WEAR CONTAMINATION FLUID CONDITION

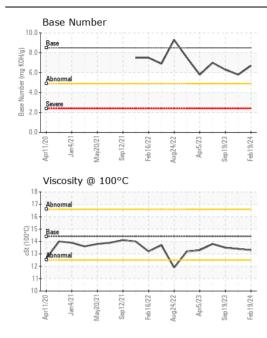
NORMAL NORMAL NORMAL

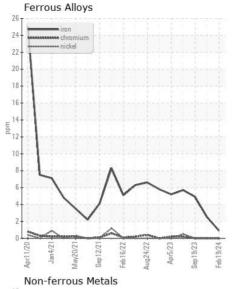


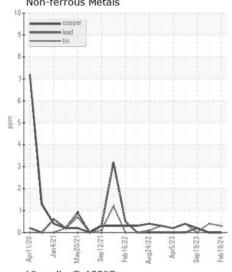
JOHN DEERE 324L PML-4 (S/N 052609)

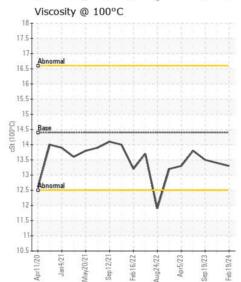
Component Diesel Engine

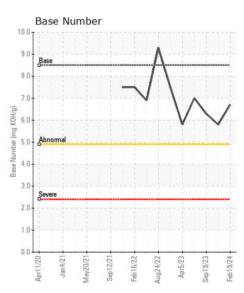
DIESEL ENGINE OIL SAE 40 (3	GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		CL0005192	CL0004989	CL0004748
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		19 Feb 2024	04 Dec 2023	19 Sep 2023
	Machine Age	hrs	Client Info		5250	4960	4620
	Oil Age	hrs	Client Info		290	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>50	<1	2	5
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>11	0	0	0
	Nickel	ppm	ASTM D5185m	>5	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	3	4	<1
	Lead	ppm	ASTM D5185m	>26	0	0	<1
	Copper	ppm	ASTM D5185m	>13	0	0	<1
	Tin	ppm	ASTM D5185m	>4	<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>81	3	4	4
	Potassium	ppm	ASTM D5185m		<1	1	2
There is no indication of any contamination in the oil.	Fuel	1-1-	WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.21	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	8.9	9.2	9.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	18.4	19.1
	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	>0.21	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>216	1	<1	4
	Boron	ppm	ASTM D5185m	250	63	59	44
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	81	85	87
	Manganese	ppm	ASTM D5185m		<1	<1	0
	Magnesium	ppm	ASTM D5185m	450	17	18	25
	Calcium	ppm	ASTM D5185m	3000	2049	2106	2338
	Phosphorus	ppm	ASTM D5185m		1001	1047	1077
	Zinc	ppm	ASTM D5185m		1182	1265	1324
	Sulfur	ppm	ASTM D5185m	4250	3562	3868	4838
	Oxidation	Abs/.1mm	*ASTM D7414		14.2	14.6	15.2
	Base Number (BN)				6.7	5.8	6.3
	Visc @ 100°C	cSt	ASTM D445	14.4	13.3	13.4	13.5













Laboratory Sample No. Unique Number : 10901854

: CL0005192 Lab Number : 06103624

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

Received **Tested**

: 28 Feb 2024 : 29 Feb 2024

Diagnosed

: 29 Feb 2024 - Wes Davis

MOORESVILLE, NC US 28115 Contact: LARRY

146 MCLELLAND

PEDULLA

T:

F:

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)