



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 260E 1DW260ETENF716185
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 0W40 (32 QTS)

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		JR0213800	JR0176749	JR0167352
Sample Date		Client Info		23 May 2024	27 Jul 2023	15 May 2023
Machine Age	hrs	Client Info		1492	973	676
Oil Age	hrs	Client Info		519	297	676
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Valve wear is indicated.

Iron	ppm	ASTM D5185m	>51	37	20	30
Chromium	ppm	ASTM D5185m	>11	2	<1	<1
Nickel	ppm	ASTM D5185m	>5	▲ 27	10	12
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	1	0	0
Aluminum	ppm	ASTM D5185m	>31	7	3	4
Lead	ppm	ASTM D5185m	>26	2	0	<1
Copper	ppm	ASTM D5185m	>26	3	<1	2
Tin	ppm	ASTM D5185m	>4	1	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is negative.

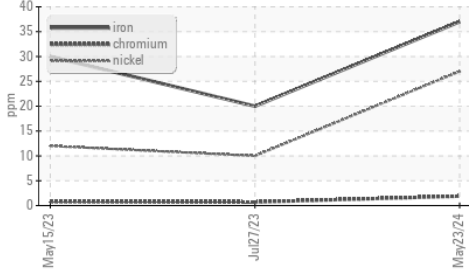
Silicon	ppm	ASTM D5185m	>22	9	6	8
Potassium	ppm	ASTM D5185m	>20	▲ 57	<1	2
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.2	7.3	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	20.4	21.3
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

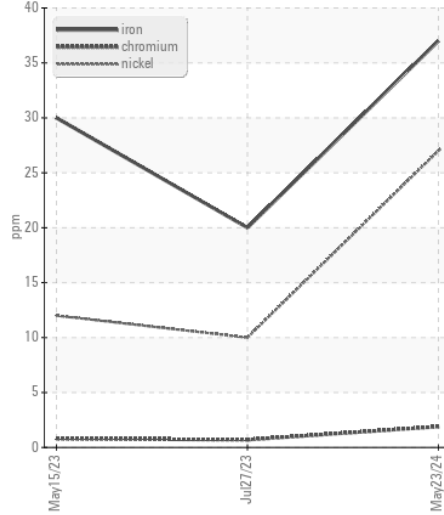
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>31	20	2	2
Boron	ppm	ASTM D5185m		227	245	224
Barium	ppm	ASTM D5185m		2	2	0
Molybdenum	ppm	ASTM D5185m		261	252	256
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m		836	876	858
Calcium	ppm	ASTM D5185m		1402	1516	1448
Phosphorus	ppm	ASTM D5185m		911	943	897
Zinc	ppm	ASTM D5185m		1096	1151	1123
Sulfur	ppm	ASTM D5185m		3194	3816	3564
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	14.8	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	8.7	9.2	8.9
Visc @ 100°C	cSt	ASTM D445	14	13.3	13.6	13.3

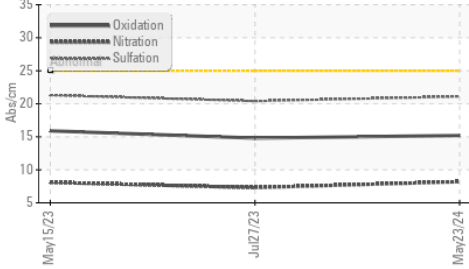
▲ Ferrous Alloys



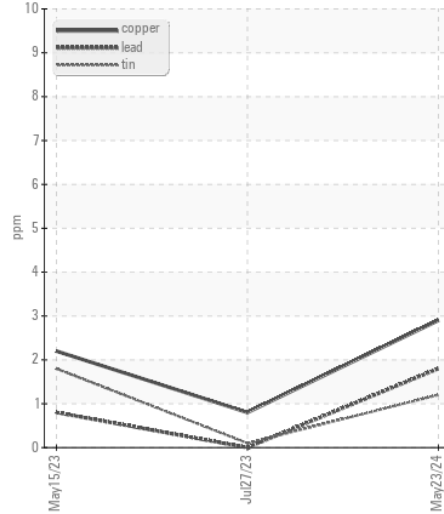
▲ Ferrous Alloys



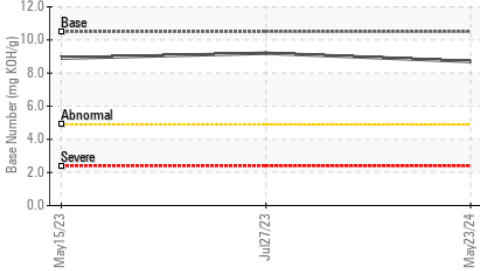
FT-IR (Direct Trend)



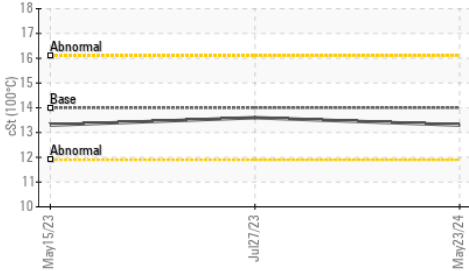
Non-ferrous Metals



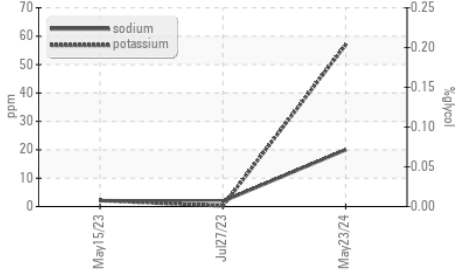
Base Number



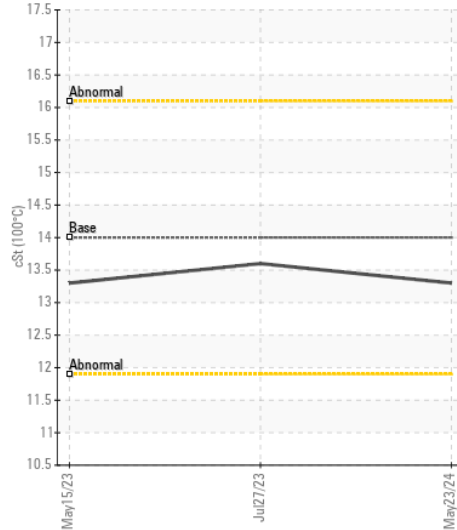
Viscosity @ 100°C



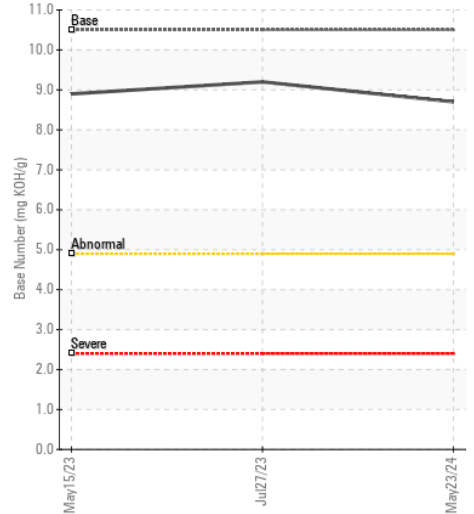
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0213800 **Received** : 28 May 2024
Lab Number : 06191967 **Tested** : 30 May 2024
Unique Number : 11048719 **Diagnosed** : 30 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: Glycol, TBN)

JRE - GREENVILLE
 3604 HIGHWAY 264 E
 GREENVILLE, NC
 US 27834-5800

Contact: GREENVILLE SHOP
 christopher.martin@jamesriverequipment.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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F: