



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 349F 6115 (S/N HPD00640)**  
 Component  
**Left Swing Drive**  
 Fluid  
**TULCO LUBSOIL TO-4 30 (3 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TO10003671</b>	TO10003050	TO10001564
Sample Date		Client Info		<b>22 Jun 2024</b>	18 Dec 2023	30 Mar 2023
Machine Age	hrs	Client Info		<b>8055</b>	7585	7109
Oil Age	hrs	Client Info		<b>1462</b>	992	516
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>None</b>	None	None
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

PQ		ASTM D8184		<b>69</b>	35	32
Iron	ppm	ASTM D5185m	>400	<b>69</b>	43	30
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

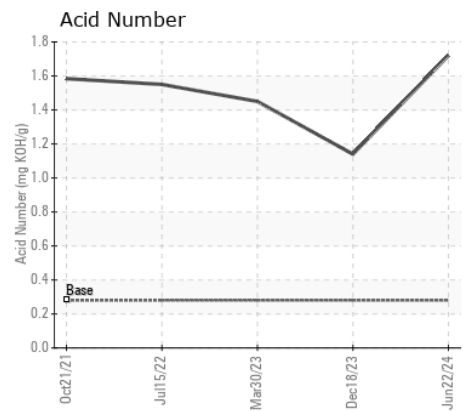
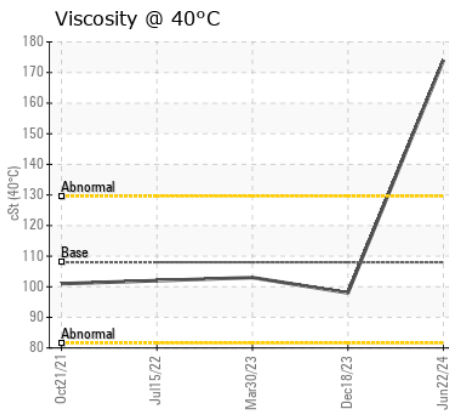
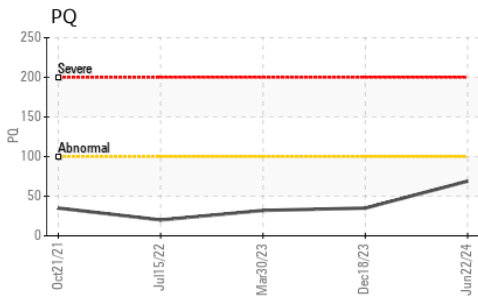
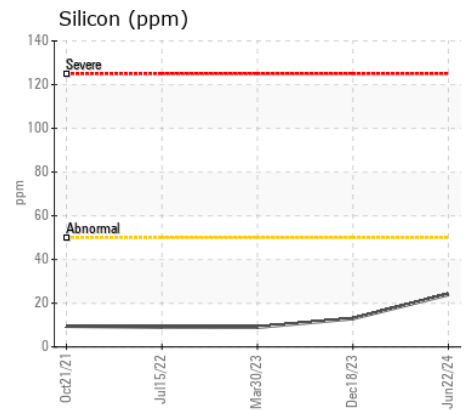
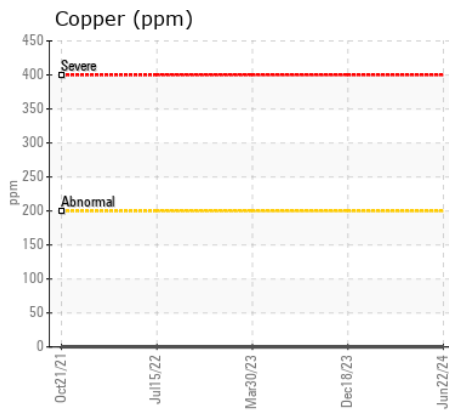
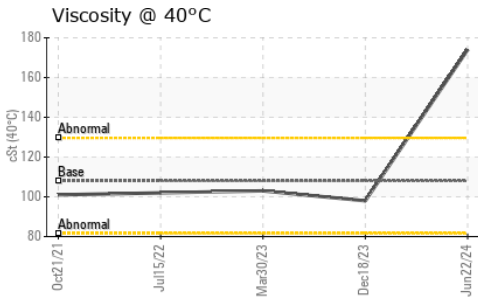
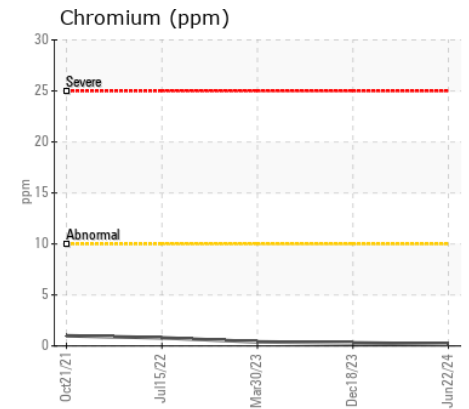
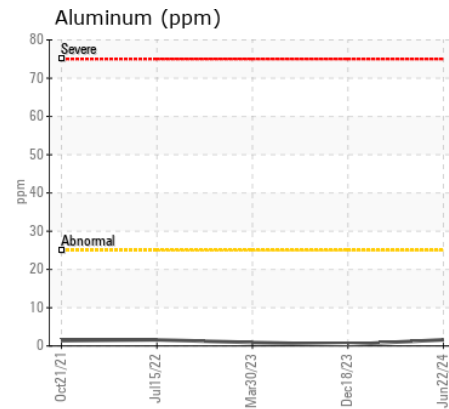
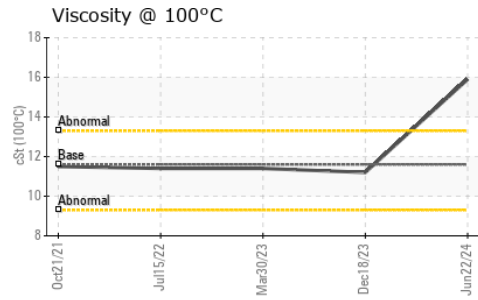
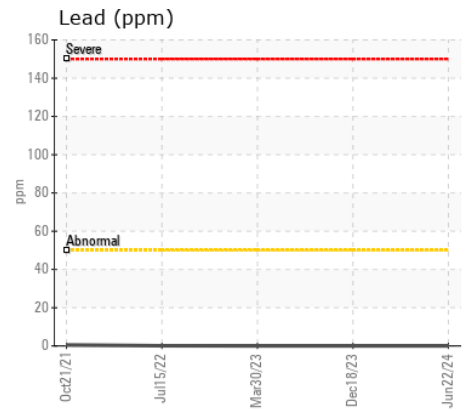
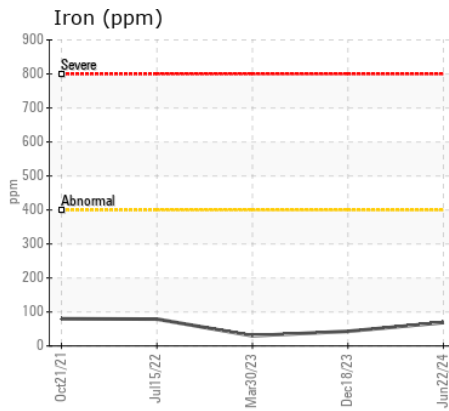
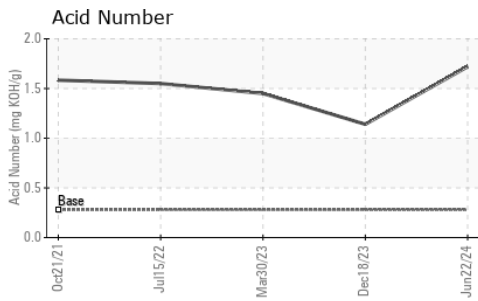
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>24</b>	13	9
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>6</b>	2	2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	9	<b>16</b>	27	22
Calcium	ppm	ASTM D5185m	4500	<b>3093</b>	2857	2305
Phosphorus	ppm	ASTM D5185m	1150	<b>976</b>	893	719
Zinc	ppm	ASTM D5185m	1250	<b>1124</b>	1147	918
Sulfur	ppm	ASTM D5185m	4500	<b>5385</b>	4579	4369
Acid Number (AN)	mg KOH/g	ASTM D8045	0.28	<b>1.72</b>	1.14	1.45
Visc @ 40°C	cSt	ASTM D445	108	<b>174</b>	98.0	103
Visc @ 100°C	cSt	ASTM D445	11.6	<b>15.9</b>	11.2	11.4
Viscosity Index (VI)	Scale	ASTM D2270	94	<b>93</b>	99	96



Certificate L2367

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

Sample No. : TO10003671

Lab Number : 06225312

Unique Number : 11103509

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

Received : 01 Jul 2024

Tested : 02 Jul 2024

Diagnosed : 03 Jul 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)