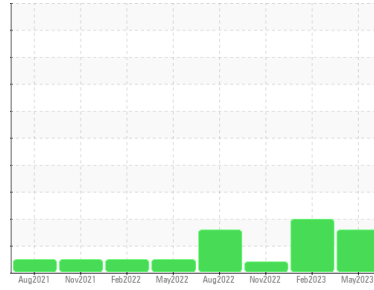


PROBLEM SUMMARY

Sample Rating Trend

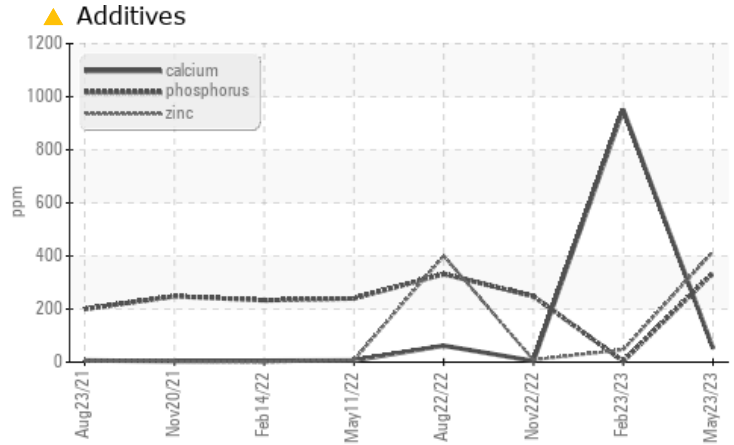
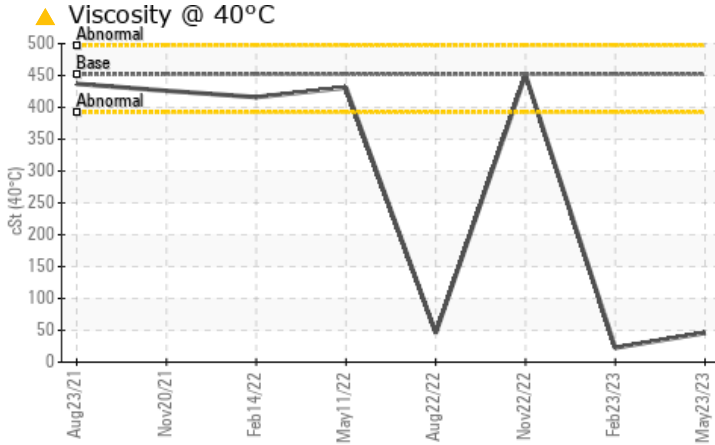


VISCOSITY



Area
Pickle Line
 Machine Id
[Pickle Line] 585215-DELIVERY TENSION REEL-E/W Dr
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 460 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ATTENTION
Calcium	ppm	ASTM D5185m	6	▲ 53	▲ 951	4
Zinc	ppm	ASTM D5185m	3	▲ 416	▲ 47	8
Sulfur	ppm	ASTM D5185m	10310	▲ 1577	▲ 1265	6898
Visc @ 40°C	cSt	ASTM D445	452	▲ 46.0	▲ 22.6	▲ 451

Customer Id: SDITER
 Sample No.: PCA0095476
 Lab Number: 05894584
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

23 Feb 2023 Diag: Jonathan Hester

VISCOSITY



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

view report



22 Nov 2022 Diag: Don Baldrige

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



22 Aug 2022 Diag: Doug Bogart

VISCOSITY



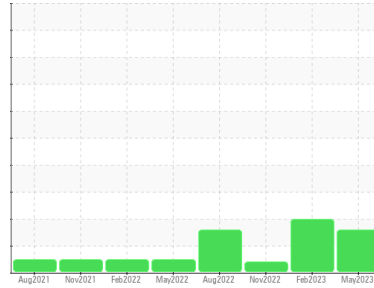
Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

view report



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



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.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0095476	PCA0089511	PCA0081746
Sample Date	Client Info	23 May 2023	23 Feb 2023	22 Nov 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ATTENTION	ATTENTION	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	10	19	---	
Iron	ppm	ASTM D5185m >200	1	<1	31
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	<1	<1	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	0	0
Aluminum	ppm	ASTM D5185m >25	<1	<1	<1
Lead	ppm	ASTM D5185m >100	0	6	0
Copper	ppm	ASTM D5185m >200	6	50	2
Tin	ppm	ASTM D5185m >25	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 55	0	0	25
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	3	1	0
Calcium	ppm	ASTM D5185m 6	▲ 53	▲ 951	4
Phosphorus	ppm	ASTM D5185m 240	336	▲ 3	248
Zinc	ppm	ASTM D5185m 3	▲ 416	▲ 47	8
Sulfur	ppm	ASTM D5185m 10310	▲ 1577	▲ 1265	6898

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<1	9	3
Sodium	ppm	ASTM D5185m	<1	37	<1
Potassium	ppm	ASTM D5185m >20	1	<1	0

FLUID DEGRADATION

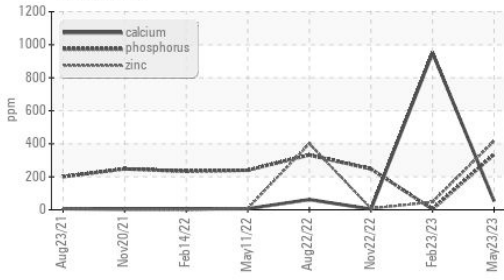
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	0.33	1.33	0.53

