



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR CS54B SDR-6 (S/N VL4H00167)
Component
Hydrostatic
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005611	CL0003513	CL0001106
Sample Date		Client Info		29 Jun 2024	27 Aug 2022	17 Apr 2020
Machine Age	hrs	Client Info		3170	2725	2290
Oil Age	hrs	Client Info		3170	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	20	18	20
Chromium	ppm	ASTM D5185m	>10	4	4	4
Nickel	ppm	ASTM D5185m		0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>50	1	1	2
Lead	ppm	ASTM D5185m	>50	1	2	2
Copper	ppm	ASTM D5185m	>200	25	22	27
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

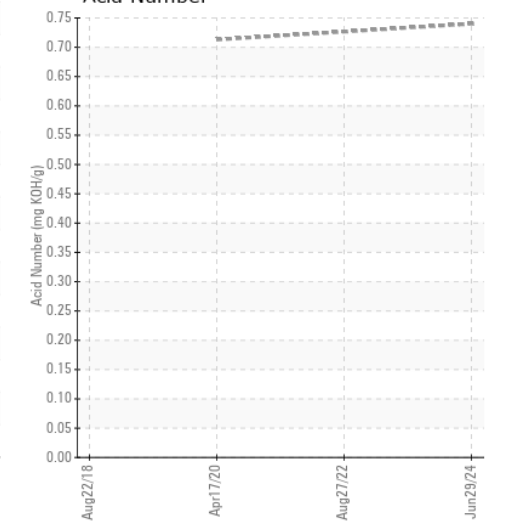
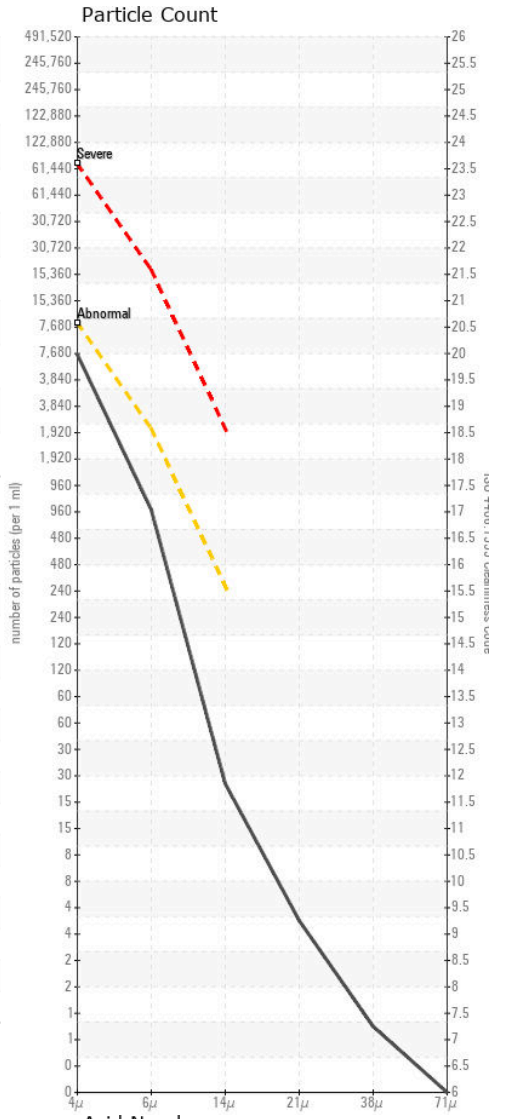
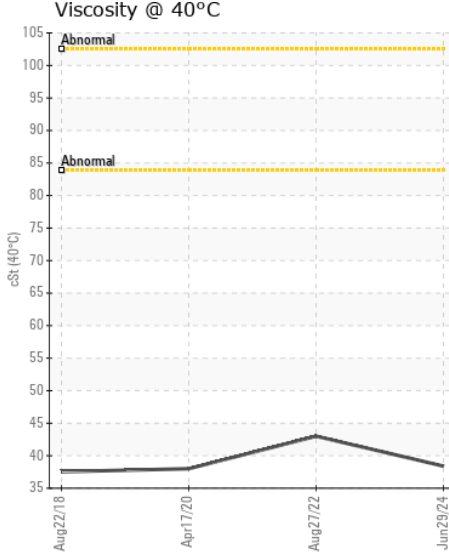
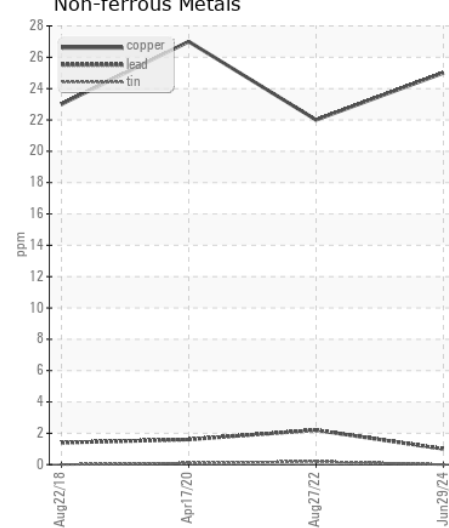
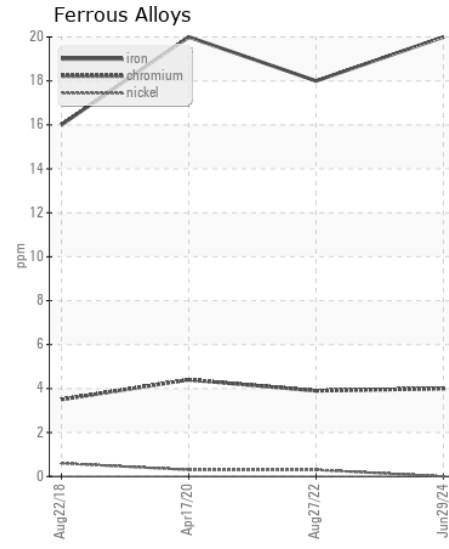
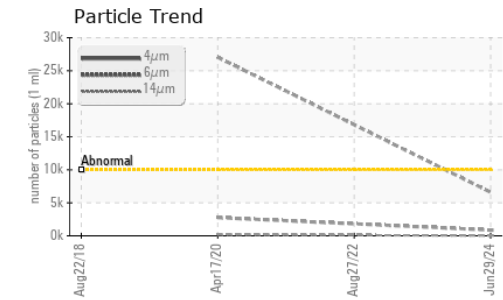
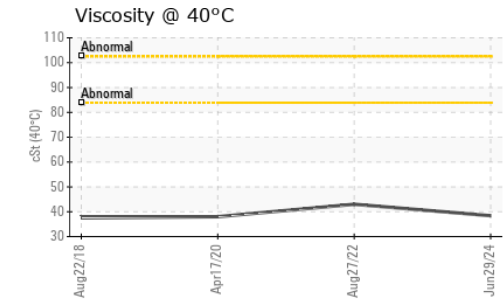
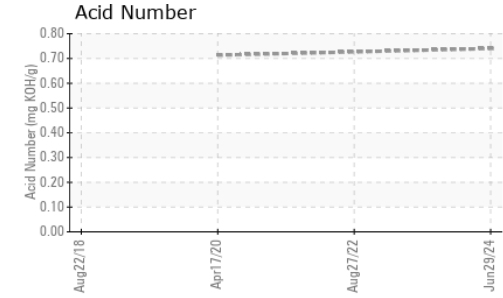
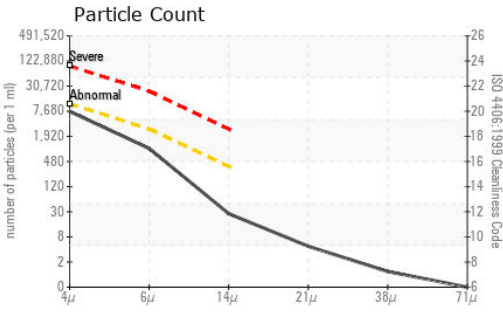
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	3	4	4
Potassium	ppm	ASTM D5185m	>20	1	4	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	6604	---	▲ 27038
Particles >6µm		ASTM D7647	>2500	865	---	● 2758
Particles >14µm		ASTM D7647	>320	24	---	179
Particles >21µm		ASTM D7647	>80	4	---	50
Particles >38µm		ASTM D7647	>20	1	---	2
Particles >71µm		ASTM D7647	>4	0	---	0
Oil Cleanliness		ISO 4406 (c)	>20/18/15	20/17/12	---	▲ 22/19/15
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	>0.1	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		6	5	5
Boron	ppm	ASTM D5185m		<1	3	5
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		14	16	18
Calcium	ppm	ASTM D5185m		486	434	369
Phosphorus	ppm	ASTM D5185m		667	627	722
Zinc	ppm	ASTM D5185m		853	881	976
Sulfur	ppm	ASTM D5185m		2362	2310	2007
Acid Number (AN)	mg KOH/g	ASTM D8045		0.74	---	0.713
Visc @ 40°C	cSt	ASTM D445		38.4	43.0	38.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005611 **Received** : 08 Jul 2024
Lab Number : 06230119 **Tested** : 09 Jul 2024
Unique Number : 11113612 **Diagnosed** : 09 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PrtCount)

PEDULLA
 146 MCLELLAND
 MOORESVILLE, NC
 US 28115
 Contact: LARRY

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)