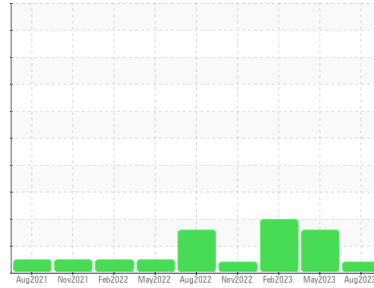


PROBLEM SUMMARY

Sample Rating Trend

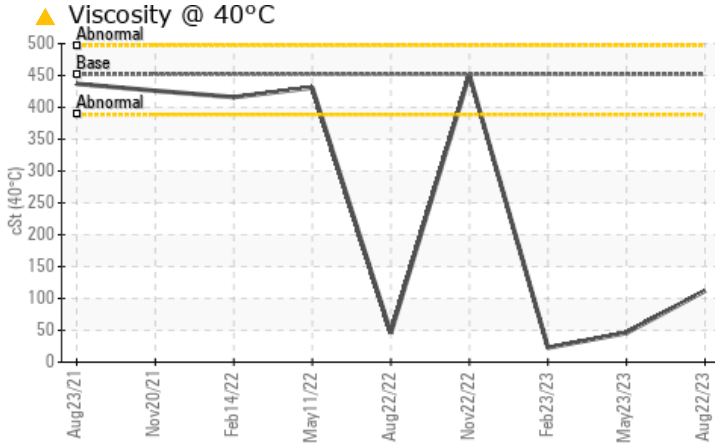


VISCOSITY



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

We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ATTENTION	ATTENTION
Visc @ 40°C	cSt	ASTM D445	452	▲ 112	▲ 46.0	▲ 22.6

Customer Id: SDITER
Sample No.: PCA0101440
Lab Number: 05932886
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@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 May 2023 Diag: Jonathan Hester

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. 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



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

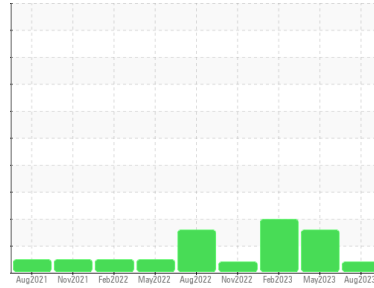


Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 460 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



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

We recommend an early resample to monitor this condition.

Wear

The iron level is abnormal. All other 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PCA0101440	PCA0095476	PCA0089511
Sample Date	Client Info			22 Aug 2023	23 May 2023	23 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	Not Changd	Not Changd
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		11	10	19
Iron	ppm	ASTM D5185m	>200	2	1	<1
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>100	0	0	6
Copper	ppm	ASTM D5185m	>200	0	6	50
Tin	ppm	ASTM D5185m	>25	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	1	0

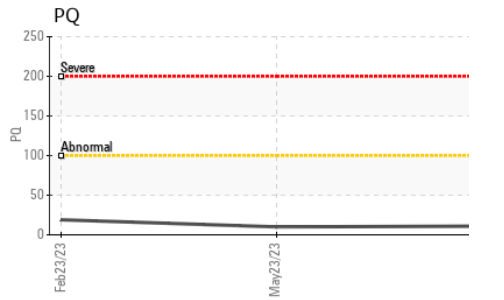
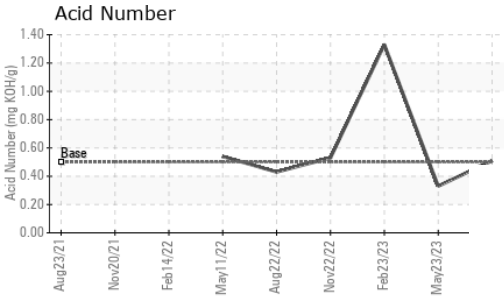
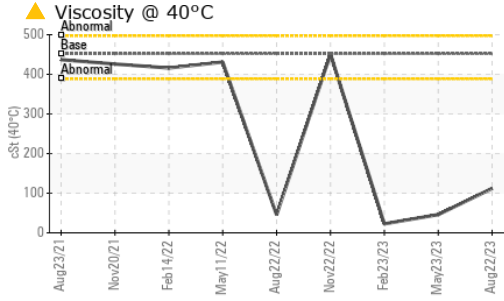
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	13	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	2	<1	3	1
Calcium	ppm	ASTM D5185m	6	0	▲ 53	▲ 951
Phosphorus	ppm	ASTM D5185m	240	194	336	▲ 3
Zinc	ppm	ASTM D5185m	3	0	▲ 416	▲ 47
Sulfur	ppm	ASTM D5185m	10310	9191	▲ 1577	▲ 1265

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	10	<1	9
Sodium	ppm	ASTM D5185m		<1	<1	37
Potassium	ppm	ASTM D5185m	>20	1	1	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.5	0.51	0.33	1.33

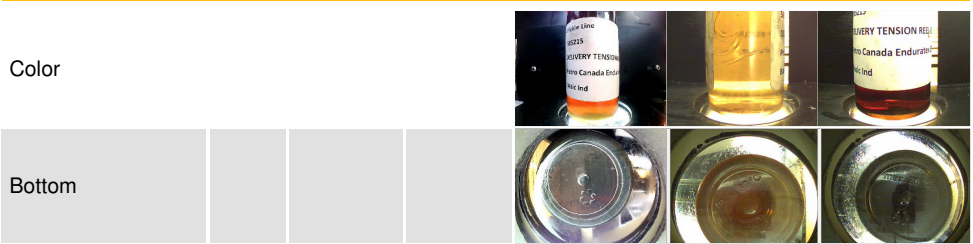
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

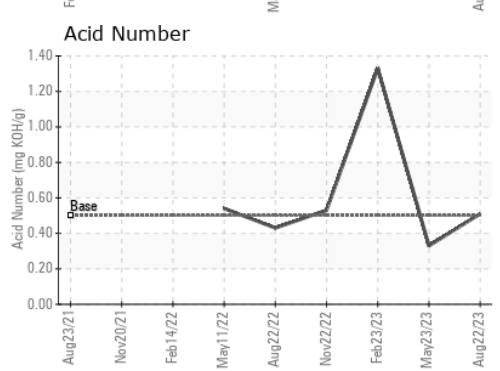
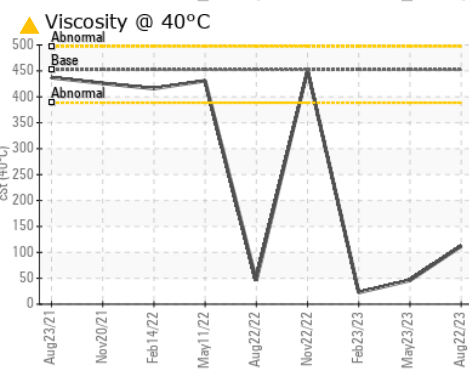
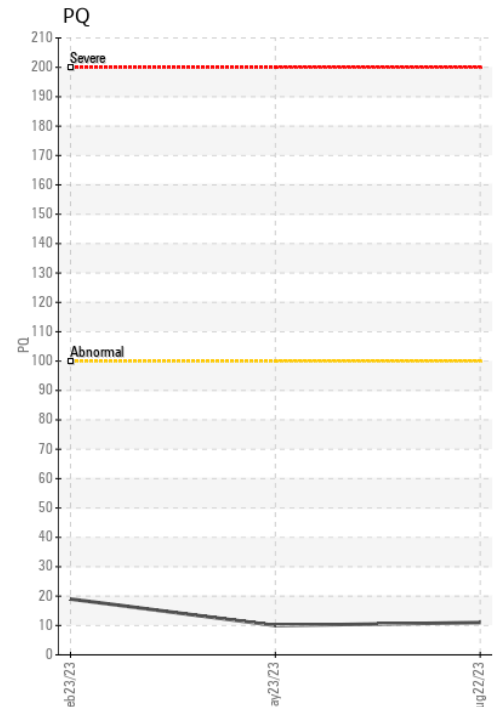
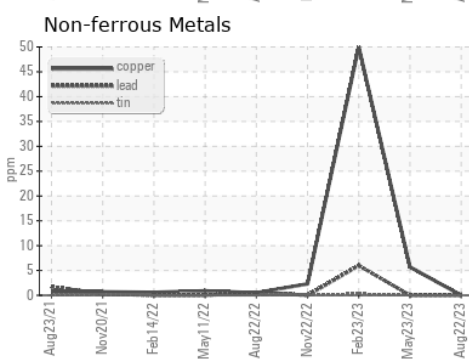
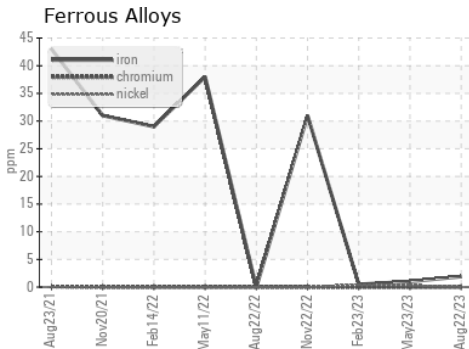


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	452	▲ 112	▲ 46.0	▲ 22.6

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101440
Lab Number : 05932886
Unique Number : 10618157
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)