



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 4 - Fairmont [RO# 152869]

Machine Id
PRINOTH T12 935300157

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (4 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0050974	LEC0033107	LEC0032217
Sample Date		Client Info		06 Jul 2024	09 Jun 2022	26 May 2022
Machine Age	hrs	Client Info		2737	1774	1762
Oil Age	hrs	Client Info		975	12	351
Filter Age	hrs	Client Info		975	0	351
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ABNORMAL	NORMAL	SEVERE

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	65	51	▲ 154
Chromium	ppm	ASTM D5185m	>20	4	4	▲ 15
Nickel	ppm	ASTM D5185m	>4	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 26	17	▲ 56
Lead	ppm	ASTM D5185m	>40	0	1	<1
Copper	ppm	ASTM D5185m	>330	3	4	20
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

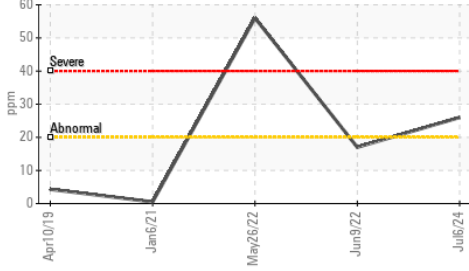
Silicon	ppm	ASTM D5185m	>120	11	16	▲ 53
Potassium	ppm	ASTM D5185m	>20	2	3	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.6	6.1	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	19.6	21.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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

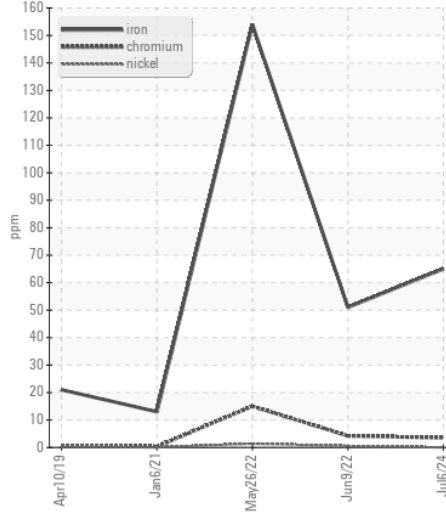
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	1	2
Boron	ppm	ASTM D5185m		188	258	189
Barium	ppm	ASTM D5185m		<1	<1	<1
Molybdenum	ppm	ASTM D5185m		239	185	197
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		793	650	638
Calcium	ppm	ASTM D5185m		1560	1577	1596
Phosphorus	ppm	ASTM D5185m		938	915	852
Zinc	ppm	ASTM D5185m		1074	1092	1056
Sulfur	ppm	ASTM D5185m		3470	3239	2946
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	14.6	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	9.3	7.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	14.3	14.1

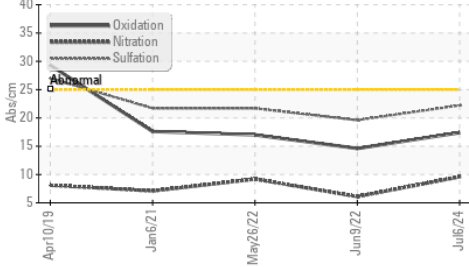
▲ Aluminum (ppm)



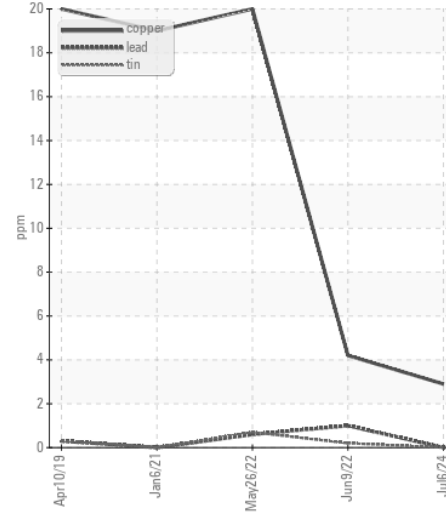
Ferrous Alloys



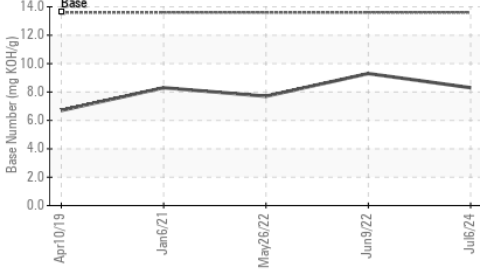
FT-IR (Direct Trend)



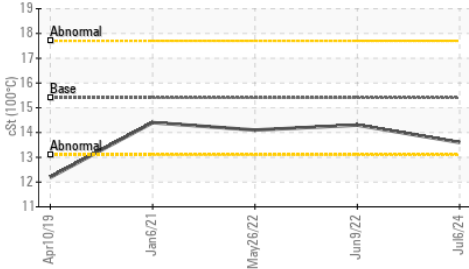
Non-ferrous Metals



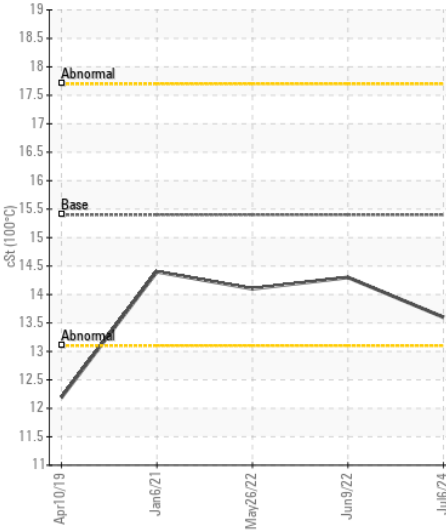
Base Number



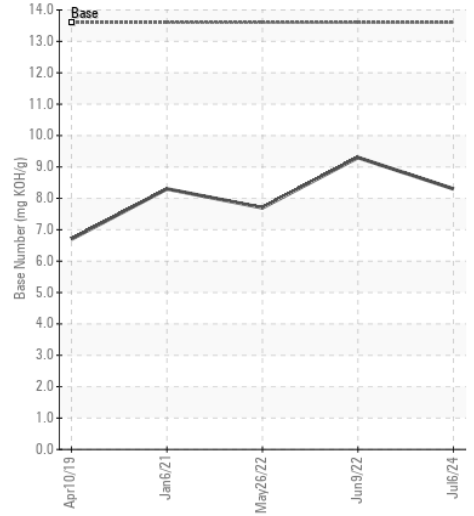
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : LEC0050974
 Lab Number : 06235699
 Unique Number : 11124533
 Test Package : CONST (Additional Tests: TBN)

Received : 15 Jul 2024
 Tested : 16 Jul 2024
 Diagnosed : 16 Jul 2024 - Don Baldrige

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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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