



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 1 - Cowen

Machine Id
CHEVROLET 3500 1GB4YSEY6LF321079

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (11 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0044861	LEC0044748	LEC0039966
Sample Date		Client Info		07 May 2024	11 Dec 2023	15 Jun 2023
Machine Age	hrs	Client Info		67912	60393	53024
Oil Age	hrs	Client Info		7519	7369	7753
Filter Age	hrs	Client Info		7519	7369	7753
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	43	44	33
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	12	11	11
Lead	ppm	ASTM D5185m	>40	5	6	2
Copper	ppm	ASTM D5185m	>330	5	8	7
Tin	ppm	ASTM D5185m	>15	2	2	2
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.

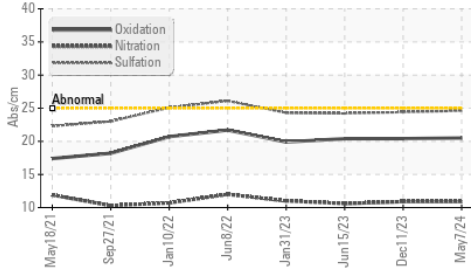
Silicon	ppm	ASTM D5185m	>120	14	13	12
Potassium	ppm	ASTM D5185m	>20	15	15	15
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	24.4	24.2
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

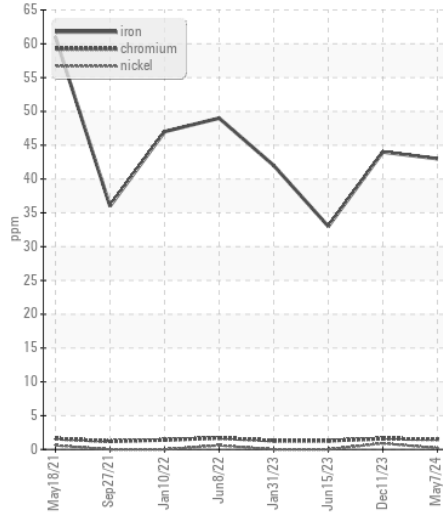
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	0	1
Boron	ppm	ASTM D5185m		208	145	181
Barium	ppm	ASTM D5185m		<1	11	0
Molybdenum	ppm	ASTM D5185m		262	237	241
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		781	733	808
Calcium	ppm	ASTM D5185m		1519	1403	1559
Phosphorus	ppm	ASTM D5185m		964	794	904
Zinc	ppm	ASTM D5185m		1109	1005	1133
Sulfur	ppm	ASTM D5185m		3167	3085	3586
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	20.4	20.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.2	8.3	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.4	13.5

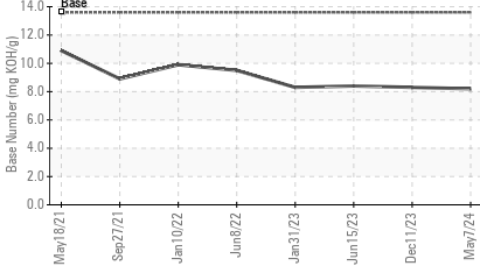
FT-IR (Direct Trend)



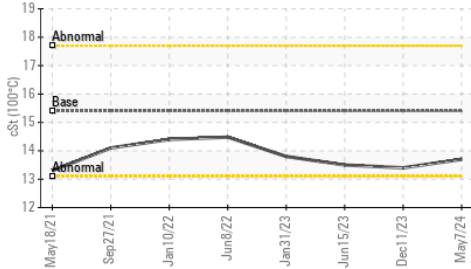
Ferrous Alloys



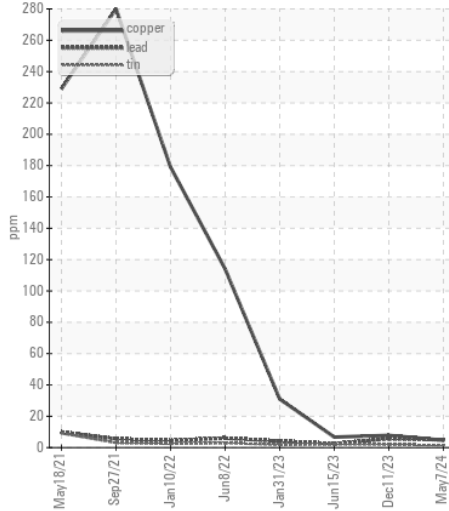
Base Number



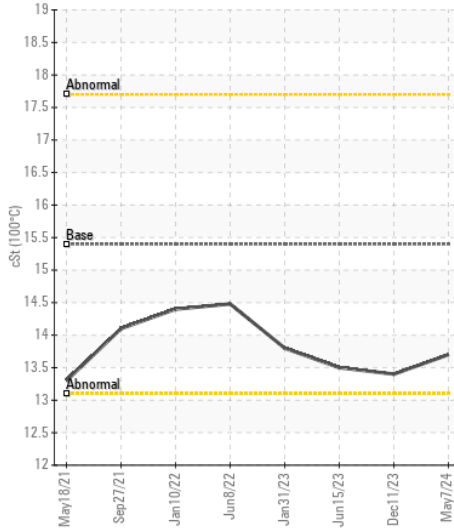
Viscosity @ 100°C



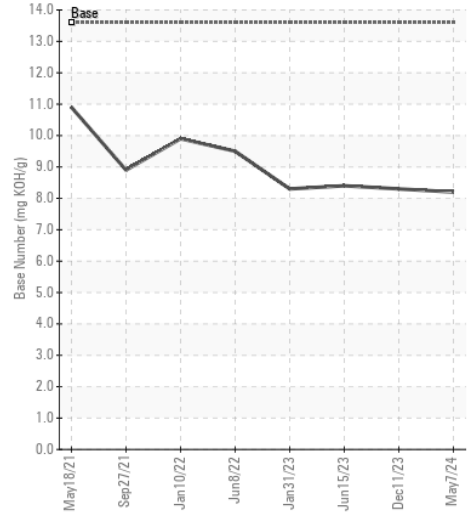
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0044861 **Received** : 09 May 2024
Lab Number : 06174927 **Tested** : 10 May 2024
Unique Number : 11020980 **Diagnosed** : 10 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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)

T: (740)373-5570