



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 775D HAUL TRUCK 6451 (S/N 6KR00212)
 Component
Rear Left Final Drive
 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		TO10002092	TO10002762	TO10002362
Sample Date		Client Info		13 Jun 2024	09 Oct 2023	05 Jul 2023
Machine Age	hrs	Client Info		43445	42649	42147
Oil Age	hrs	Client Info		4465	3669	3167
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	None	None
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>500	68	171	135
Iron	ppm	ASTM D5185m	>800	47	70	58
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>5	24	83	69
Titanium	ppm	ASTM D5185m	>15	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	2	4	4
Lead	ppm	ASTM D5185m	>10	0	3	<1
Copper	ppm	ASTM D5185m	>75	9	20	17
Tin	ppm	ASTM D5185m	>8	0	2	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

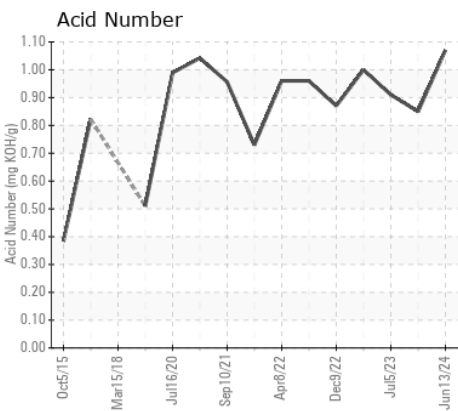
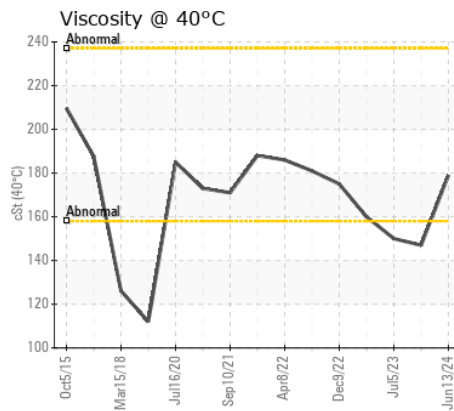
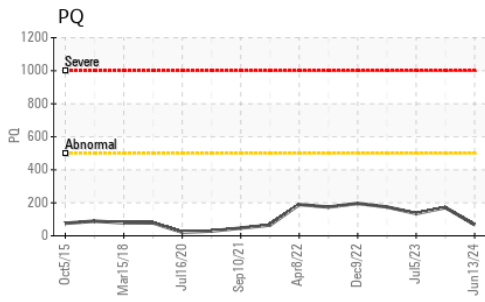
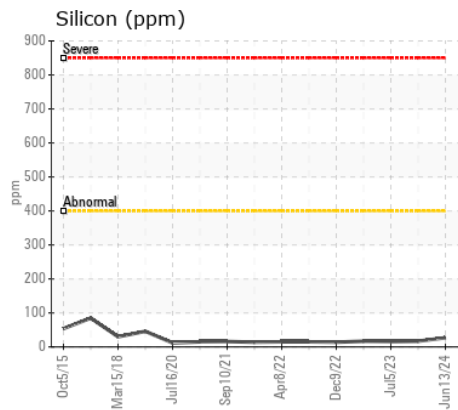
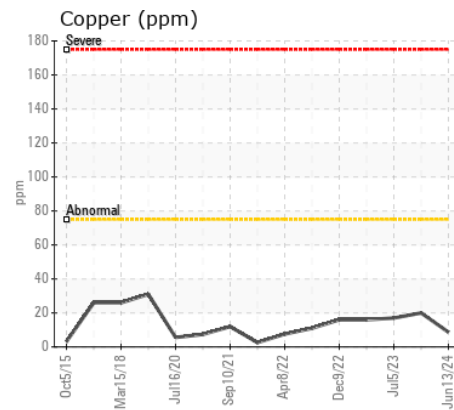
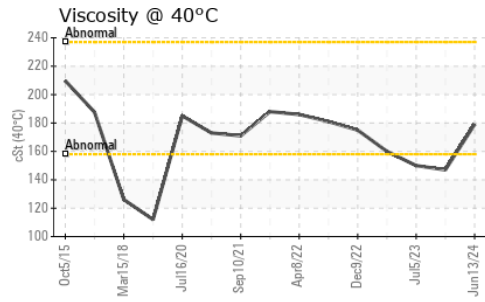
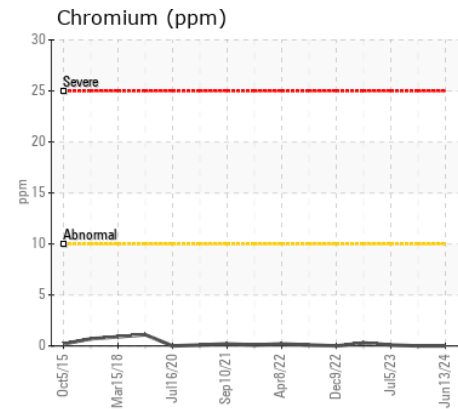
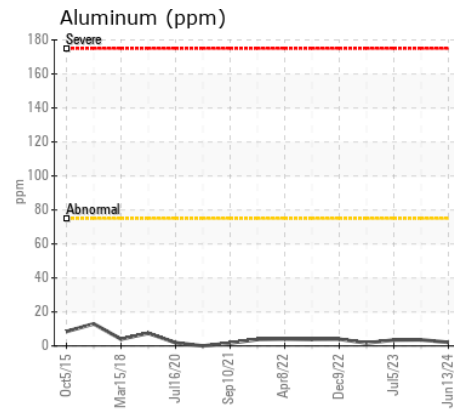
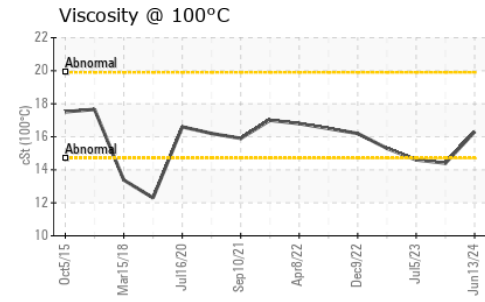
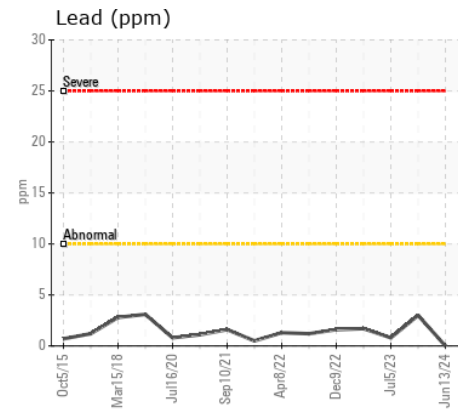
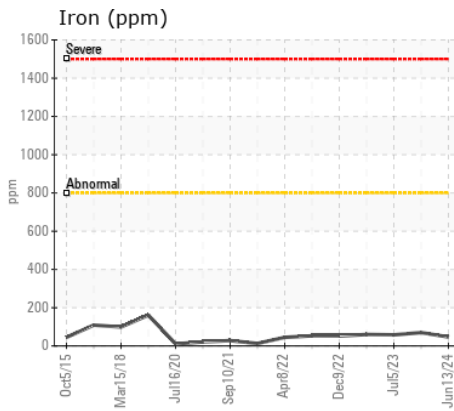
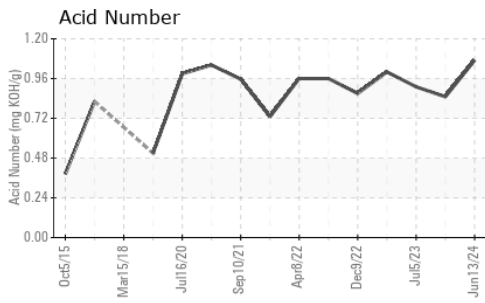
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	27	17	16
Potassium	ppm	ASTM D5185m	>20	0	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT	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	>0.2	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		4	3	3
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		26	32	43
Calcium	ppm	ASTM D5185m		3396	3776	3349
Phosphorus	ppm	ASTM D5185m		959	933	771
Zinc	ppm	ASTM D5185m		1147	1193	963
Sulfur	ppm	ASTM D5185m		5513	5110	4963
Acid Number (AN)	mg KOH/g	ASTM D8045		1.07	0.85	0.91
Visc @ 40°C	cSt	ASTM D445		179	147	150
Visc @ 100°C	cSt	ASTM D445		16.3	14.4	14.6
Viscosity Index (VI)	Scale	ASTM D2270		94	95	95



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TO10002092

Lab Number : 06213644

Unique Number : 11086508

Test Package : MOB 2 (Additional Tests: KV100, PQ, VI)

Received : 18 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 20 Jun 2024 - Don Baldrige

ANCHOR STONE TULSA ROCK

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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)