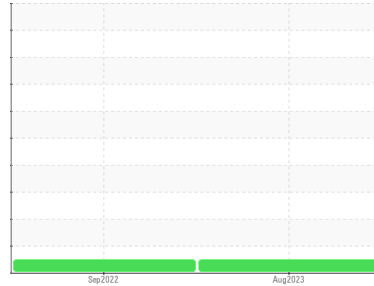


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
CRANE 12 WEST BRIDGE

Component
Gearbox

Fluid
PETRO CANADA ENDURATEX EP 220 (--- 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		PCA0101532	PCA0077451	---
Sample Date	Client Info		28 Aug 2023	22 Sep 2022	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	Not Changd	---
Sample Status			NORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		14	12	---
Iron	ppm	ASTM D5185m >200	15	13	---
Chromium	ppm	ASTM D5185m >15	0	0	---
Nickel	ppm	ASTM D5185m >15	<1	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >25	0	0	---
Lead	ppm	ASTM D5185m >100	0	0	---
Copper	ppm	ASTM D5185m >200	<1	<1	---
Tin	ppm	ASTM D5185m >25	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 60	2	2	---
Barium	ppm	ASTM D5185m 0	7	0	---
Molybdenum	ppm	ASTM D5185m 0	0	0	---
Manganese	ppm	ASTM D5185m 0	0	<1	---
Magnesium	ppm	ASTM D5185m 0	<1	<1	---
Calcium	ppm	ASTM D5185m 0	9	9	---
Phosphorus	ppm	ASTM D5185m 270	279	269	---
Zinc	ppm	ASTM D5185m 0	12	8	---
Sulfur	ppm	ASTM D5185m 11200	11535	11891	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	13	9	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	<1	1	---

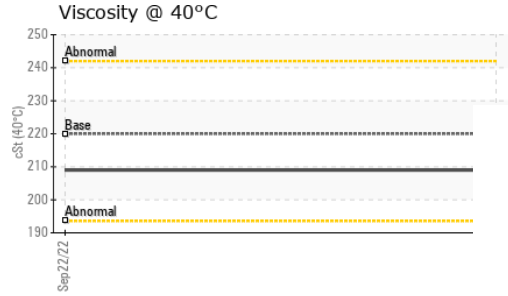
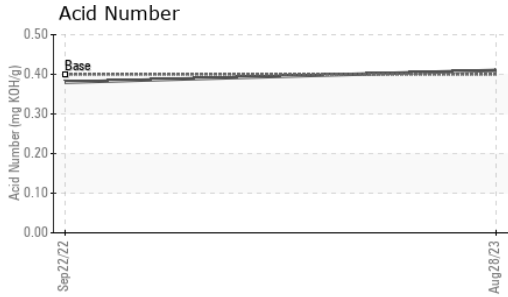
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.40	0.41	0.38	---

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	---	---



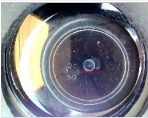
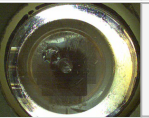
OIL ANALYSIS REPORT



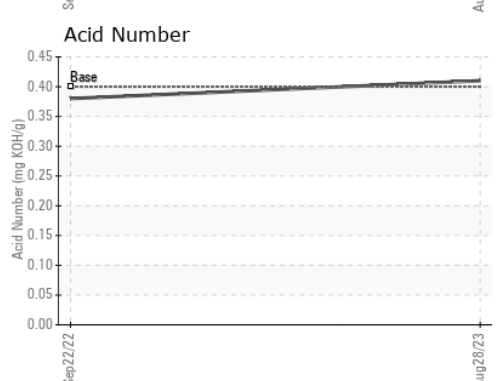
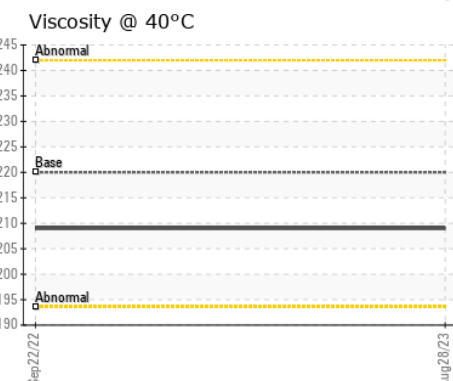
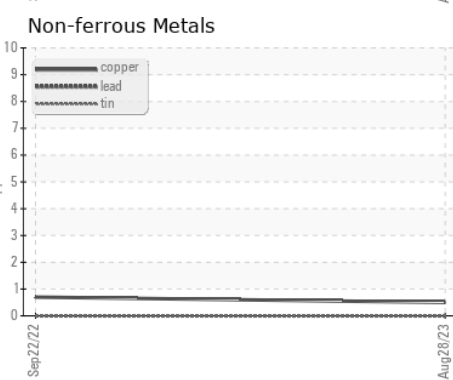
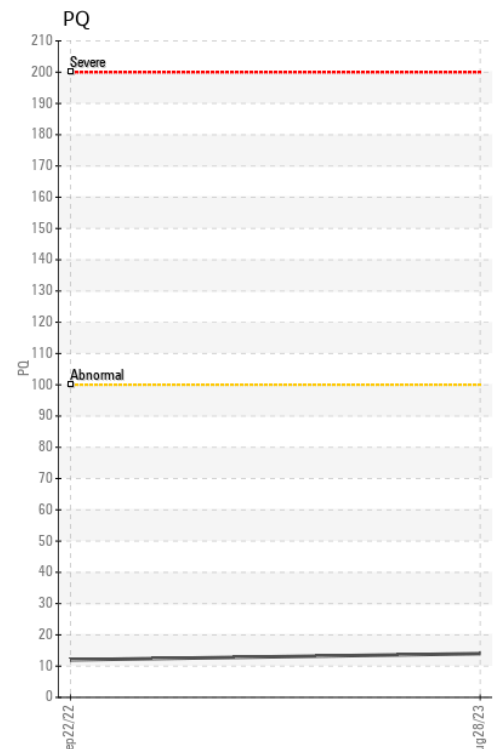
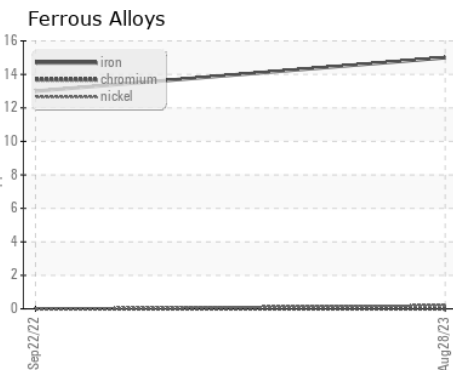
FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D445 220	209	209	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101532 **Received** : 29 Aug 2023
Lab Number : 05937368 **Diagnosed** : 30 Aug 2023
Unique Number : 10622639 **Diagnostician** : 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
 T:
 F:

Certificate L2367
 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)