



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 299D SKIDSTEER 040-0019 (S/N CAT0299DAFD204356)

Component
Hydraulic System

Fluid
SCHAEFFER 315 SIMPLEX SUPREME (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868418	WC0868392	WC0815231
Sample Date		Client Info		24 Jan 2024	21 Dec 2023	03 Oct 2023
Machine Age	hrs	Client Info		11409	11252	10384
Oil Age	hrs	Client Info		0	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	Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	24	23	20
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	3	3	0
Lead	ppm	ASTM D5185m	>10	<1	<1	1
Copper	ppm	ASTM D5185m	>75	13	13	9
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

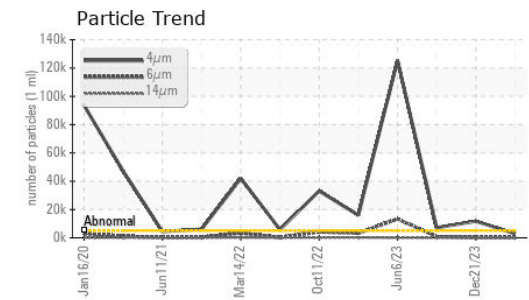
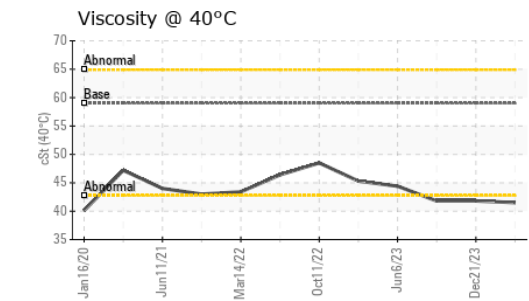
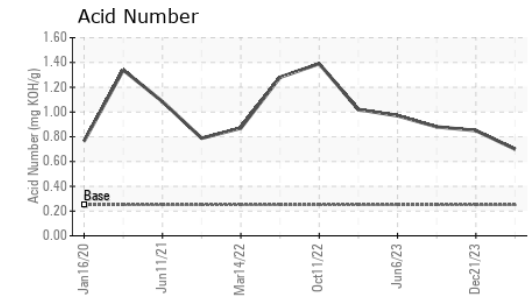
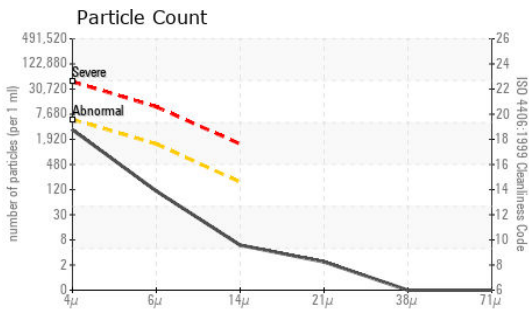
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>20	2	2	2
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2844	▲ 11691	▲ 7157
Particles >6µm		ASTM D7647	>1300	98	177	782
Particles >14µm		ASTM D7647	>160	5	5	45
Particles >21µm		ASTM D7647	>40	2	1	10
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/14/10	▲ 21/15/10	▲ 20/17/13
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		<1	<1	0
Boron	ppm	ASTM D5185m	100	0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m	0	77	77	85
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	0	0	6
Calcium	ppm	ASTM D5185m	4300	466	464	489
Phosphorus	ppm	ASTM D5185m	1400	667	667	716
Zinc	ppm	ASTM D5185m	1700	794	795	831
Sulfur	ppm	ASTM D5185m	3800	2228	2238	2428
Acid Number (AN)	mg KOH/g	ASTM D8045	0.25	0.70	0.85	0.88
Visc @ 40°C	cSt	ASTM D445	59	41.5	41.8	41.8



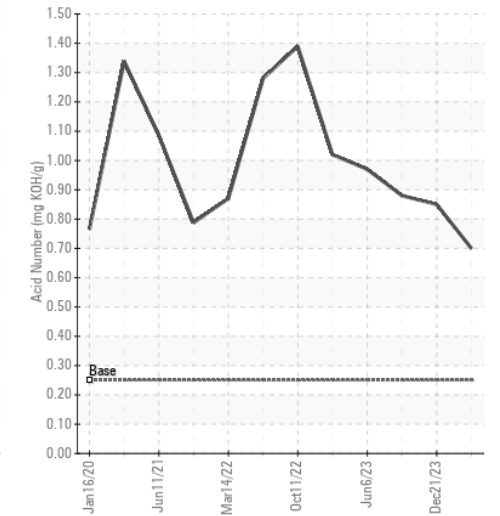
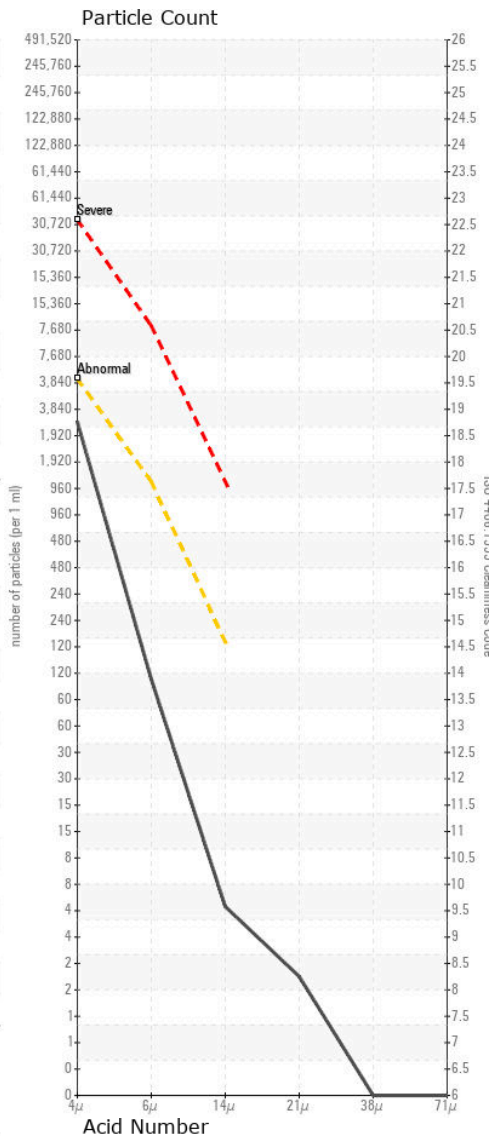
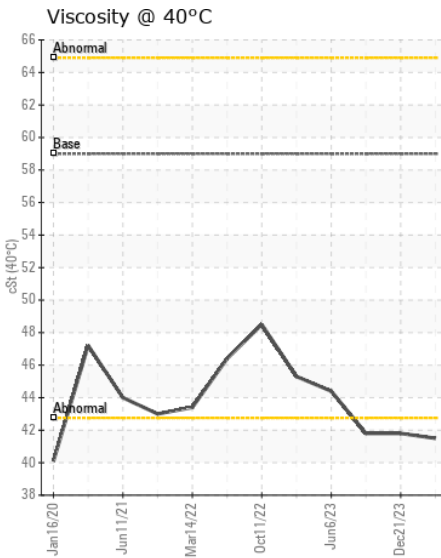
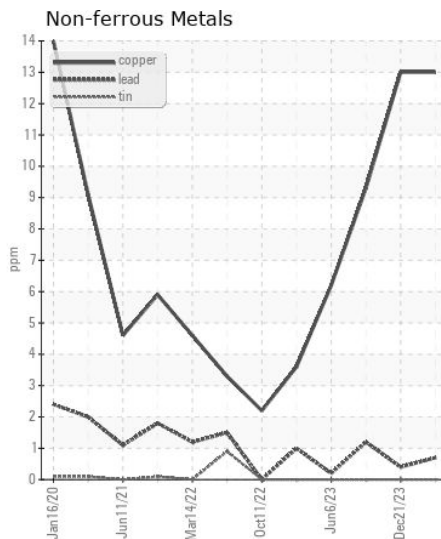
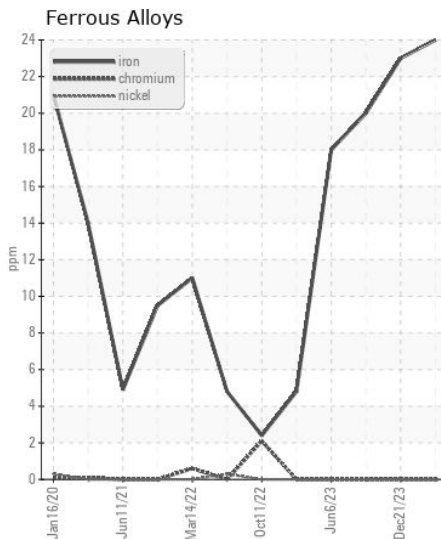
Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868418 **Received** : 30 Jan 2024
Lab Number : 06073823 **Diagnosed** : 31 Jan 2024
Unique Number : 10855914 **Diagnostician** : Angela Borella
Test Package : CONST

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)



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