LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Area
Store 6 - Ashland [152254]
Machine Id
JOHN DEERE 844K 28819 (S/N 1DW844KCLJF689430)
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (11 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

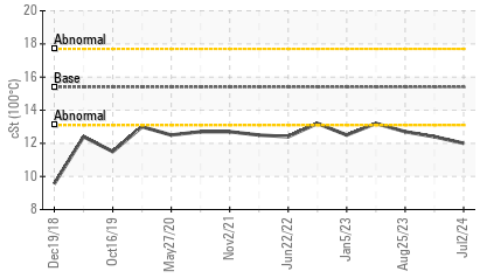
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

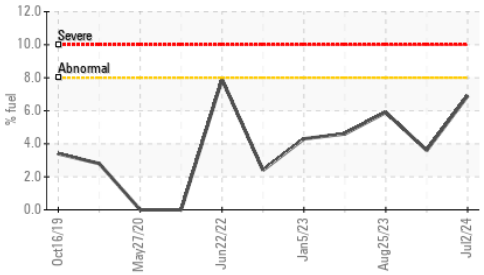
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0051342	LEC0046491	LEC0041889
Sample Date		Client Info		02 Jul 2024	15 Jan 2024	25 Aug 2023
Machine Age	hrs	Client Info		11067	10131	9547
Oil Age	hrs	Client Info		936	584	584
Filter Age	hrs	Client Info		936	584	584
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	21	14	14
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	7	4	7
Lead	ppm	ASTM D5185m	>26	4	3	3
Copper	ppm	ASTM D5185m	>26	16	12	14
Tin	ppm	ASTM D5185m	>4	0	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>!20	5	6	6
Potassium	ppm	ASTM D5185m	>20	1	3	2
Fuel	%	ASTM D3524	>8.0	6.9	3.6	▲ 5.9
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.5	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.7	9.7	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9	24.6	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
Sodium	ppm	ASTM D5185m	>31	10	<1	5
Boron	ppm	ASTM D5185m		69	164	142
Barium	ppm	ASTM D5185m		0	4	0
Molybdenum	ppm	ASTM D5185m		244	249	254
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		759	815	827
Calcium	ppm	ASTM D5185m		1415	1298	1437
Phosphorus	ppm	ASTM D5185m		724	777	761
Zinc	ppm	ASTM D5185m		842	978	950
Sulfur	ppm	ASTM D5185m		2806	3124	3414
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	18.8	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.2	7.4	8.0
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.0	12.4	▲ 12.7

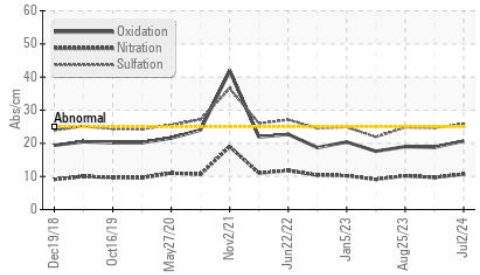
Viscosity @ 100°C



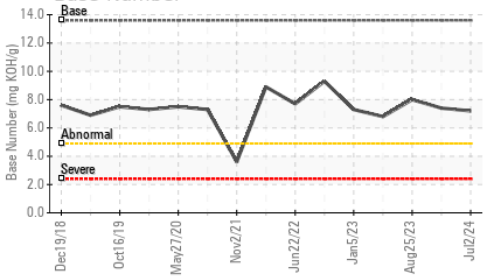
Fuel Dilution



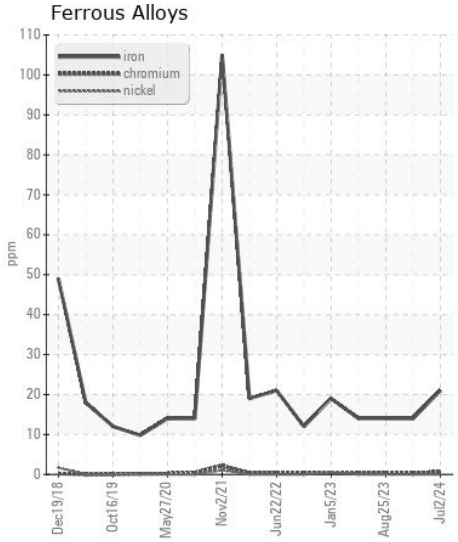
FT-IR (Direct Trend)



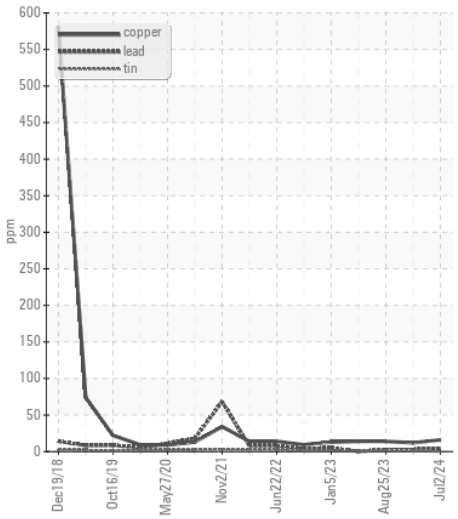
Base Number



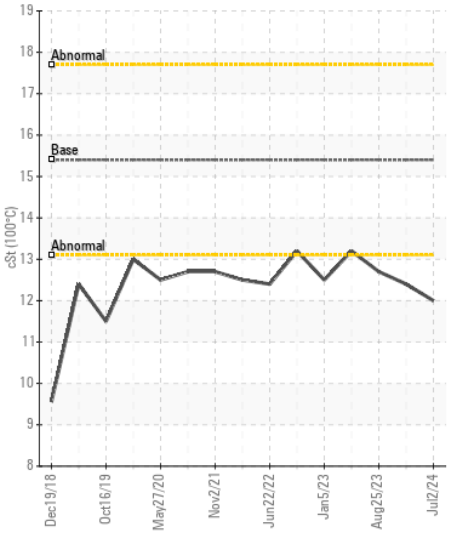
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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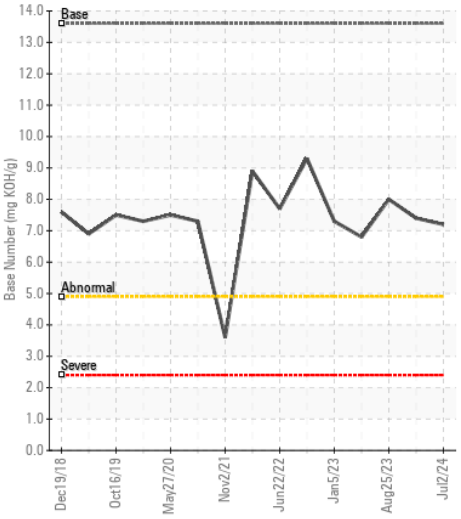

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0051342
Lab Number : 06228402
Unique Number : 11111895
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 05 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 Jul 2024 - Jonathan Hester

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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