

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
LAKE CALUMET
 Machine Id
CATERPILLAR 950M L-131-1 (S/N CAT0950MHFTR00452)
 Component
Diesel Engine
 Fluid
NAPA Motor Oil 15W40 (--- 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0092986	---	---
Sample Date	Client Info	09 Aug 2023	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	21	---	---
Chromium	ppm ASTM D5185m >20	1	---	---
Nickel	ppm ASTM D5185m >2	0	---	---
Titanium	ppm ASTM D5185m >2	<1	---	---
Silver	ppm ASTM D5185m >2	0	---	---
Aluminum	ppm ASTM D5185m >25	17	---	---
Lead	ppm ASTM D5185m >40	1	---	---
Copper	ppm ASTM D5185m >330	2	---	---
Tin	ppm ASTM D5185m >15	<1	---	---
Vanadium	ppm ASTM D5185m	<1	---	---
Cadmium	ppm ASTM D5185m	<1	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	22	---	---
Barium	ppm ASTM D5185m	0	---	---
Molybdenum	ppm ASTM D5185m	34	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m	767	---	---
Calcium	ppm ASTM D5185m	1092	---	---
Phosphorus	ppm ASTM D5185m	923	---	---
Zinc	ppm ASTM D5185m	1132	---	---
Sulfur	ppm ASTM D5185m	3553	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	4	---	---
Sodium	ppm ASTM D5185m	4	---	---
Potassium	ppm ASTM D5185m >20	5	---	---

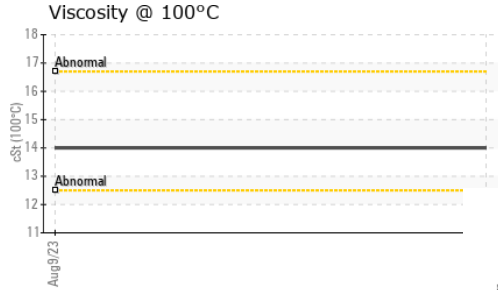
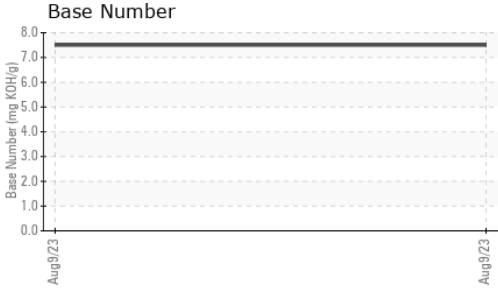
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.6	---	---
Nitration	Abs/cm *ASTM D7624 >20	9.5	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	19.1	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	14.1	---	---
Base Number (BN)	mg KOH/g ASTM D2896	7.5	---	---

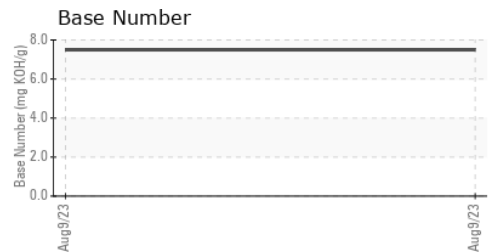
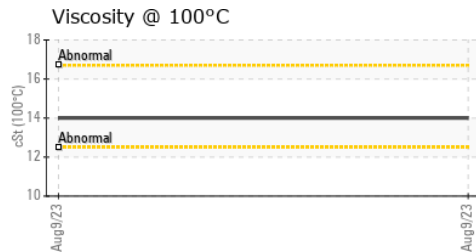
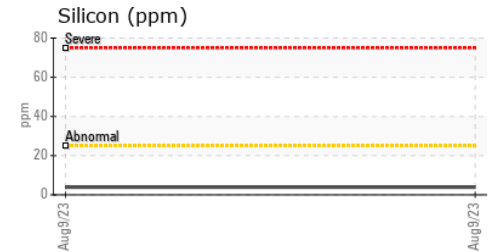
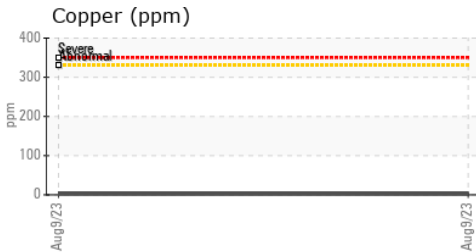
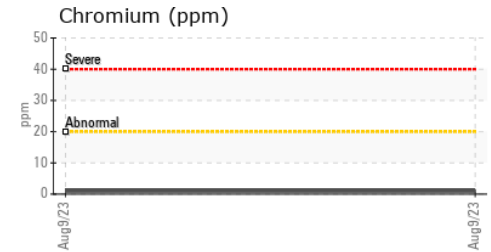
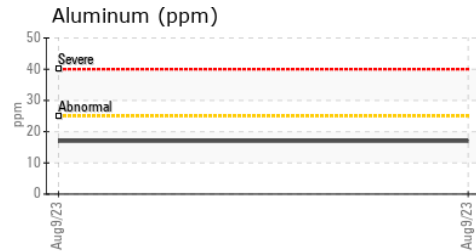
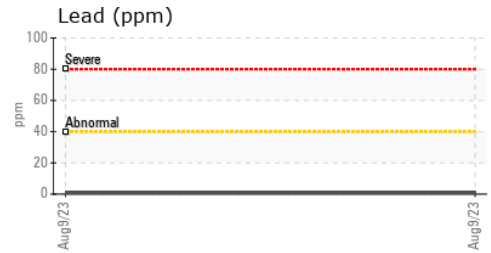
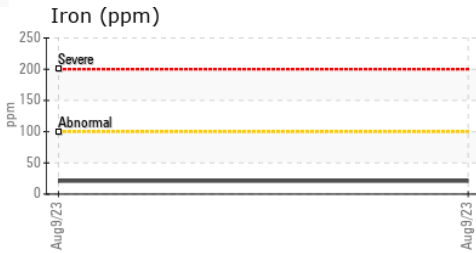
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
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	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.0	---	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0092986 **Received** : 29 Aug 2023
Lab Number : **05936951** **Diagnosed** : 29 Aug 2023
Unique Number : 10622222 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

NORTH AMERICAN STEVEDORING CO
 9301 S KREITER AVE
 CHICAGO, IL
 US 60617
 Contact: PACO MARTINEZ
 paco.martinez@qsl.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: