|----------|------|
| Visc @ 40°C | cSt | ASTM D445 | 45.4 | 44.3 | 44.6 | 44.6 |

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

| | | | | | |
|--------|----------|----------|--|--|--|
| Color | no image | no image | | | |
| Bottom | no image | no image | | | |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0125332 **Received** : 13 May 2024
Lab Number : **06178033** **Tested** : 14 May 2024
Unique Number : 11029359 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : IND 1

ELGIN DIE MOLD
 14N002 PRAIRIE ST
 PINGREE GROVE, IL
 US 60140
 Contact: STEVE METCALF
 pm@elgindiemold.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)