



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	MARGINAL

Machine Id
MOT 5062M PLP2147 (S/N 3001622997)

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0199208	JR0195978	JR0176187
Sample Date		Client Info		12 Jan 2024	07 Dec 2023	25 Jun 2023
Machine Age	hrs	Client Info		27454	26585	25314
Oil Age	hrs	Client Info		869	26585	25314
Filter Age	hrs	Client Info		0	26585	25314
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	40	56	22
Chromium	ppm	ASTM D5185m	>20	2	2	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	18	▲ 21	6
Lead	ppm	ASTM D5185m	>40	2	0	<1
Copper	ppm	ASTM D5185m	>330	0	2	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	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.

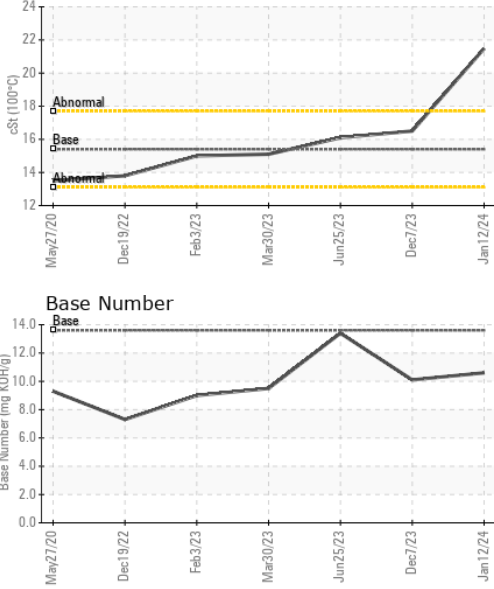
Silicon	ppm	ASTM D5185m	>25	15	18	11
Potassium	ppm	ASTM D5185m	>20	1	2	11
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.8	0.1
Nitration	Abs/cm	*ASTM D7624	>20	14.3	15.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.6	31.3	18.5
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

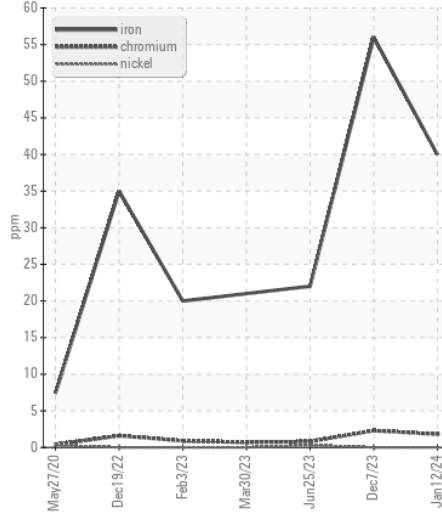
The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		2	4	2
Boron	ppm	ASTM D5185m		161	220	148
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		240	398	179
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		664	1167	501
Calcium	ppm	ASTM D5185m		2886	2532	2094
Phosphorus	ppm	ASTM D5185m		1503	1256	1099
Zinc	ppm	ASTM D5185m		1850	1736	1310
Sulfur	ppm	ASTM D5185m		4552	3704	3566
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.3	33.0	10.5
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.6	10.1	13.4
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 21.48	16.5	16.1

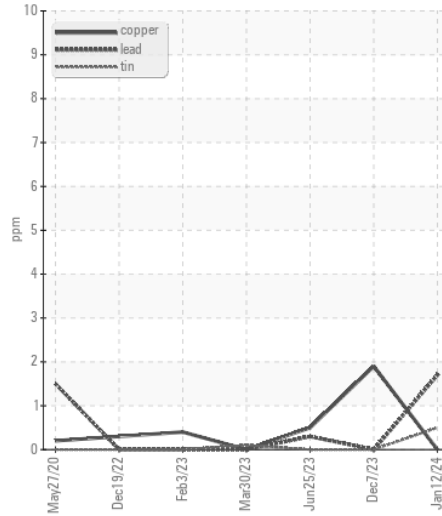
▲ Viscosity @ 100°C



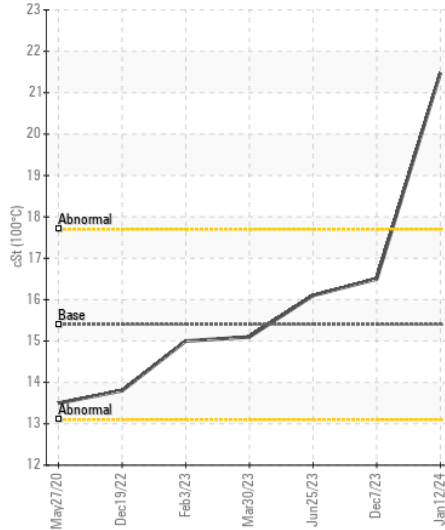
Ferrous Alloys



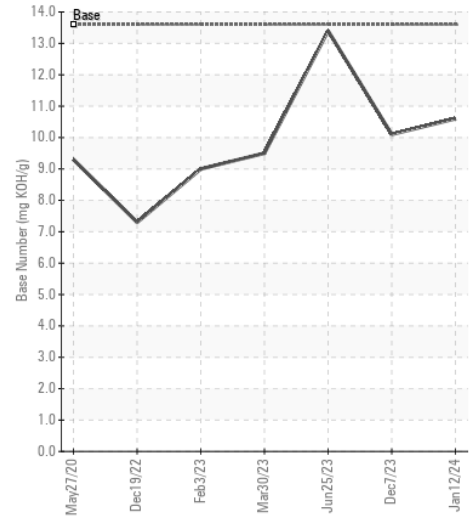
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0199208 **Recieved** : 16 Jan 2024
Lab Number : 06060871 **Diagnosed** : 23 Jan 2024
Unique Number : 10832253 **Diagnostician** : Doug Bogart
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)

OSCAR RENDA CONTRACTING

5222 BENSON LANE
 ROANOKE, TX
 US 76262

Contact: TROY COREY
 tcorey@oscarrenda.com

T: (817)491-2703

F: