

WEAR CONTAMINATION FLUID CONDITION

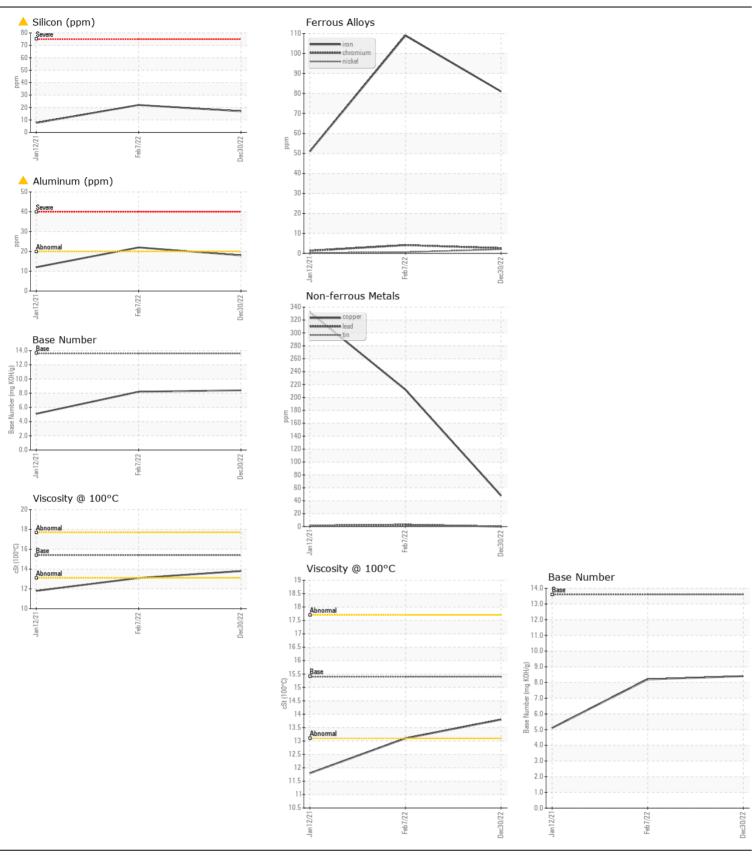
ATTENTION ABNORMAL NORMAL

Store 9 - Marietta [RO#134569] PRINOTH T14R 935310196

Component

Diesel Engine JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (F CAL)						

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for diagnostic comment updates.	Sample Number		Client Info		LEC0035472	LEC0028355	LEC0016934
	Sample Date	la con	Client Info		30 Dec 2022	07 Feb 2022	12 Jan 2021
	Machine Age	hrs	Client Info		1574	1114	529
	Oil Age	hrs	Client Info		460	585	529
	Filter Age	hrs	Client Info		460	585	0 Changed
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed Sample Status		Client Info		Changed ABNORMAL	Changed ABNORMAL	Changed ABNORMAL
					ADNUNIMAL	ADNONIVIAL	ADNONIVIAL
WEAR	Iron	ppm	ASTM D5185m	>100	81	<u> </u>	51
	Chromium	ppm	ASTM D5185m	>20	3	4	1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	2	<1	<1
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	18	▲ 22	12
	Lead	ppm	ASTM D5185m	>40	0	3	1
	Copper	ppm	ASTM D5185m	>330	48	212	△ 332
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon		ACTM DE10Em	. 100	A 17	A 00	0
CONTAMINATION	Potassium	ppm	ASTM D5185m ASTM D5185m		▲ 17 4	<u>22</u>	8
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.	Fuel	ppm	WC Method		<1.0	<1.0	0.8
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	<i>></i> 0.∠	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	\3	0.3	0.5	0.3
	Nitration	Abs/cm	*ASTM D7624		8.7	11.8	11
	Sulfation	Abs/.1mm	*ASTM D7415		22.3	26.9	32.8
	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
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	3
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.	Boron	ppm	ASTM D5185m		94	77	34
	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		144	200	6
	Manganese	ppm	ASTM D5185m		1	2	3
	Magnesium	ppm	ASTM D5185m		513	677	39
	Calcium Phosphorus	ppm	ASTM D5185m		1518	1663	2425
		ppm	ASTM D5185m		902	851	1065 1349
	Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		1106	1074 2477	3371
	Oxidation	ppm Abs/.1mm	*ASTM D5185m	>25	3345 17.0	2477	33.4
	Base Number (BN)		ASTM D7414 ASTM D2896		8.4	8.2	5.1
	Visc @ 100°C	cSt	ASTM D2090		13.8	13.1	<u>11.8</u>
	V130 @ 100 O	COL	AUTIVI DTTJ	10.4	13.0	10.1	11.0







Laboratory Sample No.

: LEC0035472 Lab Number : 05730816 Unique Number : 10280414

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

Tested Diagnosed Test Package : CONST (Additional Tests: TBN)

: 05 Jan 2023 : 06 Jan 2023

: 06 Jan 2023 - Jonathan Hester

Contact: LEANNE KENDALL KendalLeanne@lec1.com

LESLIE EQUIPMENT COMPANY

105 TENNIS CENTER DR.

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)

T: F: (740)373-5570

MARIETTA, OH

US 45750-9765