



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

Store 5 - Cross Lanes

Machine Id

JOHN DEERE 1FF350GXVEE809964

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (7 GAL)

RECOMMENDATION

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		LEC0046019	LEC0039319	LEC0036030
Sample Date		Client Info		26 Jan 2024	12 Apr 2023	03 Oct 2022
Machine Age	hrs	Client Info		7204	7031	6466
Oil Age	hrs	Client Info		173	565	591
Filter Age	hrs	Client Info		173	565	591
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>51	▲ 80	▲ 124	▲ 187
Chromium	ppm	ASTM D5185m	>11	1	2	4
Nickel	ppm	ASTM D5185m	>5	2	3	5
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	6	3	7
Lead	ppm	ASTM D5185m	>26	2	2	3
Copper	ppm	ASTM D5185m	>26	<1	2	3
Tin	ppm	ASTM D5185m	>4	<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

There is no indication of any contamination in the oil.

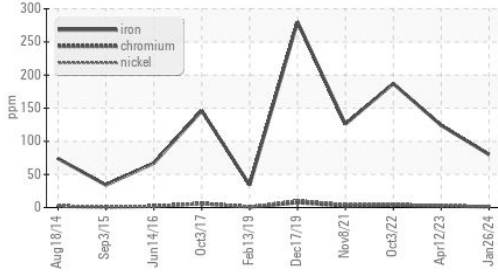
Silicon	ppm	ASTM D5185m	>120	11	12	11
Potassium	ppm	ASTM D5185m	>20	4	2	6
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	9.1	9.8	13.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	22.3	24.8
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	>0.21	NEG	NEG	NEG

FLUID CONDITION

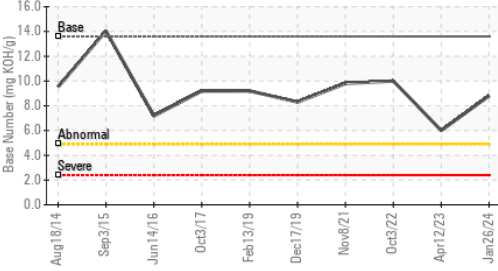
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	3	3	2
Boron	ppm	ASTM D5185m		180	113	46
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		230	168	209
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		754	575	707
Calcium	ppm	ASTM D5185m		1351	1543	1654
Phosphorus	ppm	ASTM D5185m		939	878	949
Zinc	ppm	ASTM D5185m		1072	1073	1146
Sulfur	ppm	ASTM D5185m		2992	3065	3675
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	19.0	20.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.8	6.0	10.0
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	13.6	14.0

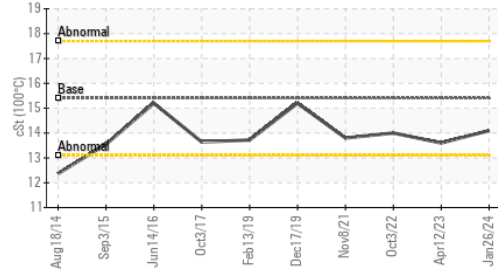
▲ Ferrous Alloys



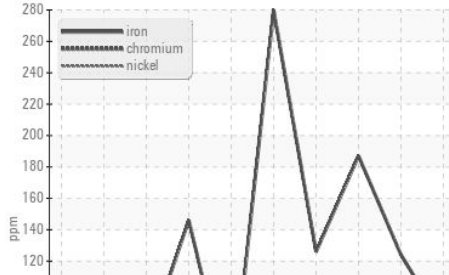
Base Number



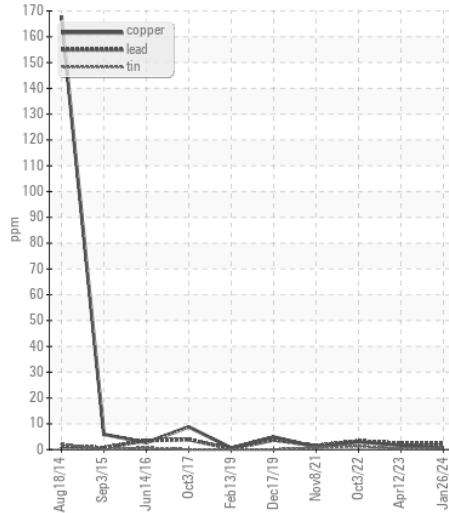
Viscosity @ 100°C



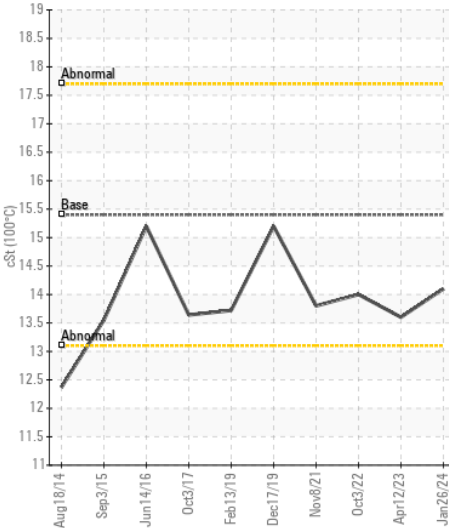
▲ Ferrous Alloys



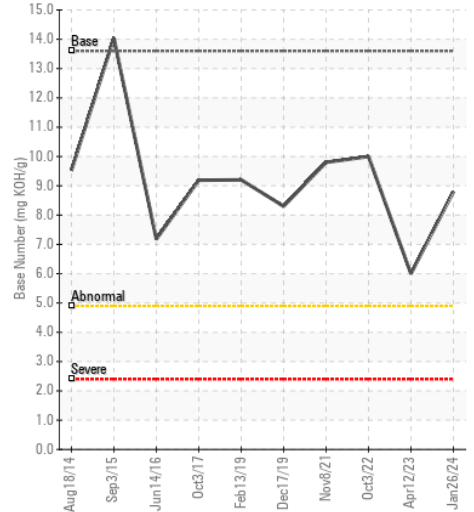
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046019 **Received** : 31 Jan 2024
Lab Number : 06075497 **Diagnosed** : 01 Feb 2024
Unique Number : 10857588 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: 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)

SAFECO ENVIRONMENTAL
 3082 SOUTH HWY 88
 DILLINER, PA
 US 15327
 Contact: B JORDAN
 bjordan@safecoservices.com

T:
 F: (724)725-1133