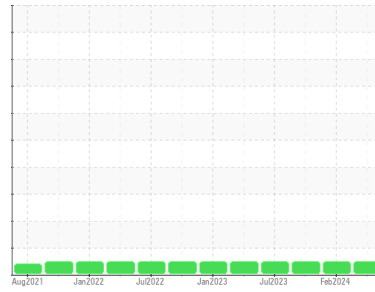


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Pickle Line
 Machine Id
[Pickle Line] 520045-#2 PAYOFF REEL
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 460 (--- GAL)

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

There is no indication of any contamination in the oil.

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 | PCA0117629 | PCA0112985 | PCA0101623 |
| Sample Date | Client Info | 08 Apr 2024 | 14 Feb 2024 | 25 Oct 2023 |
| Machine Age | hrs | Client Info | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 |
| Oil Changed | Client Info | N/A | N/A | N/A |
| Sample Status | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| method | limit/base | current | history1 | history2 | |
|--------|------------|---------|------------|----------|-----|
| Water | WC Method | >0.2 | NEG | NEG | NEG |

WEAR METALS

| method | limit/base | current | history1 | history2 | | |
|----------|------------|-------------|----------|----------|----|----|
| PQ | ASTM D8184 | 16 | 15 | 13 | | |
| Iron | ppm | ASTM D5185m | >200 | 0 | 2 | 3 |
| Chromium | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m | >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | 0 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| 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 | 55 | 31 | 35 | 40 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 2 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 6 | 0 | 26 | 0 |
| Phosphorus | ppm | ASTM D5185m | 240 | 191 | 183 | 192 |
| Zinc | ppm | ASTM D5185m | 3 | 0 | 0 | 4 |
| Sulfur | ppm | ASTM D5185m | 10310 | 7481 | 6080 | 5946 |

CONTAMINANTS

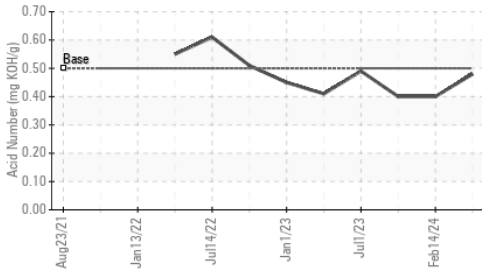
| method | limit/base | current | history1 | history2 | | |
|-----------|------------|-------------|----------|--------------|----|----|
| Silicon | ppm | ASTM D5185m | >50 | 2 | 2 | 7 |
| Sodium | ppm | ASTM D5185m | | <1 | <1 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 0 | <1 |

FLUID DEGRADATION

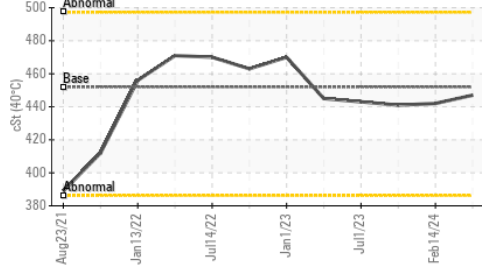
| method | limit/base | current | history1 | history2 | | |
|------------------|------------|------------|----------|-------------|------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.5 | 0.48 | 0.40 | 0.40 |

OIL ANALYSIS REPORT

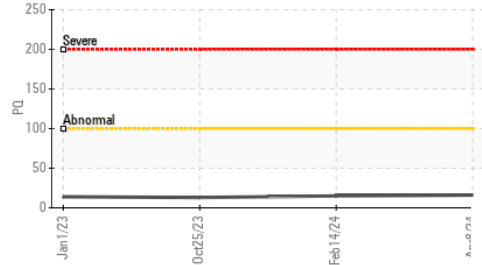
Acid Number



Viscosity @ 40°C



PQ



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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 452 | 447 | 442 |

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

Color

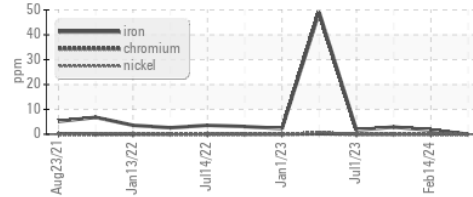


Bottom

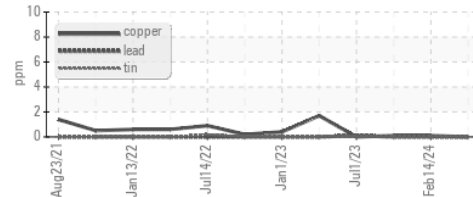


GRAPHS

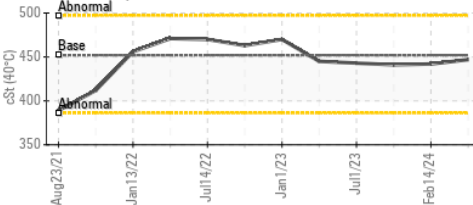
Ferrous Alloys



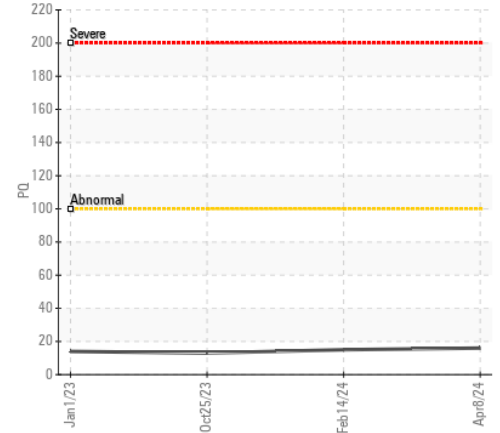
Non-ferrous Metals



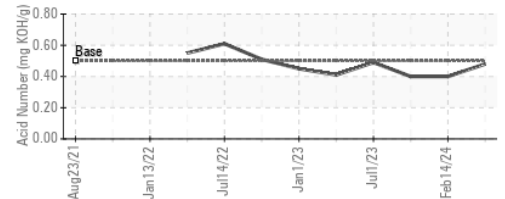
Viscosity @ 40°C



PQ



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0117629
Lab Number : 06142415
Unique Number : 10967223
Test Package : PLANT

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Wes Davis

SDI - Steel DynamicsInc. - Heartland
 455 West Industrial Drive
 Terre Haute, IN
 US 47802
 Contact: BRAD ELLIS
 brad.ellis@steeldynamics.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: