MOB

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W8928]
Machine Id
JOHN DEERE 410E 1DW410ETVLF706853
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (12 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: W8928)

WEAR

All component wear rates are normal.

CONTAMINATION

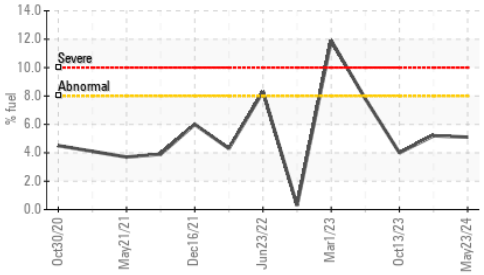
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

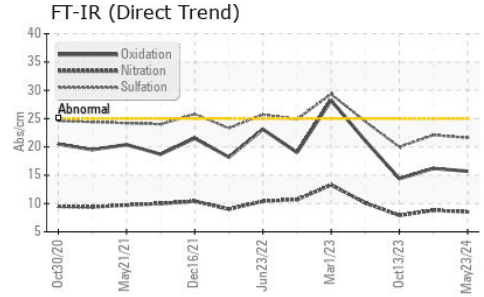
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oils additive package is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0196848**	JR0197145	JR0183309
Sample Date		Client Info		**23 May 2024**	06 Feb 2024	13 Oct 2023
Machine Age	hrs	Client Info		**6461**	5971	5501
Oil Age	hrs	Client Info		**490**	470	551
Filter Age	hrs	Client Info		**490**	470	551
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	**14**	14	25
Chromium	ppm	ASTM D5185m	>11	**<1**	<1	1
Nickel	ppm	ASTM D5185m	>5	**2**	<1	1
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m	>3	**<1**	0	0
Aluminum	ppm	ASTM D5185m	>31	**9**	8	6
Lead	ppm	ASTM D5185m	>26	**4**	2	3
Copper	ppm	ASTM D5185m	>26	**3**	2	7
Tin	ppm	ASTM D5185m	>4	**2**	2	1
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	>22	**8**	5	8
Potassium	ppm	ASTM D5185m	>20	**4**	2	4
Fuel	%	ASTM D3524	>8.0	**5.1**	5.2	4.0
Water		WC Method	>0.21	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**8.5**	8.8	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.6**	22.1	20.0
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	**3**	3	2
Boron	ppm	ASTM D5185m		**177**	194	208
Barium	ppm	ASTM D5185m		**0**	<1	0
Molybdenum	ppm	ASTM D5185m		**237**	258	232
Manganese	ppm	ASTM D5185m		**<1**	1	<1
Magnesium	ppm	ASTM D5185m		**841**	805	692
Calcium	ppm	ASTM D5185m		**1322**	1263	1185
Phosphorus	ppm	ASTM D5185m		**834**	893	790
Zinc	ppm	ASTM D5185m		**1053**	1038	931
Sulfur	ppm	ASTM D5185m		**3329**	2914	2753
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.7**	16.2	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	**8.0**	8.1	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	**11.4**	11.9	12.4

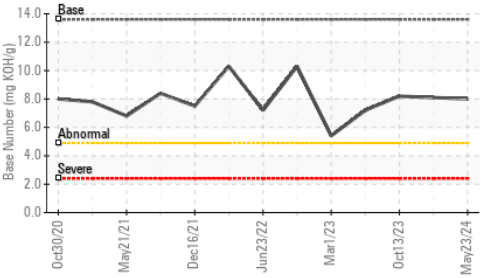
Fuel Dilution



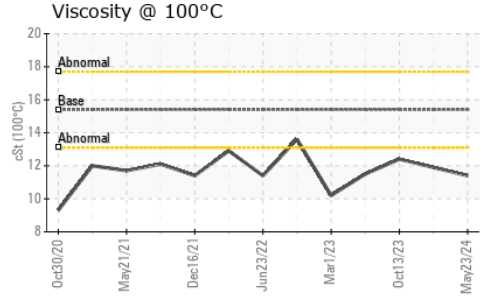
FT-IR (Direct Trend)



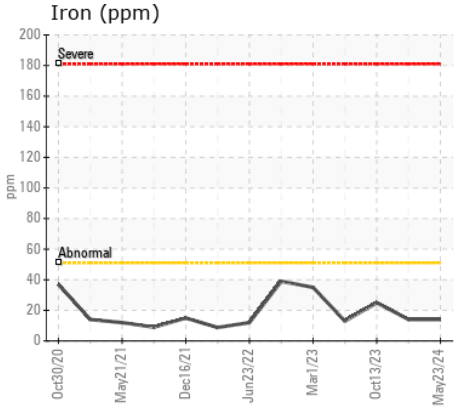
Base Number



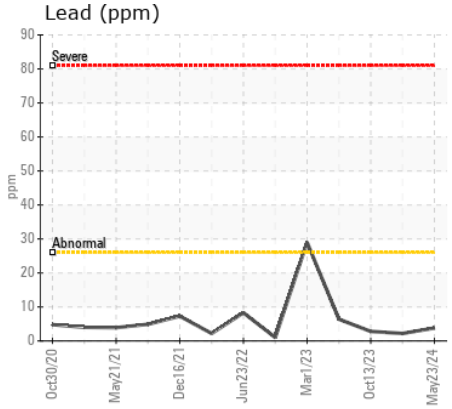
Viscosity @ 100°C



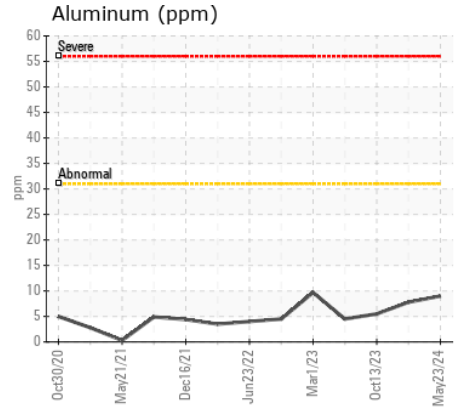
Iron (ppm)



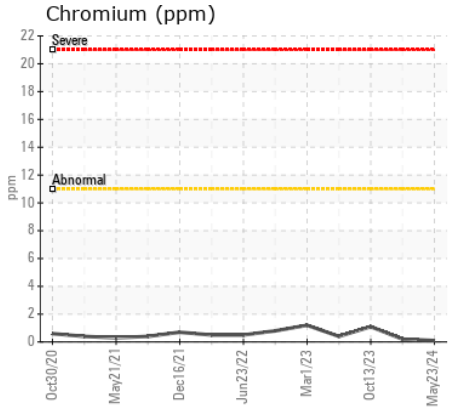
Lead (ppm)



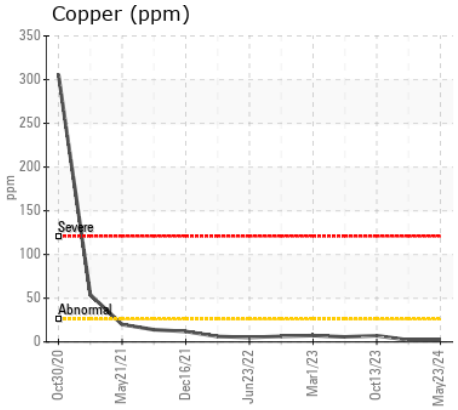
Aluminum (ppm)



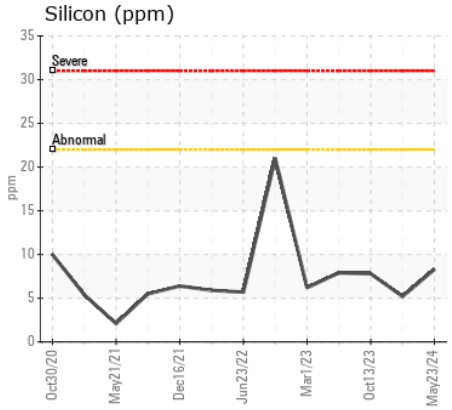
Chromium (ppm)



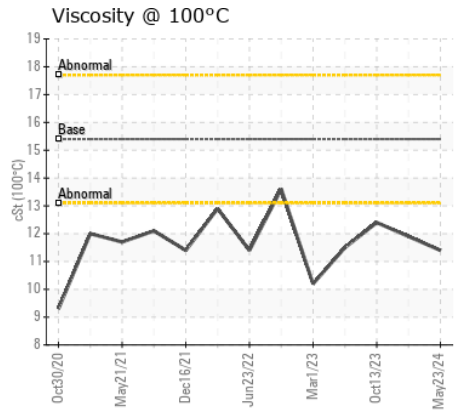
Copper (ppm)



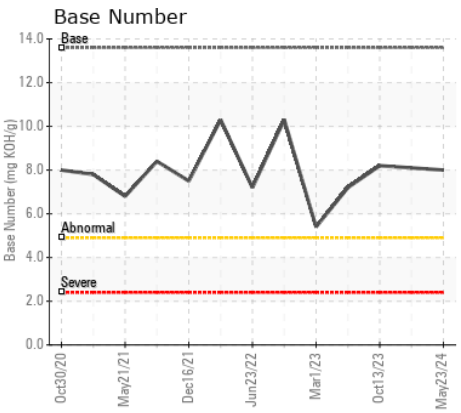
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0196848
Lab Number : 06190166
Unique Number : 11046918
Test Package : MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 24 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Jonathan Hester

JRE - HOPE MILLS/FAYETTEVILLE
5039 HWY 301 SOUTH
HOPE MILLS, NC
US 28348
Contact: FAYETTEVILLE SHOP
stephen.mullis@jamesriverequipment.com;canastasio@wearcheck.com
T:
F:

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)