



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 56126
 Component
Diesel Engine
 Fluid
CHEVRON 15W40 (20 QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0913546	WC0716275	WCMC164962
Sample Date		Client Info		10 Jul 2024	16 Aug 2022	01 Feb 2018
Machine Age	hrs	Client Info		5482	5263	5050
Oil Age	hrs	Client Info		500	200	250
Filter Age	hrs	Client Info		500	200	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	14	22	25
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>31	5	14	2
Lead	ppm	ASTM D5185m	>26	<1	1	<1
Copper	ppm	ASTM D5185m	>26	12	1	<1
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Sodium and/or potassium levels are high.

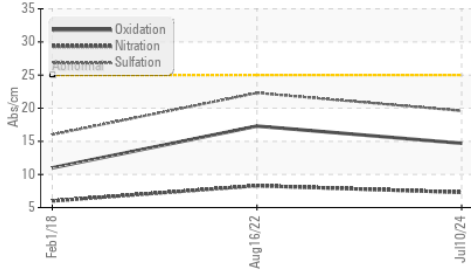
Silicon	ppm	ASTM D5185m	>22	8	6	2
Potassium	ppm	ASTM D5185m	>20	▲ 117	10	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0
Nitration	Abs/cm	*ASTM D7624	>20	7.3	8.3	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	22.3	16.
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

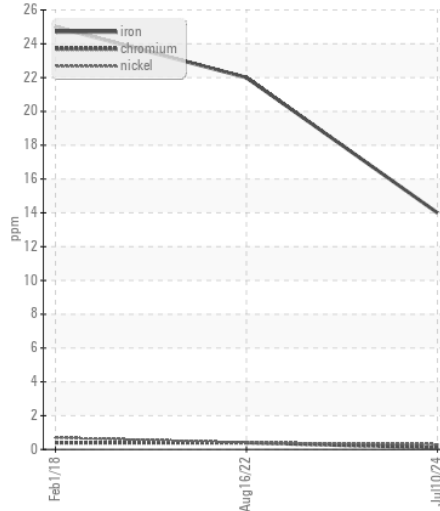
The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>50	▲ 200	15	1
Boron	ppm	ASTM D5185m		164	291	5
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		251	113	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		741	539	748
Calcium	ppm	ASTM D5185m		1347	1408	1146
Phosphorus	ppm	ASTM D5185m		849	746	947
Zinc	ppm	ASTM D5185m		996	879	1017
Sulfur	ppm	ASTM D5185m		2632	2642	3127
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	17.3	11.
Base Number (BN)	mg KOH/g	ASTM D2896		10.2	8.5	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.2	13.3	13.83

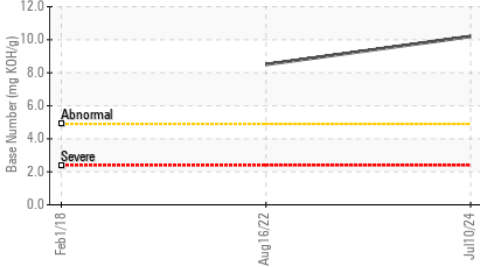
FT-IR (Direct Trend)



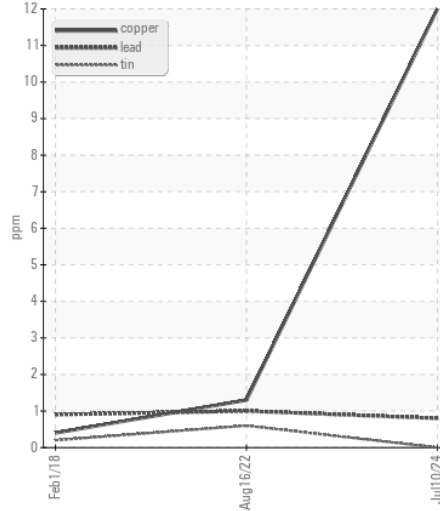
Ferrous Alloys



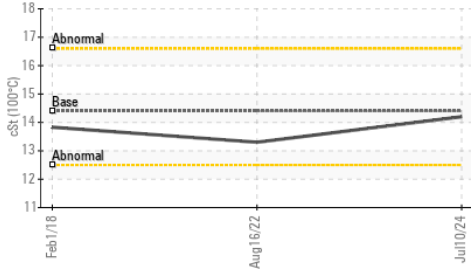
Base Number



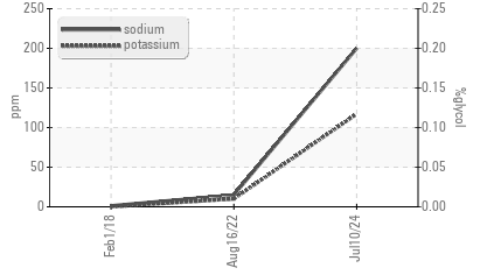
Non-ferrous Metals



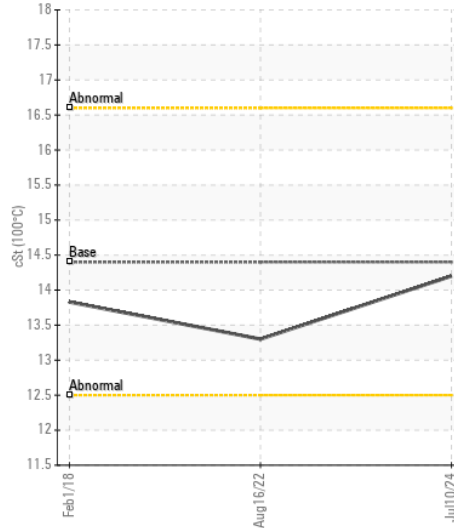
Viscosity @ 100°C



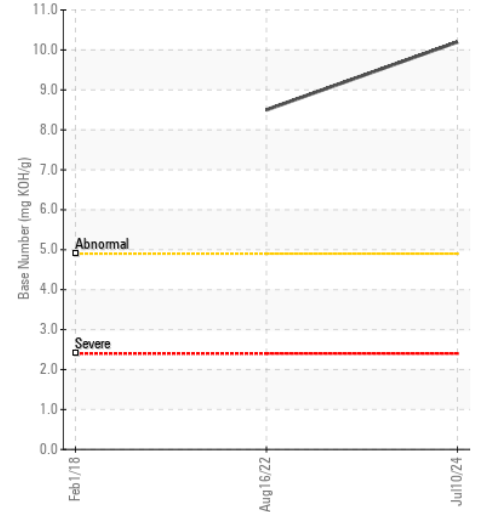
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0913546 **Received** : 11 Jul 2024
Lab Number : 06233031 **Tested** : 15 Jul 2024
Unique Number : 11116524 **Diagnosed** : 15 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

SULLIVAN EASTERN INC
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560

Contact: SCOTT SULLIVAN
 ssullivan@sullivaneastern.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)

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