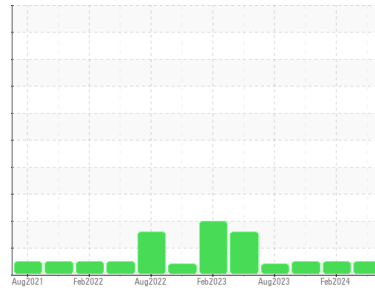


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Pickle Line

Machine Id

[Pickle Line] 585215-DELIVERY TENSION REEL-E/W Dr

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 | PCA0117684 | PCA0113012 | PCA0107658 |
| Sample Date | Client Info | 08 May 2024 | 13 Feb 2024 | 26 Nov 2023 |
| Machine Age | hrs | 0 | 0 | 0 |
| Oil Age | hrs | 0 | 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 | 47 | 36 | --- |
| Iron | ppm ASTM D5185m >200 | 29 | 18 | 17 |
| Chromium | ppm ASTM D5185m >15 | <1 | 0 | <1 |
| Nickel | ppm ASTM D5185m >15 | <1 | <1 | <1 |
| Titanium | ppm ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >25 | <1 | <1 | <1 |
| Lead | ppm ASTM D5185m >100 | <1 | 0 | <1 |
| Copper | ppm ASTM D5185m >200 | 1 | 0 | <1 |
| Tin | ppm ASTM D5185m >25 | <1 | 0 | <1 |
| Vanadium | ppm ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm ASTM D5185m | <1 | 0 | <1 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|-----------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185m 55 | 15 | 18 | 21 |
| Barium | ppm ASTM D5185m 0 | 0 | 0 | <1 |
| Molybdenum | ppm ASTM D5185m 0 | <1 | 0 | <1 |
| Manganese | ppm ASTM D5185m 0 | <1 | <1 | <1 |
| Magnesium | ppm ASTM D5185m 2 | 0 | 0 | 0 |
| Calcium | ppm ASTM D5185m 6 | 0 | 0 | <1 |
| Phosphorus | ppm ASTM D5185m 240 | 156 | 186 | 172 |
| Zinc | ppm ASTM D5185m 3 | <1 | 0 | 0 |
| Sulfur | ppm ASTM D5185m 10310 | 7372 | 7429 | 7880 |

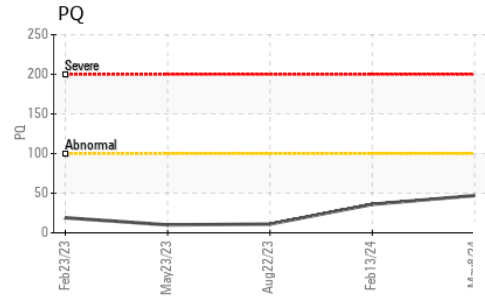
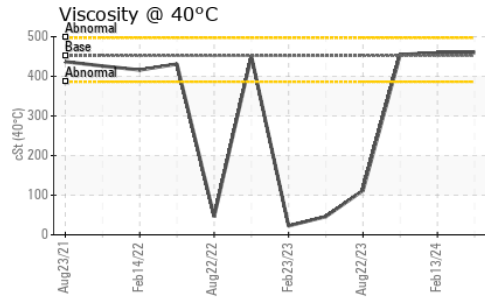
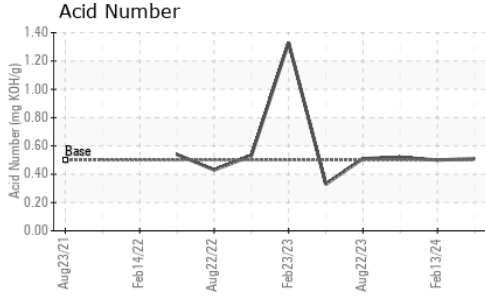
CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|---------------------|----------|----------|----------|
| Silicon | ppm ASTM D5185m >50 | 6 | 5 | 8 |
| Sodium | ppm ASTM D5185m | 0 | 0 | 0 |
| Potassium | ppm ASTM D5185m >20 | 2 | 0 | 1 |

