

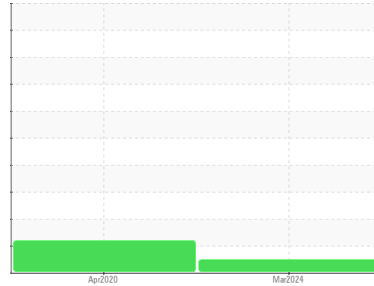
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
CATERPILLAR 980M L56
 Component
Rear Differential
 Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- 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		PCA0118451	PCA0016952	---
Sample Date	Client Info		11 Mar 2024	28 Apr 2020	---
Machine Age	hrs	Client Info	16346	5001	---
Oil Age	hrs	Client Info	2183	1000	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.2	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	236	24	---
Chromium	ppm	ASTM D5185m >3	<1	<1	---
Nickel	ppm	ASTM D5185m >3	0	<1	---
Titanium	ppm	ASTM D5185m >2	<1	0	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >30	15	3	---
Lead	ppm	ASTM D5185m >13	3	<1	---
Copper	ppm	ASTM D5185m >103	77	20	---
Tin	ppm	ASTM D5185m >5	<1	0	---
Antimony	ppm	ASTM D5185m >5	---	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	6	<1	---
Barium	ppm	ASTM D5185m 0	0	0	---
Molybdenum	ppm	ASTM D5185m 0	0	0	---
Manganese	ppm	ASTM D5185m 0	4	<1	---
Magnesium	ppm	ASTM D5185m 9	23	8	---
Calcium	ppm	ASTM D5185m 3114	2966	2699	---
Phosphorus	ppm	ASTM D5185m 1099	982	868	---
Zinc	ppm	ASTM D5185m 1245	1163	1062	---
Sulfur	ppm	ASTM D5185m 7086	6078	8740	---

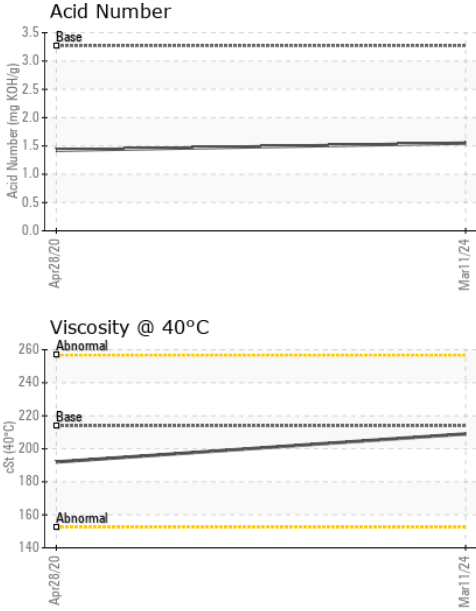
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >100	18	15	---
Sodium	ppm	ASTM D5185m	1	1	---
Potassium	ppm	ASTM D5185m >20	0	0	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	1.55	1.423	---

OIL ANALYSIS REPORT



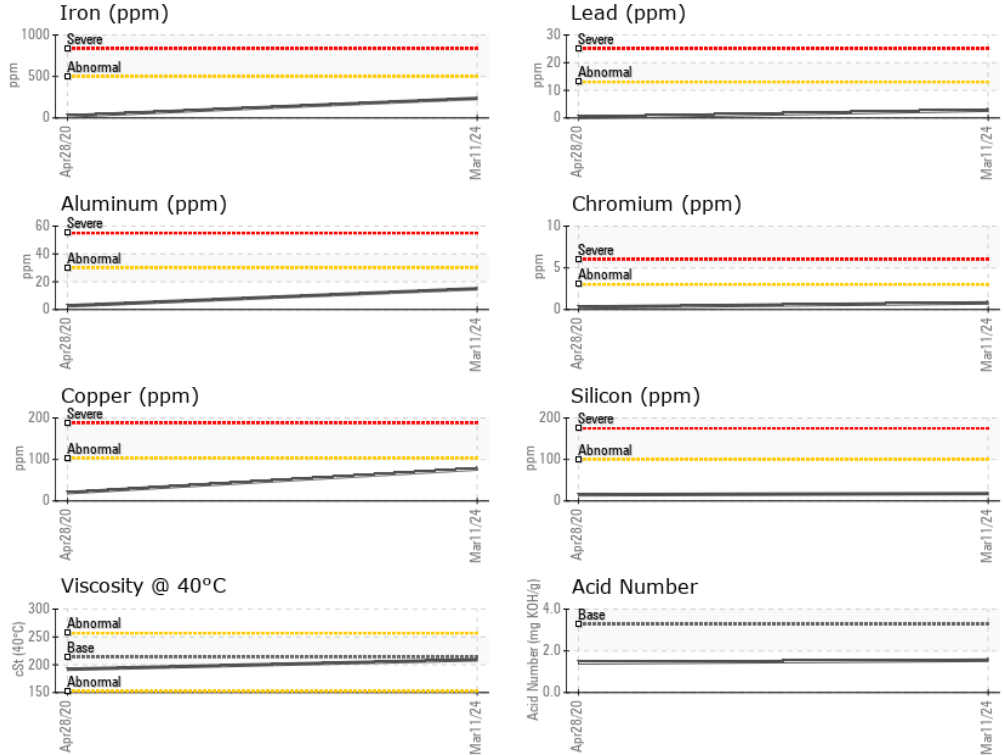
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	▲ HEAVY
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	209	192

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0118451
Lab Number : 06121005
Unique Number : 10929838
Test Package : MOB 2

SCRAP METAL SERVICES (SMS Mill Services LLC)
 1500 COMMERCIAL AVE
 MINGO JUNCTION, OH
 US 43938
 Contact: FRANK NALLY
 fnally@scrapmetalservices.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: