



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

[B AND K EXCAVATING]

Machine Id
JOHN DEERE 317G 1P0317GJHPJ436680

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0195586	JR0184831	---
Sample Date		Client Info		07 Jul 2024	29 Dec 2023	---
Machine Age	hrs	Client Info		0	250	---
Oil Age	hrs	Client Info		0	250	---
Filter Age	hrs	Client Info		0	250	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	28	23	---
Chromium	ppm	ASTM D5185m	>11	2	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		1	0	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>31	6	6	---
Lead	ppm	ASTM D5185m	>26	<1	0	---
Copper	ppm	ASTM D5185m	>26	8	21	---
Tin	ppm	ASTM D5185m	>4	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

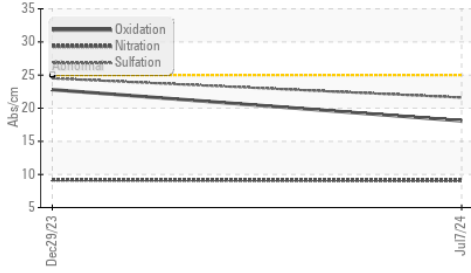
Silicon	ppm	ASTM D5185m	>22	13	39	---
Potassium	ppm	ASTM D5185m	>20	2	3	---
Fuel		WC Method	>2.1	<1.0	0.8	---
Water		WC Method	>0.21	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.6	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	9.1	9.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	24.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	NEG	---

FLUID CONDITION

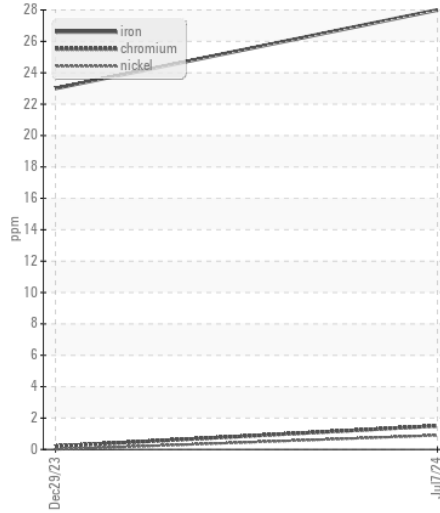
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	5	13	---
Boron	ppm	ASTM D5185m	250	100	264	---
Barium	ppm	ASTM D5185m	10	0	0	---
Molybdenum	ppm	ASTM D5185m	100	101	251	---
Manganese	ppm	ASTM D5185m		1	0	---
Magnesium	ppm	ASTM D5185m	450	495	694	---
Calcium	ppm	ASTM D5185m	3000	1903	1669	---
Phosphorus	ppm	ASTM D5185m	1150	1095	920	---
Zinc	ppm	ASTM D5185m	1350	1369	1098	---
Sulfur	ppm	ASTM D5185m	4250	3511	3719	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	22.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.5	8.3	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.2	11.9	---

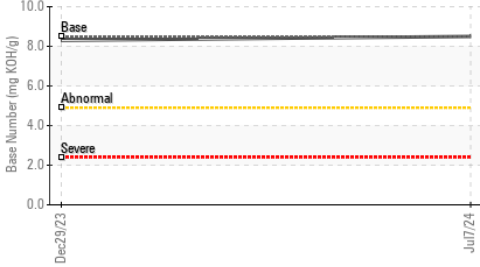
FT-IR (Direct Trend)



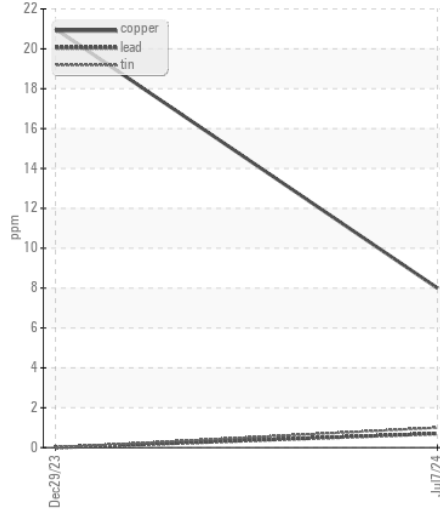
Ferrous Alloys



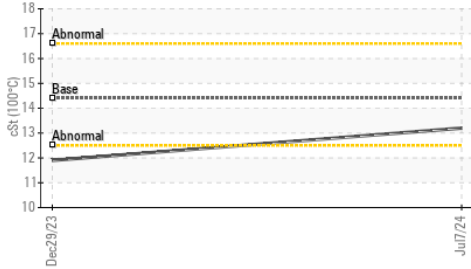
Base Number



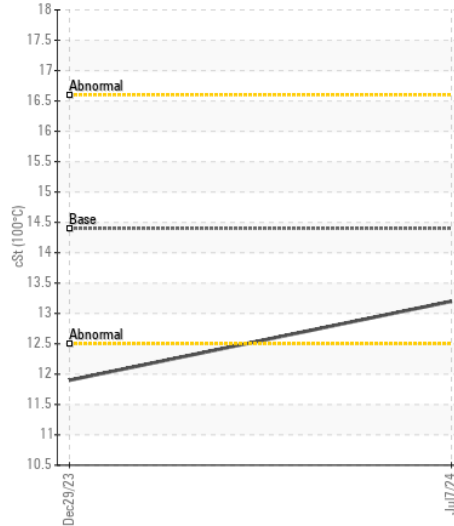
Non-ferrous Metals



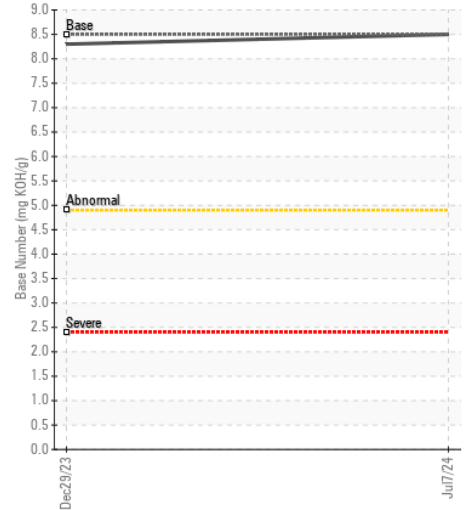
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0195586

Lab Number : 06229936

Unique Number : 11113429

Test Package : CONST (Additional Tests: TBN)

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 09 Jul 2024 - Wes Davis

JRE - STEPHENSON

245 YARDMASTER COURT

STEPHENSON, VA

US 22656-1761

Contact: PHIL DAUGHERTY

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T: x:

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)

F: (540)693-2588