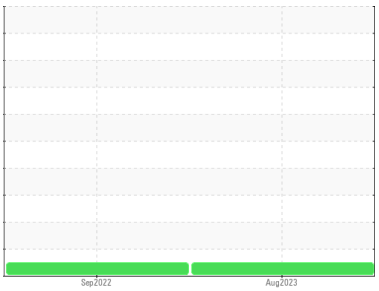
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
[] CRANE 1 NORTH 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		**PCA0101530**	PCA0077449	---
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		**17**	10	---
Iron	ppm	ASTM D5185m	>200	**15**	12	---
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	**<1**	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	**<1**	1	---
Barium	ppm	ASTM D5185m	0	**2**	0	---
Molybdenum	ppm	ASTM D5185m	0	**0**	0	---
Manganese	ppm	ASTM D5185m	0	**<1**	<1	---
Magnesium	ppm	ASTM D5185m	0	**2**	2	---
Calcium	ppm	ASTM D5185m	0	**21**	19	---
Phosphorus	ppm	ASTM D5185m	270	**328**	315	---
Zinc	ppm	ASTM D5185m	0	**41**	36	---
Sulfur	ppm	ASTM D5185m	11200	**15913**	16766	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**43**	37	---
Sodium	ppm	ASTM D5185m		**1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	---

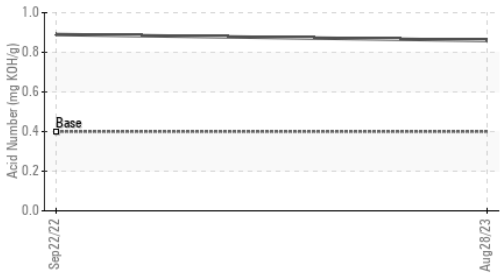
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	**0.86**	0.89	---

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	---

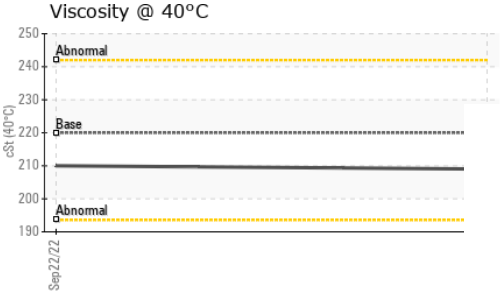
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

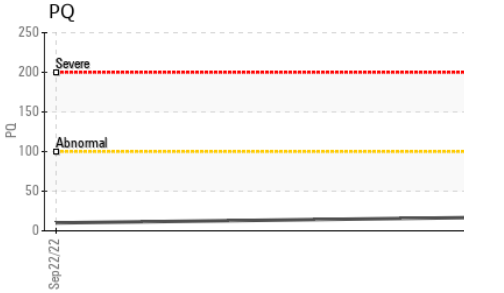
Acid Number



Viscosity @ 40°C

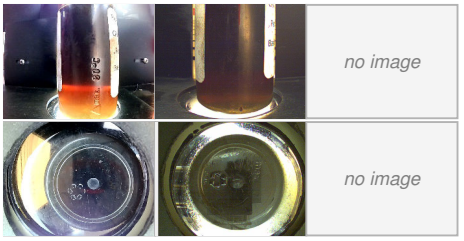


PQ



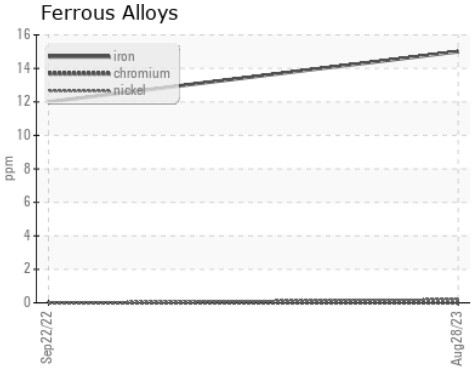
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	**209**	210	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

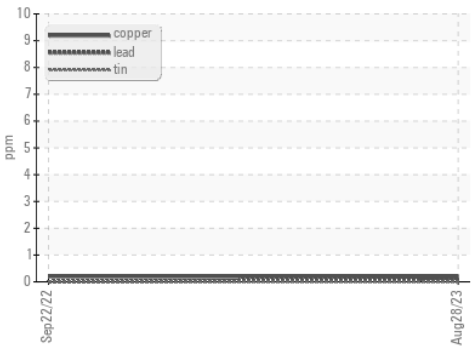


GRAPHS

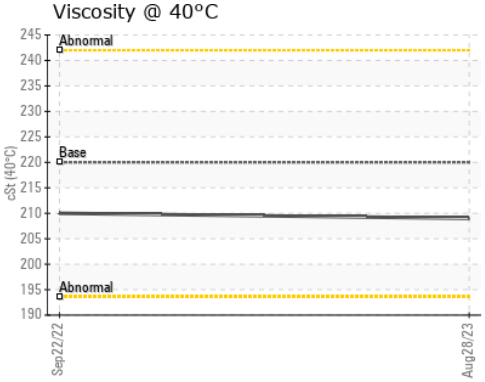
Ferrous Alloys



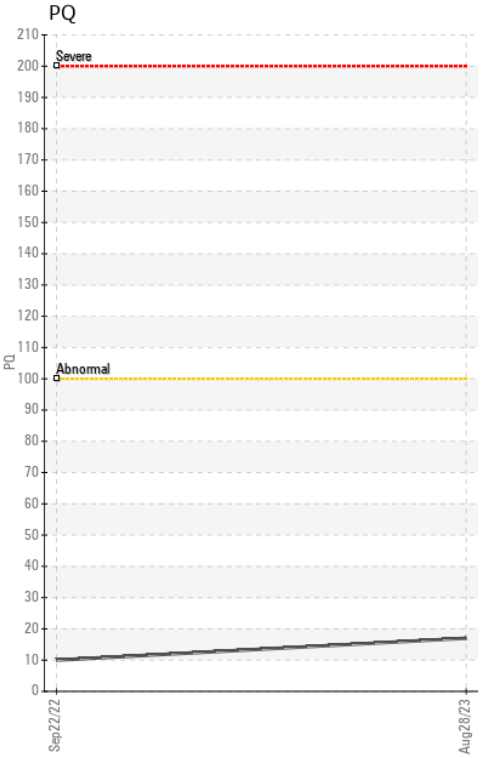
Non-ferrous Metals



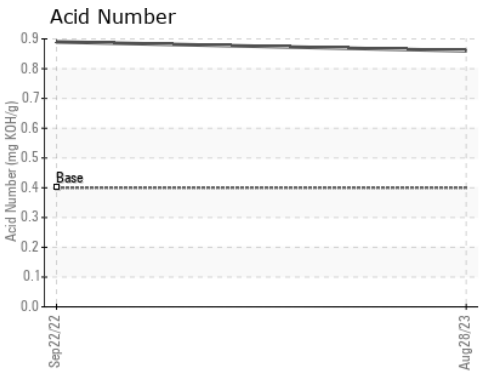
Viscosity @ 40°C



PQ



Acid Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: PCA0101530	**Received**	: 29 Aug 2023
Lab Number	: 05937366	**Diagnosed**	: 30 Aug 2023
Unique Number	: 10622637	**Diagnostician**	: Wes Davis
Test Package	: PLANT		

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)

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