



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
CATERPILLAR 558LL 10-18 (S/N F5L00339)

Component
Swing Drive

Fluid
CAT TRANS AND DRIVE TRAIN OIL 50 SAE (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06196006	---	---
Sample Date		Client Info		18 Apr 2024	---	---
Machine Age	hrs	Client Info		2036	---	---
Oil Age	hrs	Client Info		2036	---	---
Filter Age	hrs	Client Info		2036	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				ATTENTION	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>400	79	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	1	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>200	<1	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

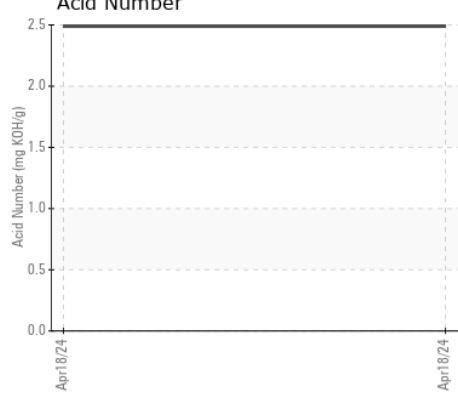
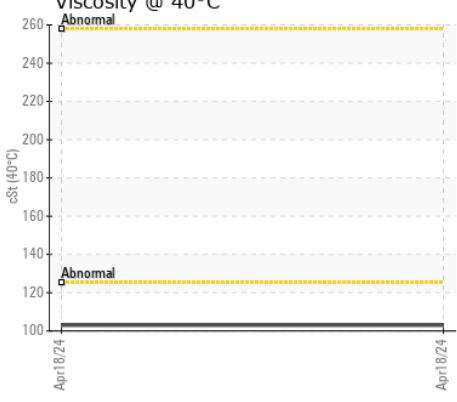
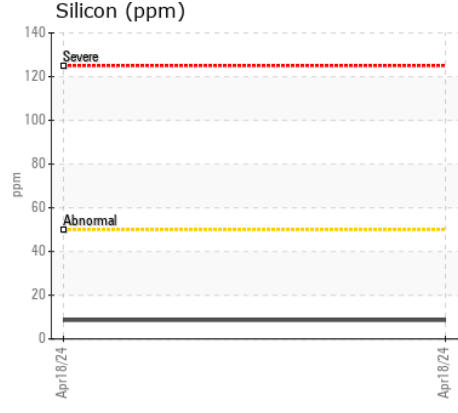
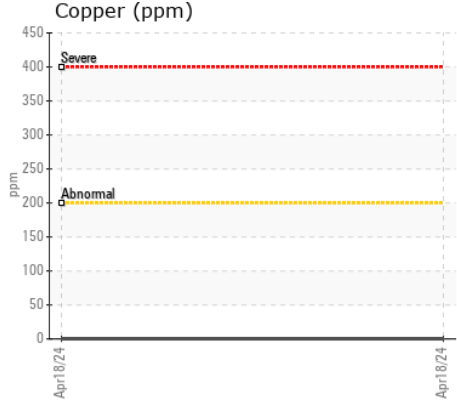
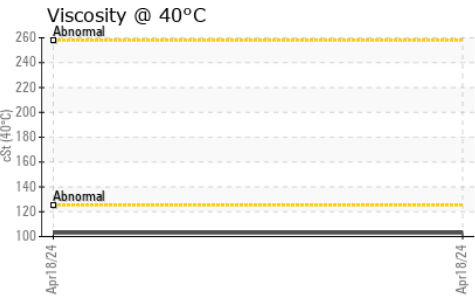
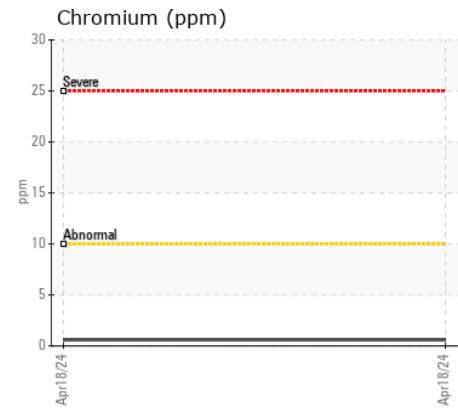
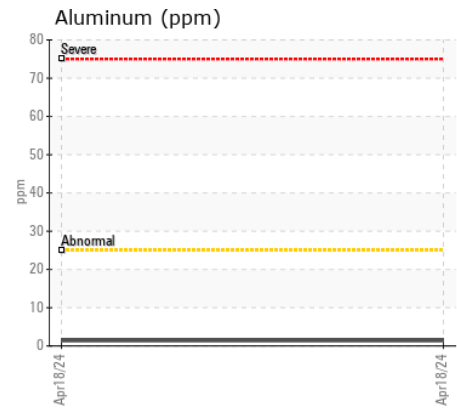
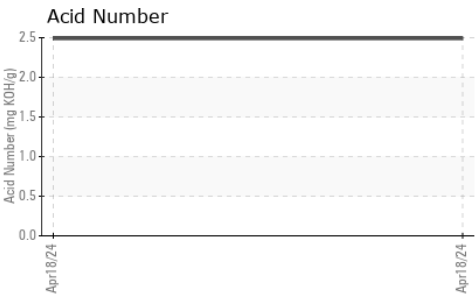
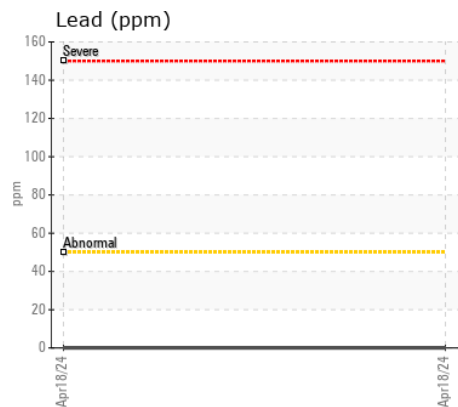
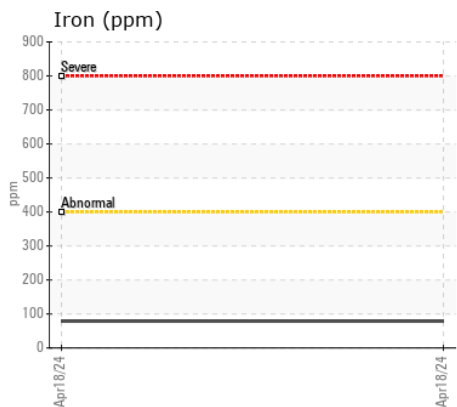
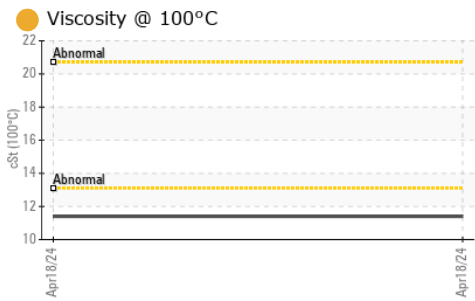
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	9	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water		WC Method	>0.2	NEG	---	---
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	---	---

FLUID CONDITION

The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		2	---	---
Boron	ppm	ASTM D5185m		2	---	---
Barium	ppm	ASTM D5185m		7	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		19	---	---
Calcium	ppm	ASTM D5185m		3093	---	---
Phosphorus	ppm	ASTM D5185m		1043	---	---
Zinc	ppm	ASTM D5185m		1311	---	---
Sulfur	ppm	ASTM D5185m		6928	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045		2.49	---	---
Visc @ 40°C	cSt	ASTM D445		103	---	---
Visc @ 100°C	cSt	ASTM D445		11.4	---	---
Viscosity Index (VI)	Scale	ASTM D2270		96	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06196006 **Received** : 30 May 2024
Lab Number : 06196006 **Tested** : 02 Jun 2024
Unique Number : 11058129 **Diagnosed** : 02 Jun 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KV100, VI)

KASKI LOGGING
 22411 HE CEDAR CREEK RD
 AMBOY, WA
 US 98601
 Contact: NATHAN BYRD

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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)

T:
F: