CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CATERPILLAR 299D SKIDSTEER 040-0019 (S/N CAT0299DAFD204356)
Component
Diesel Engine
Fluid
SCHAEFFER SUPREME 7000 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Engine oil sample @ 12216 hours)

WEAR

All component wear rates are normal.

CONTAMINATION

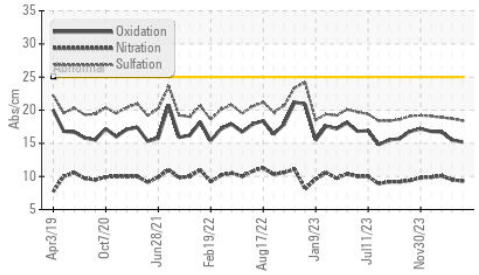
There is no indication of any contamination in the oil.

FLUID CONDITION

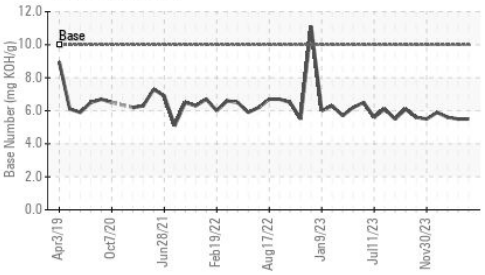
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0868282	WC0903927	WC0903957
Sample Date		Client Info		12 Jun 2024	01 May 2024	12 Mar 2024
Machine Age	hrs	Client Info		12216	11951	11644
Oil Age	hrs	Client Info		11951	11644	0
Filter Age	hrs	Client Info		0	11644	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	<1	2	3
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	3	0	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.5	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	18.7	18.9
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	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	<1	1
Boron	ppm	ASTM D5185m		63	60	75
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m	50	72	73	71
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	1000	22	11	14
Calcium	ppm	ASTM D5185m	1400	2175	2302	2163
Phosphorus	ppm	ASTM D5185m	985	1019	1046	1100
Zinc	ppm	ASTM D5185m	1060	1181	1249	1214
Sulfur	ppm	ASTM D5185m	4000	5713	6179	5346
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	15.5	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	5.5	5.5	5.6
Visc @ 100°C	cSt	ASTM D445	15	13.9	13.7	13.8

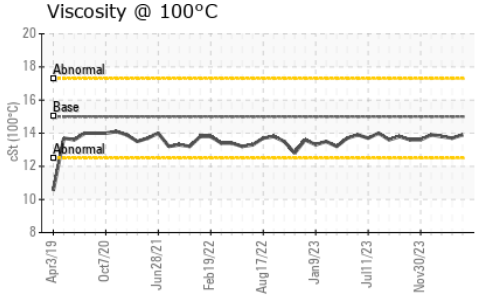
FT-IR (Direct Trend)



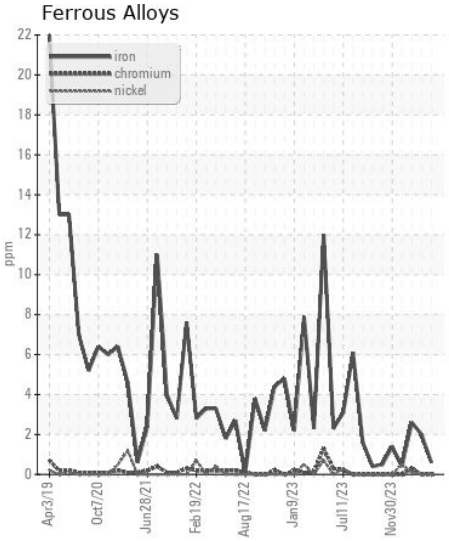
Base Number



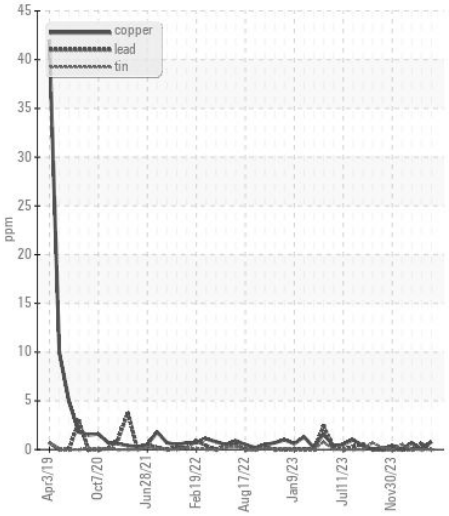
Viscosity @ 100°C



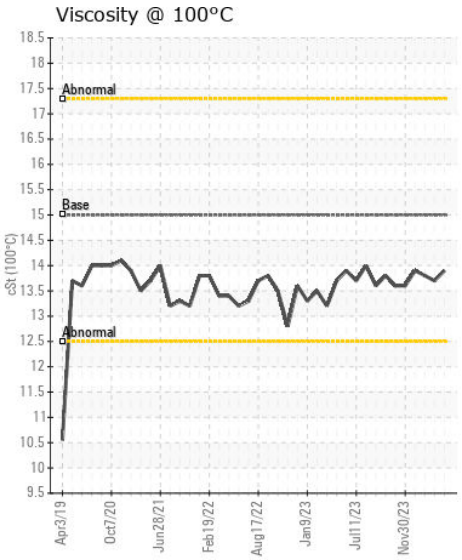
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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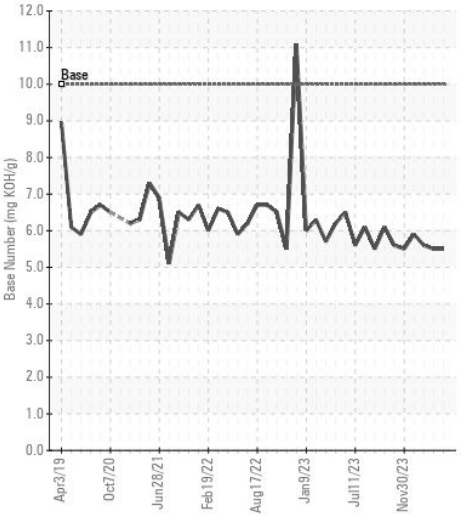

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0868282 **Received** : 17 Jun 2024
Lab Number : 06211389 **Tested** : 19 Jun 2024
Unique Number : 11084253 **Diagnosed** : 19 Jun 2024 - Don Baldridge
Test Package : CONST (Additional Tests: TBN)

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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