FLUID DEGRADATION

| method | limit/base | current | history1 | history2 |
|------------------|-------------------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g ASTM D8045 0.5 | 0.51 | 0.50 | 0.52 |

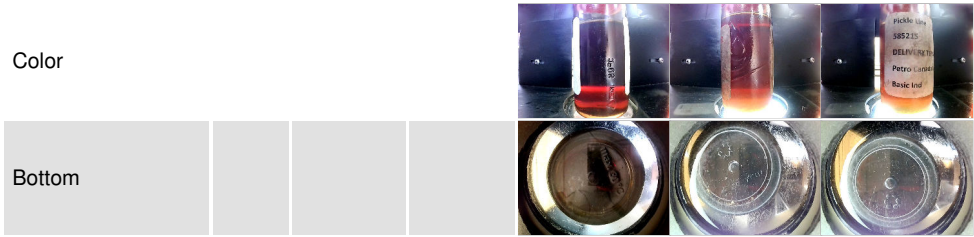
OIL ANALYSIS REPORT



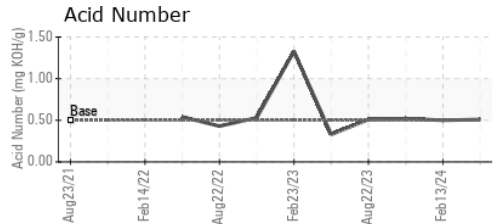
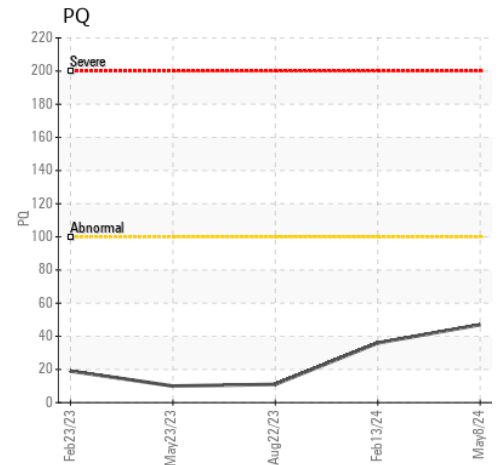
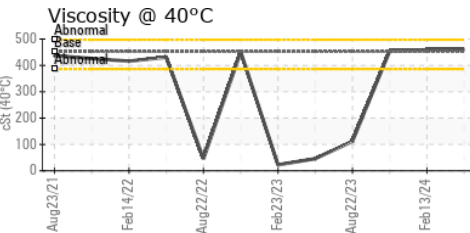
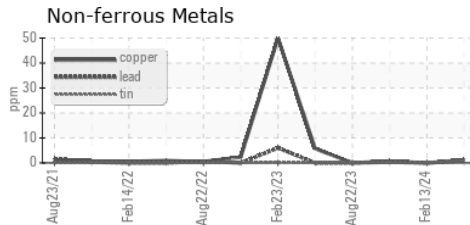
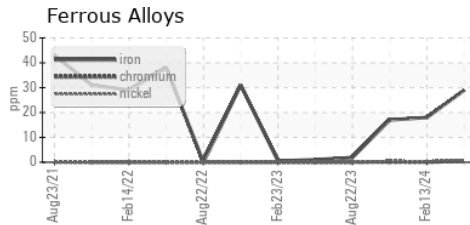
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | 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 | 460 | 459 | 455 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0117684 **Received** : 09 May 2024
Lab Number : 06173990 **Tested** : 10 May 2024
Unique Number : 11020043 **Diagnosed** : 10 May 2024 - Wes Davis
Test Package : PLANT

SDI - Steel Dynamics Inc. - 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)