



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 1 - Cowen [151979]
Machine Id
JOHN DEERE 624P 1DW624PAJNLZ15097
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049918	LEC0045952	LEC0041112
Sample Date		Client Info		12 Jun 2024	29 Mar 2024	12 Jan 2024
Machine Age	hrs	Client Info		3641	3124	2627
Oil Age	hrs	Client Info		517	497	550
Filter Age	hrs	Client Info		517	497	550
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	9	11	12
Chromium	ppm	ASTM D5185m	>11	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	5	4	2
Lead	ppm	ASTM D5185m	>26	<1	0	0
Copper	ppm	ASTM D5185m	>26	<1	2	1
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
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.

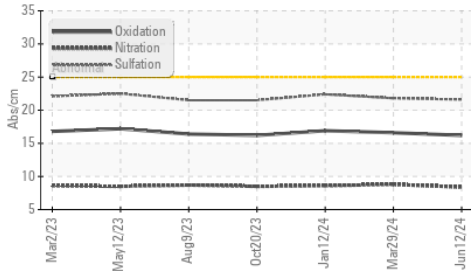
Silicon	ppm	ASTM D5185m	>120	7	5	7
Potassium	ppm	ASTM D5185m	>20	4	4	3
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.4	8.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	21.8	22.4
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

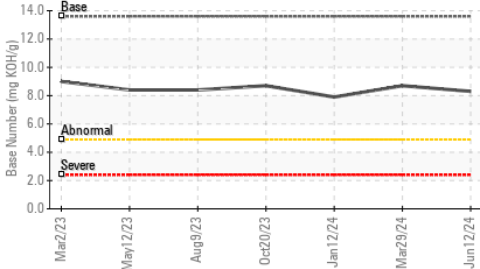
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	<1	3	0
Boron	ppm	ASTM D5185m		244	231	248
Barium	ppm	ASTM D5185m		0	<1	4
Molybdenum	ppm	ASTM D5185m		256	267	262
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		794	856	862
Calcium	ppm	ASTM D5185m		1358	1523	1363
Phosphorus	ppm	ASTM D5185m		837	977	920
Zinc	ppm	ASTM D5185m		1076	1167	1134
Sulfur	ppm	ASTM D5185m		3214	3677	3424
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	16.6	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	8.7	7.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.3	13.3	13.2

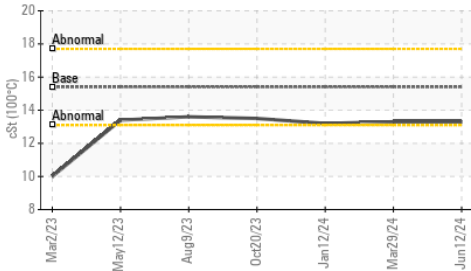
FT-IR (Direct Trend)



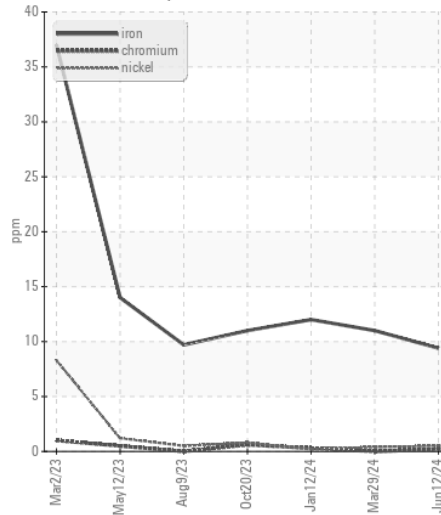
Base Number



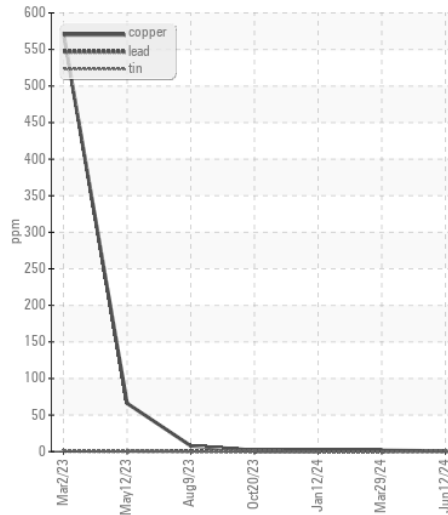
Viscosity @ 100°C



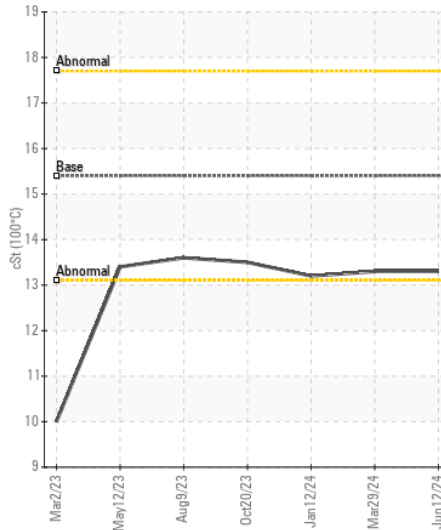
Ferrous Alloys



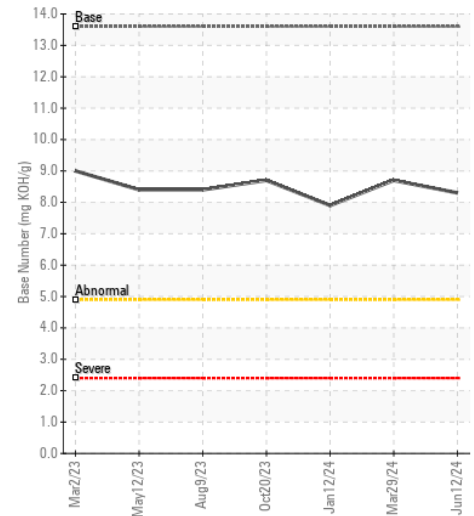
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : LEC0049918 Received : 14 Jun 2024
 Lab Number : 06209911 Tested : 17 Jun 2024
 Unique Number : 11082775 Diagnosed : 17 Jun 2024 - Wes Davis
 Test Package : CONST (Additional Tests: TBN)

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)

T:
 F: (740)373-5570