



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
DE Samples - CAT LAB
Machine Id
CATERPILLAR 980H LOADER 6583 (S/N JMS05055)
Component
Rear Differential
Fluid
TULCO LUBSOIL TO-4 50 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO10002068	TO10003058	TO10002732
Sample Date		Client Info		22 Jun 2024	08 Jan 2024	02 Oct 2023
Machine Age	hrs	Client Info		35189	34718	34179
Oil Age	hrs	Client Info		3586	3115	2576
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		None	None	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
		ASTM D8184		50	53	43
Iron	ppm	ASTM D5185m	>500	66	57	59
Chromium	ppm	ASTM D5185m	>3	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	2	2
Lead	ppm	ASTM D5185m	>13	0	0	<1
Copper	ppm	ASTM D5185m	>103	1	2	1
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

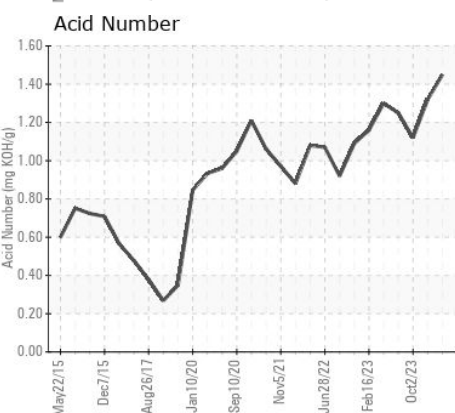
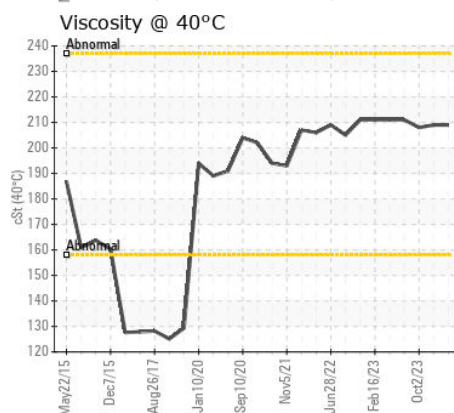
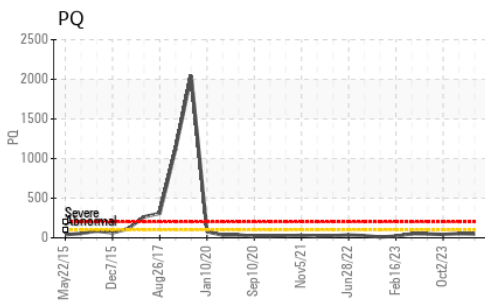
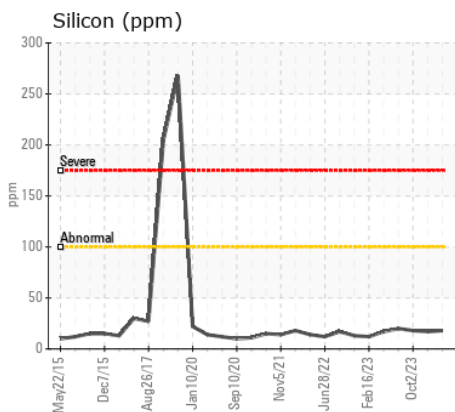
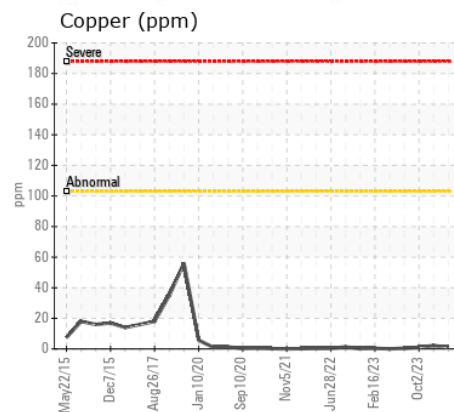
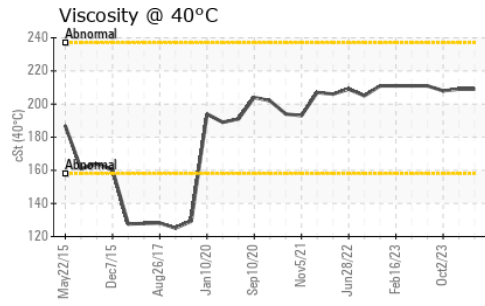
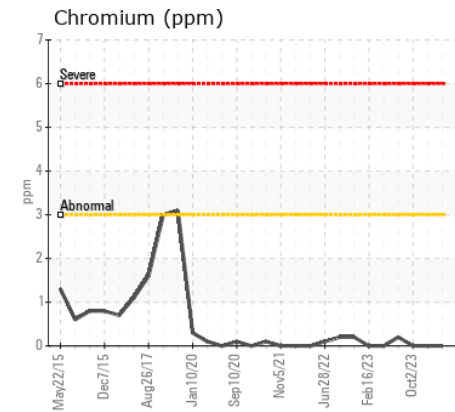
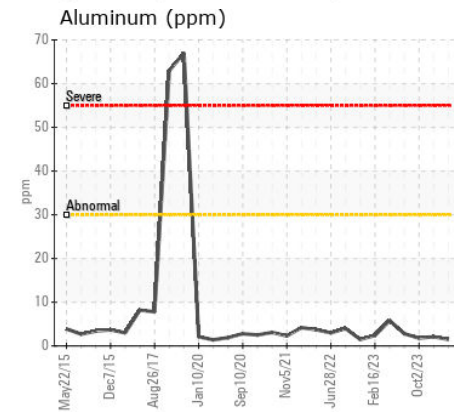
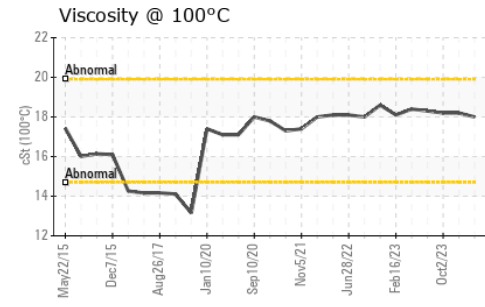
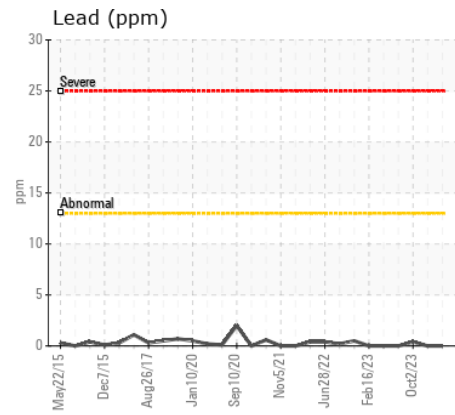
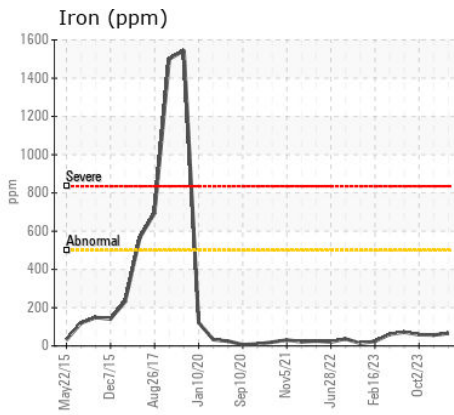
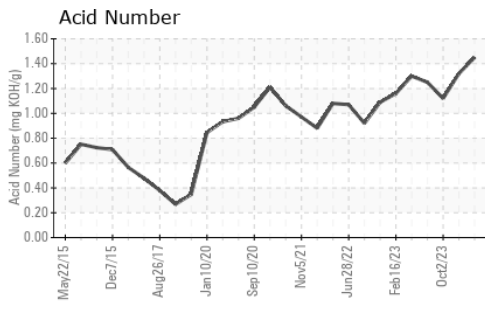
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	18	17	18
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	1	5
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	3	4
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		11	14	13
Calcium	ppm	ASTM D5185m		3205	3233	3091
Phosphorus	ppm	ASTM D5185m		954	962	960
Zinc	ppm	ASTM D5185m		1113	1195	1185
Sulfur	ppm	ASTM D5185m		5364	4768	4825
Acid Number (AN)	mg KOH/g	ASTM D8045		1.45	1.32	1.12
Visc @ 40°C	cSt	ASTM D445		209	209	208
Visc @ 100°C	cSt	ASTM D445		18.0	18.2	18.2
Viscosity Index (VI)	Scale	ASTM D2270		93	95	96



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10002068
Lab Number : 06225313
Unique Number : 11103510
Test Package : MOB 2 (Additional Tests: KV100, PQ, VI)

ANCHOR STONE TULSA ROCK
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE
 TULSA, OK
 US 74137

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: MIKE SNYDER
 msnyder@anchorstoneco.com

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

T: (417)850-9635

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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