



Machine Id
North Crane Holding Gearbox
 Component
Gearbox
 Fluid
PETRO CANADA ENDURATEX EP 220 (--- 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 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	PCA0102295	---	---
Sample Date	Client Info	13 Aug 2023	---	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	---	---
Sample Status		NORMAL	---	---

WEAR METALS method limit/base current history1 history2

PQ	ASTM D8184		85	---	---
Iron	ppm	ASTM D5185m >200	76	---	---
Chromium	ppm	ASTM D5185m >10	<1	---	---
Nickel	ppm	ASTM D5185m >10	<1	---	---
Titanium	ppm	ASTM D5185m	2	---	---
Silver	ppm	ASTM D5185m	<1	---	---
Aluminum	ppm	ASTM D5185m >25	27	---	---
Lead	ppm	ASTM D5185m >50	0	---	---
Copper	ppm	ASTM D5185m >200	0	---	---
Tin	ppm	ASTM D5185m >10	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m 60	62	---	---
Barium	ppm	ASTM D5185m 0	0	---	---
Molybdenum	ppm	ASTM D5185m 0	0	---	---
Manganese	ppm	ASTM D5185m 0	<1	---	---
Magnesium	ppm	ASTM D5185m 0	2	---	---
Calcium	ppm	ASTM D5185m 0	17	---	---
Phosphorus	ppm	ASTM D5185m 270	259	---	---
Zinc	ppm	ASTM D5185m 0	<1	---	---
Sulfur	ppm	ASTM D5185m 11200	7396	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m >50	47	---	---
Sodium	ppm	ASTM D5185m	2	---	---
Potassium	ppm	ASTM D5185m >20	1	---	---

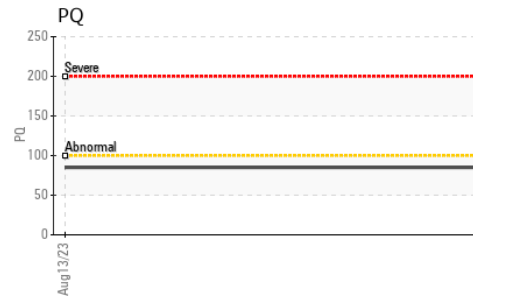
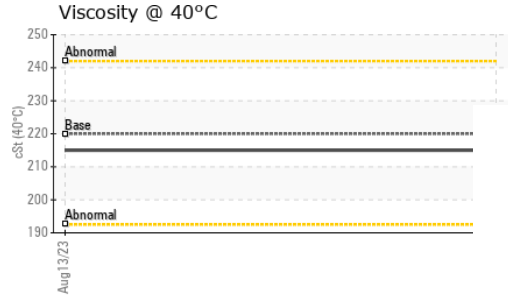
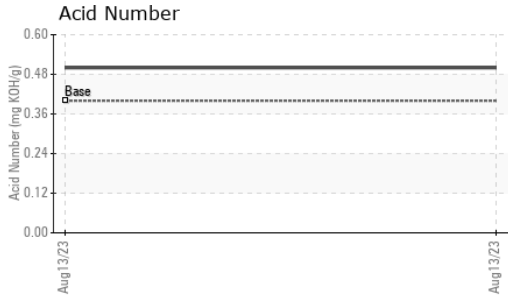
FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045 0.40	0.50	---	---
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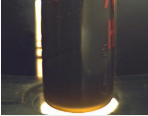
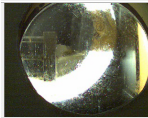
VISUAL method limit/base current history1 history2

White Metal	scalar	*Visual NONE	MODER	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---
Appearance	scalar	*Visual NORML	NORML	---	---
Odor	scalar	*Visual NORML	NORML	---	---
Emulsified Water	scalar	*Visual >0.2	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---

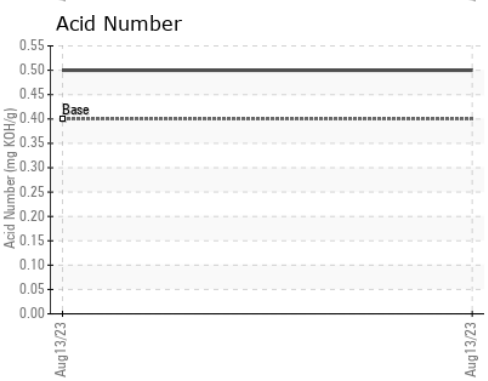
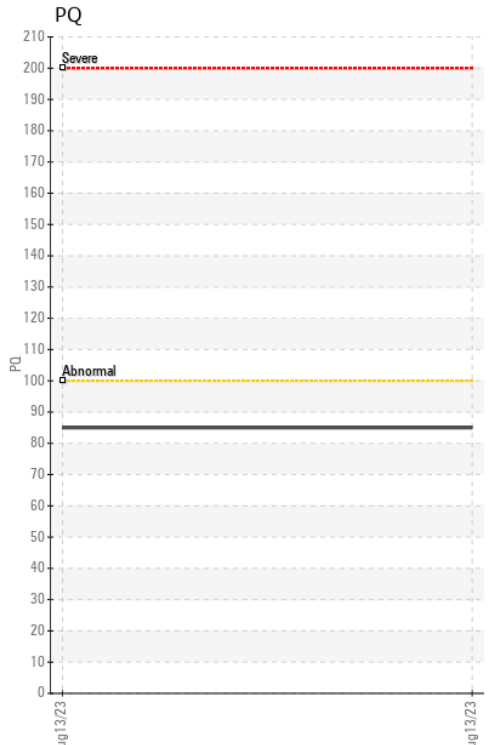
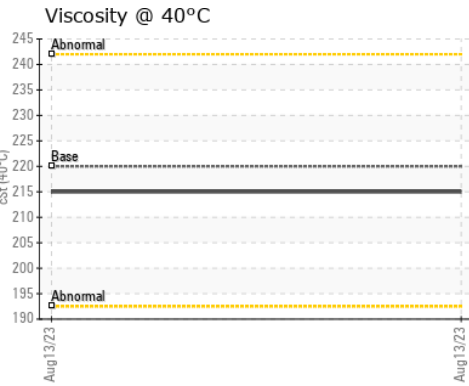
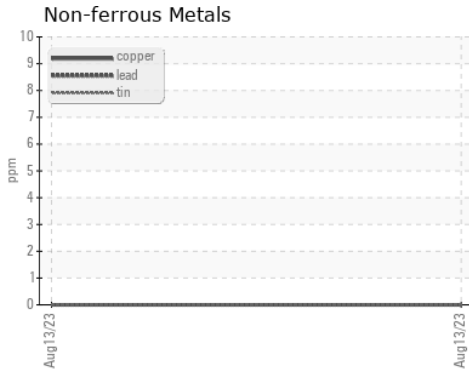
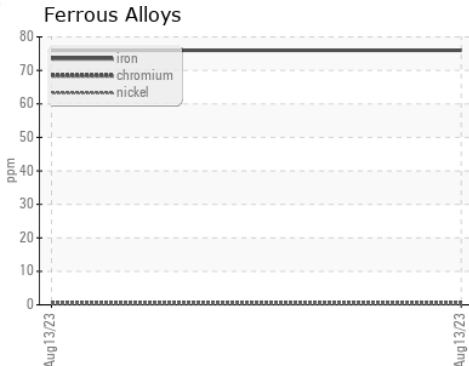
OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	215	---	---

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0102295 **Received** : 14 Aug 2023
Lab Number : 05923511 **Diagnosed** : 15 Aug 2023
Unique Number : 10603458 **Diagnostician** : Doug Bogart
Test Package : PLANT

WHEELABRATOR NORTH
 285 HOLT RD
 NORTH ANDOVER, MA
 US 01845
 Contact: Mitchell White
 mwhite1@win-waste.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)

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F: