LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Store 4 - Fairmont
Machine Id
JOHN DEERE 210G 1FF210GXJNF530304
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (6 GAL)

RECOMMENDATION

Check for low coolant level. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

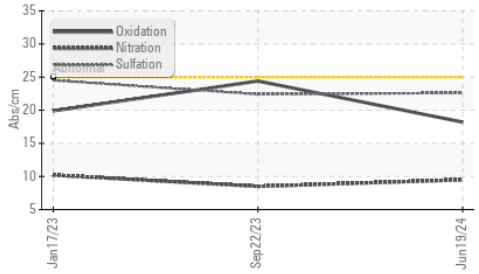
Sodium and/or potassium levels are high.

FLUID CONDITION

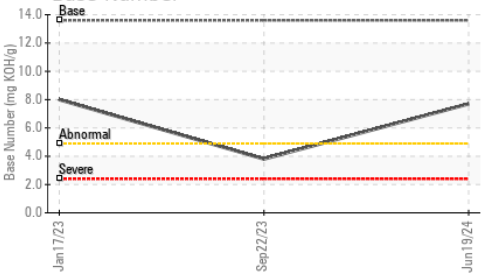
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0051042	LEC0045604	LEC0037187
Sample Date		Client Info		19 Jun 2024	22 Sep 2023	17 Jan 2023
Machine Age	hrs	Client Info		1664	1294	650
Oil Age	hrs	Client Info		370	644	650
Filter Age	hrs	Client Info		370	644	650
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	24	15	46
Chromium	ppm	ASTM D5185m	>11	1	<1	2
Nickel	ppm	ASTM D5185m	>5	9	3	4
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	6	16	4
Lead	ppm	ASTM D5185m	>26	<1	0	9
Copper	ppm	ASTM D5185m	>26	10	13	▲ 447
Tin	ppm	ASTM D5185m	>4	<1	<1	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	9	12	10
Potassium	ppm	ASTM D5185m	>20	▲ 56	▲ 407	2
Fuel		WC Method	>2.1	<1.0	<1.0	0.7
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.5	8.5	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	22.4	24.5
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
Sodium	ppm	ASTM D5185m	>31	2	4	5
Boron	ppm	ASTM D5185m		231	● 447	119
Barium	ppm	ASTM D5185m		3	7	0
Molybdenum	ppm	ASTM D5185m		362	● 1041	205
Manganese	ppm	ASTM D5185m		1	<1	4
Magnesium	ppm	ASTM D5185m		722	● 186	867
Calcium	ppm	ASTM D5185m		1315	● 638	1548
Phosphorus	ppm	ASTM D5185m		776	● 171	850
Zinc	ppm	ASTM D5185m		993	● 195	1115
Sulfur	ppm	ASTM D5185m		2822	● 2565	2815
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	24.4	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.7	▲ 3.8	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	13.4	13.8	● 11.1

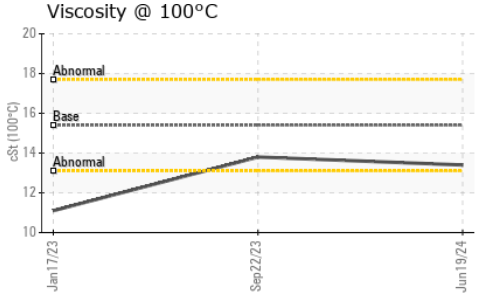
FT-IR (Direct Trend)



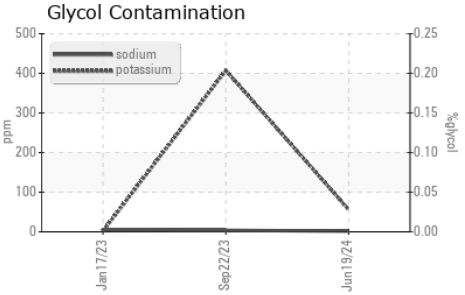
Base Number



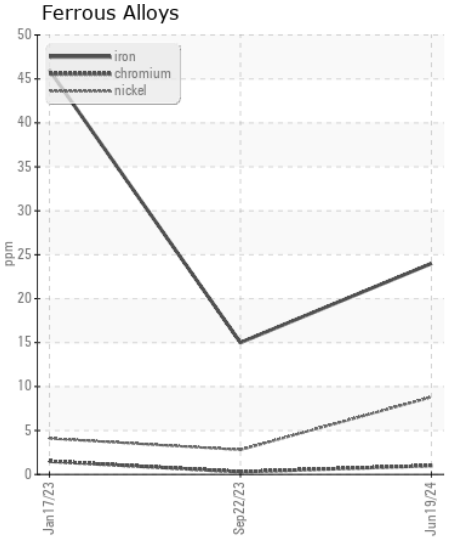
Viscosity @ 100°C



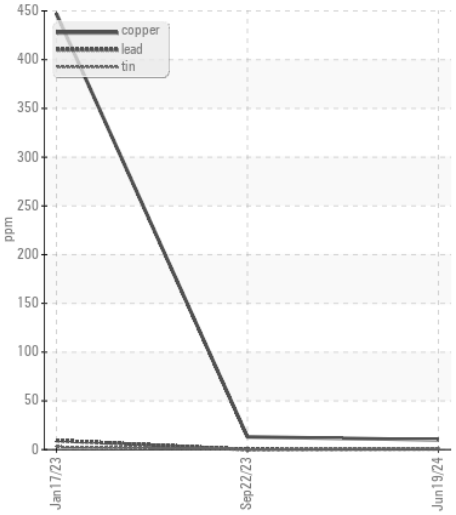
Glycol Contamination



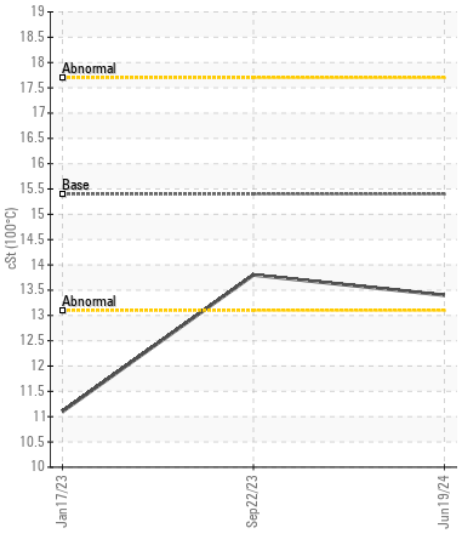
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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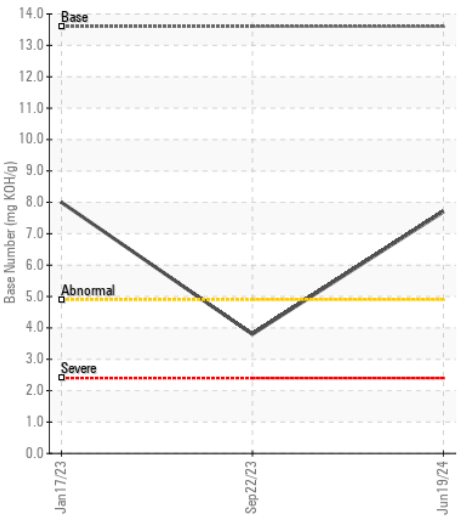

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0051042 **Received** : 25 Jun 2024
Lab Number : 06219481 **Tested** : 26 Jun 2024
Unique Number : 11097678 **Diagnosed** : 26 Jun 2024 - Sean Felton
Test Package : CONST (Additional Tests: Glycol, 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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