James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	MARGINAL

Machine Id
JOHN DEERE 844L AH 1DW844LAEML712419
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

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

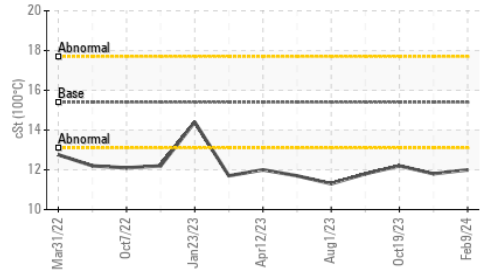
Fuel content negligible. No other contaminants were detected in the oil.

FLUID CONDITION

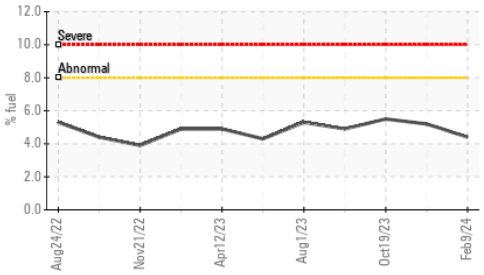
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0202261	JR0197981	JR0181322
Sample Date		Client Info		09 Feb 2024	08 Dec 2023	19 Oct 2023
Machine Age	hrs	Client Info		8036	7540	7039
Oil Age	hrs	Client Info		496	501	490
Filter Age	hrs	Client Info		496	501	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	20	21	24
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	5	7
Lead	ppm	ASTM D5185m	>26	12	10	14
Copper	ppm	ASTM D5185m	>26	10	13	8
Tin	ppm	ASTM D5185m	>4	1	3	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	8	8	13
Potassium	ppm	ASTM D5185m	>20	3	<1	5
Fuel	%	ASTM D3524	>8.0	4.4	5.2	5.5
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	7.6	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.2	19.4	25.3
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	3	7
Boron	ppm	ASTM D5185m		85	60	38
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		253	83	225
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		749	325	732
Calcium	ppm	ASTM D5185m		1349	1670	1339
Phosphorus	ppm	ASTM D5185m		787	905	752
Zinc	ppm	ASTM D5185m		1011	1131	940
Sulfur	ppm	ASTM D5185m		2749	3201	2741
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	14.5	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.9	10.0	6.4
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.0	▲ 11.8	▲ 12.2

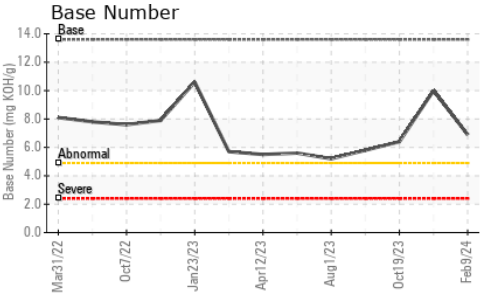
Viscosity @ 100°C



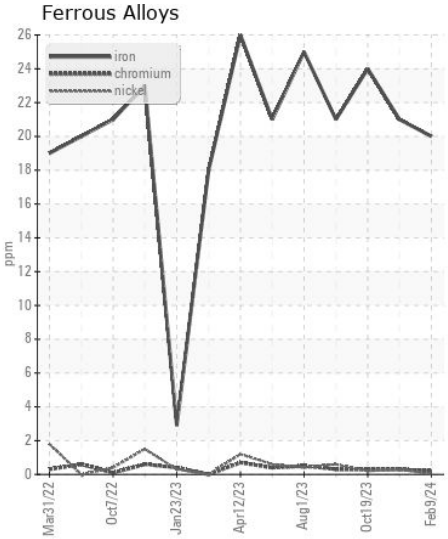
Fuel Dilution



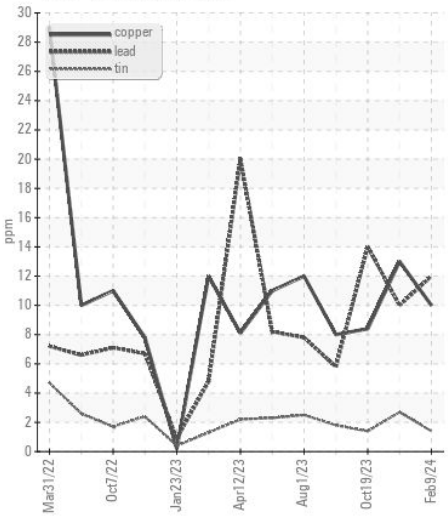
Base Number



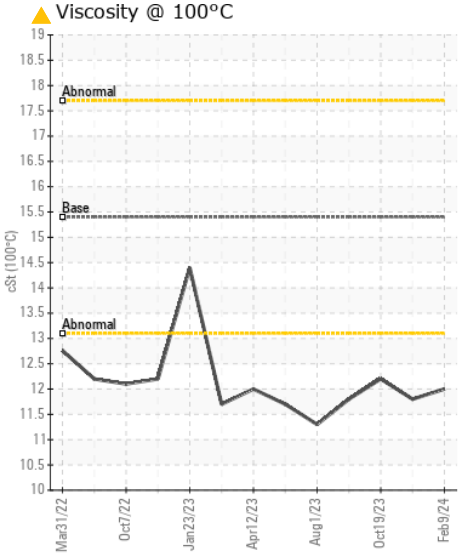
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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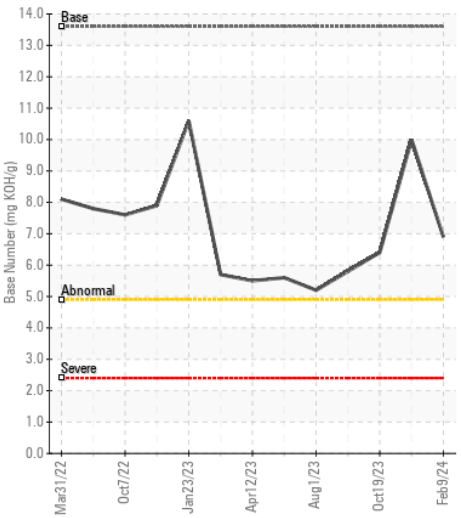

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0202261 **Received** : 13 Feb 2024
Lab Number : 06087092 **Tested** : 15 Feb 2024
Unique Number : 10874537 **Diagnosed** : 15 Feb 2024 - Doug Bogart
Test Package : CONST (Additional Tests: FUELDILUTION, PercentFuel, 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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