VISUAL

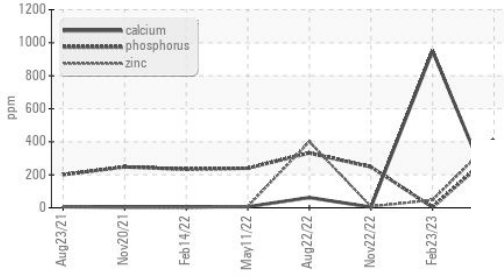
method	limit/base	current	history1	history2	
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

OIL ANALYSIS REPORT

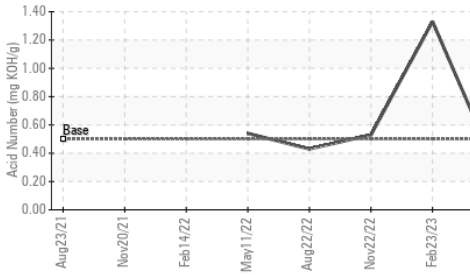
▲ Additives



▲ Additives



Acid Number



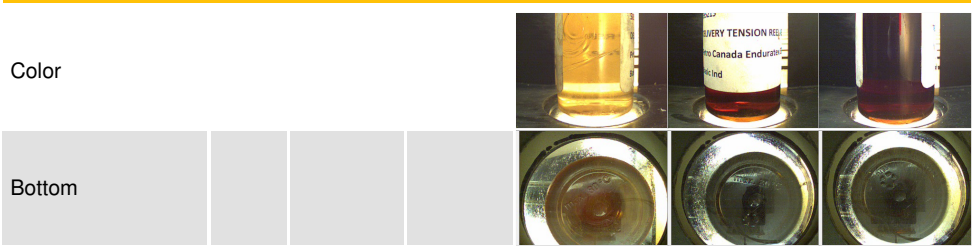
PQ



FLUID PROPERTIES

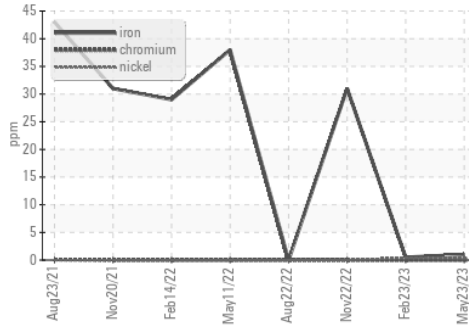
method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 452	▲ 46.0	▲ 22.6	▲ 451

SAMPLE IMAGES

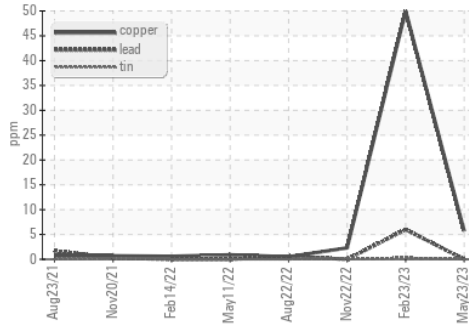


GRAPHS

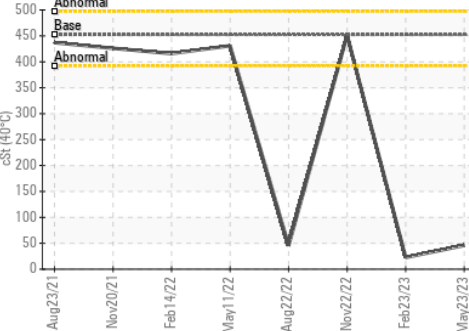
Ferrous Alloys



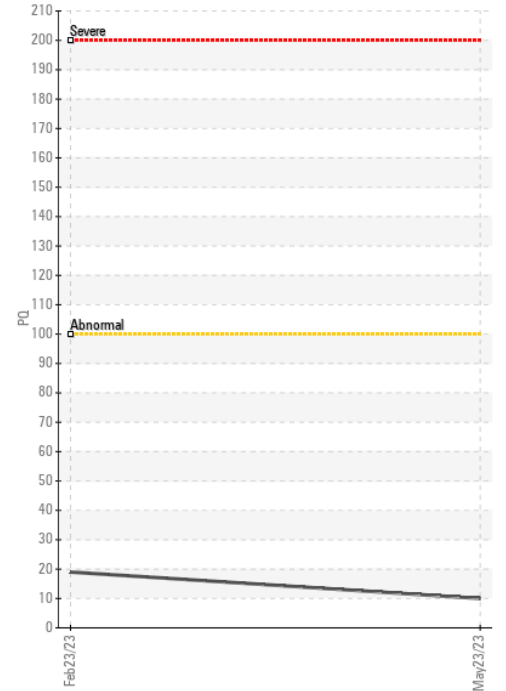
Non-ferrous Metals



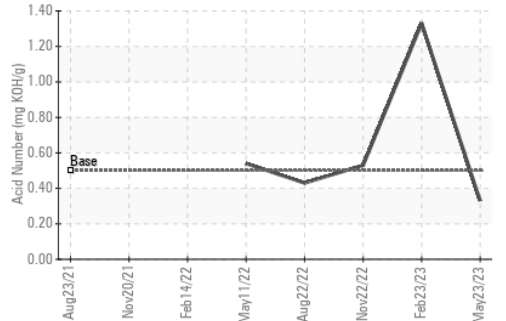
Viscosity @ 40°C



PQ



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0095476
Lab Number : 05894584
Unique Number : 10550394
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)

T:
F: