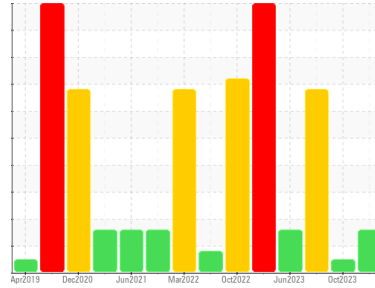




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
CATERPILLAR 299D SKIDSTEER 040-0019 (S/N CAT0299DAFD204356)
 Component
Right Final Drive
 Fluid
SCHAEFFER SCHAEFFER 293 MOLY 75W90 (1 QTS)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0868390	WC0815228	WC0815217
Sample Date	Client Info		21 Dec 2023	03 Oct 2023	13 Jul 2023
Machine Age	hrs	Client Info	11252	10384	9565
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	NORMAL	SEVERE

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >800	▲ 1309	596	▲ 1552
Chromium	ppm	ASTM D5185m >10	▲ 18	9	▲ 21
Nickel	ppm	ASTM D5185m >5	4	2	1
Titanium	ppm	ASTM D5185m >15	1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >75	20	7	6
Lead	ppm	ASTM D5185m >10	1	1	0
Copper	ppm	ASTM D5185m >75	70	52	3
Tin	ppm	ASTM D5185m >8	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	158	159	45
Barium	ppm	ASTM D5185m	16	4	0
Molybdenum	ppm	ASTM D5185m	<1	11	177
Manganese	ppm	ASTM D5185m	16	10	20
Magnesium	ppm	ASTM D5185m	11	0	2
Calcium	ppm	ASTM D5185m	124	7	39
Phosphorus	ppm	ASTM D5185m	1260	1213	689
Zinc	ppm	ASTM D5185m	62	55	44
Sulfur	ppm	ASTM D5185m	22040	21957	17061

CONTAMINANTS

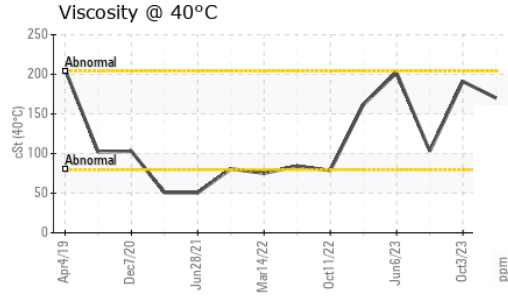
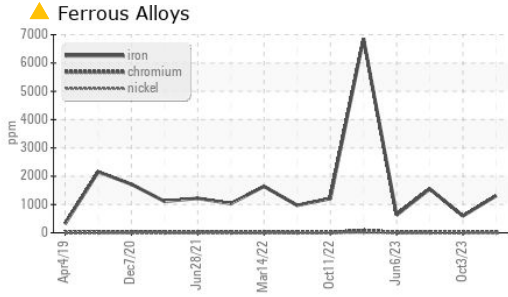
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >400	78	9	26
Sodium	ppm	ASTM D5185m	10	10	4
Potassium	ppm	ASTM D5185m >20	21	18	4

VISUAL



	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	MODER	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 >0.2	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG



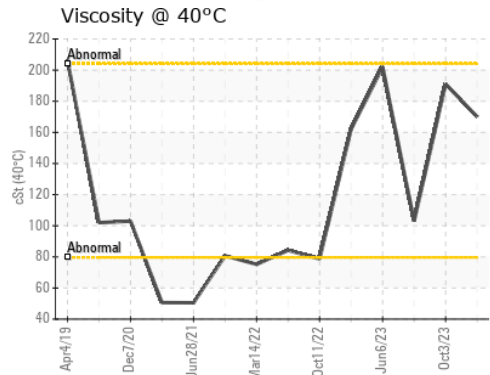
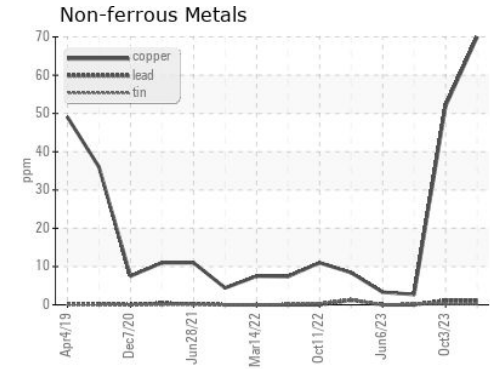
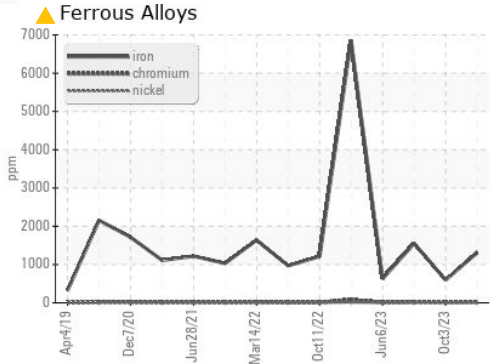
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	170	191	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868390 **Received** : 30 Jan 2024
Lab Number : **06074222** **Diagnosed** : 31 Jan 2024
Unique Number : 10856313 **Diagnostician** : Jonathan Hester
Test Package : CONST

SHIMMICK CONSTRUCTION
 5535 TRAILHEAD DRIVE
 CHATTANOOGA, TN
 US 37415
 Contact: DANIEL LISELLA
 daniel.lisella@shimmick.com
 T:
 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)