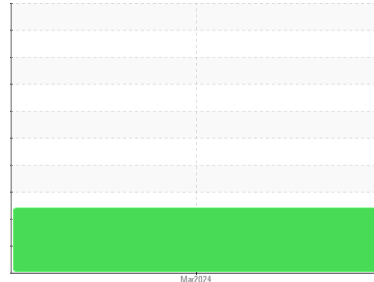


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
East Chicago Operations
 Machine Id
LIEBHERR MH-12 (S/N LHZ0744ZZK014140)
 Component
Splitter Box
 Fluid
PETRO CANADA TRAXON 80W90 (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Gear wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0113804	---	---
Sample Date	Client Info	14 Mar 2024	---	---
Machine Age	hrs Client Info	51829	---	---
Oil Age	hrs Client Info	682	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	▲ 123	---	---
Chromium	ppm ASTM D5185m >5	1	---	---
Nickel	ppm ASTM D5185m >5	<1	---	---
Titanium	ppm ASTM D5185m	0	---	---
Silver	ppm ASTM D5185m	0	---	---
Aluminum	ppm ASTM D5185m >20	4	---	---
Lead	ppm ASTM D5185m >30	1	---	---
Copper	ppm ASTM D5185m >20	17	---	---
Tin	ppm ASTM D5185m >10	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 243	85	---	---
Barium	ppm ASTM D5185m 1	0	---	---
Molybdenum	ppm ASTM D5185m	0	---	---
Manganese	ppm ASTM D5185m	1	---	---
Magnesium	ppm ASTM D5185m 2	6	---	---
Calcium	ppm ASTM D5185m 6	● 67	---	---
Phosphorus	ppm ASTM D5185m 987	● 606	---	---
Zinc	ppm ASTM D5185m 1	297	---	---
Sulfur	ppm ASTM D5185m 21530	● 10027	---	---

CONTAMINANTS

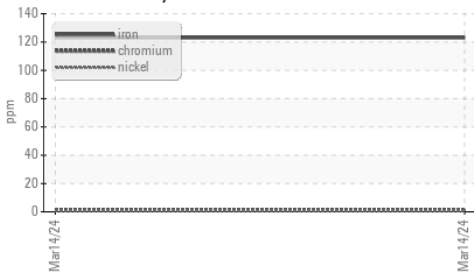
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	6	---	---
Sodium	ppm ASTM D5185m >25	3	---	---
Potassium	ppm ASTM D5185m >20	3	---	---

FLUID DEGRADATION

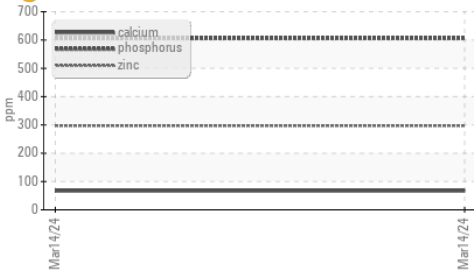
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 1.9	0.98	---	---

OIL ANALYSIS REPORT

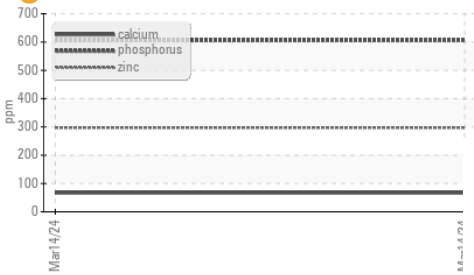
▲ Ferrous Alloys



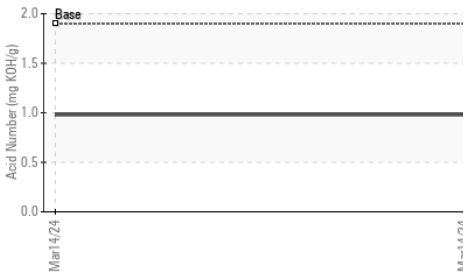
● Additives



● Additives



Acid Number



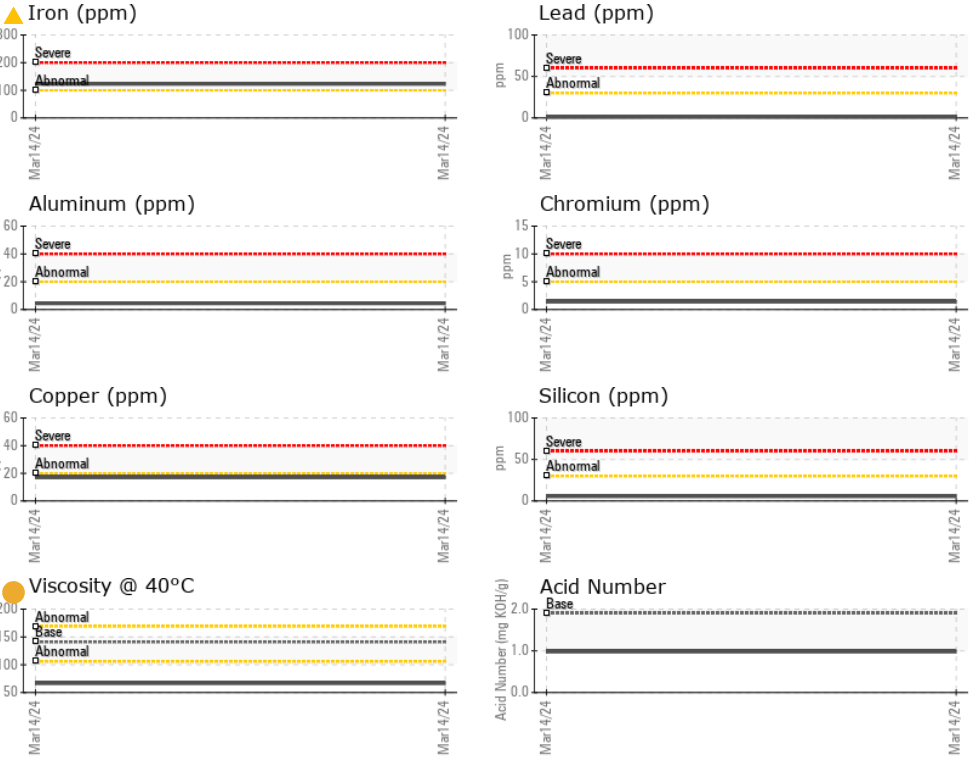
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	141.0	● 66.7	---

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. : PCA0113804 **Received** : 25 Mar 2024
Lab Number : 06128008 **Tested** : 26 Mar 2024
Unique Number : 10942159 **Diagnosed** : 27 Mar 2024 - Don Baldrige
Test Package : MOB 2

SCRAP METAL SERVICES
 415 E 151ST STREET
 EAST CHICAGO, IN
 US 46312
 Contact: DAN GERTLER
 dgertler@scrapmetalservices.com
 T: (312)771-4999
 F:

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)