CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 410E 1DW410ETCLF707444
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

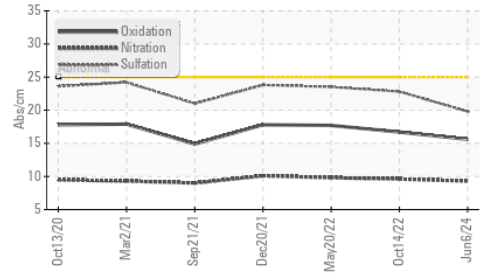
There is no indication of any contamination in the oil.

FLUID CONDITION

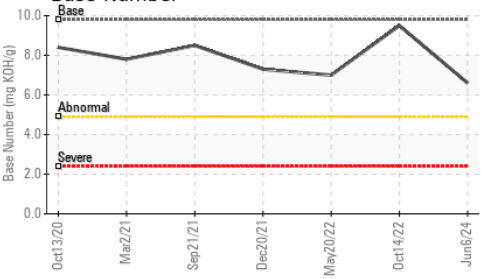
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0193307	JR0143493	JR0128063
Sample Date		Client Info		06 Jun 2024	14 Oct 2022	20 May 2022
Machine Age	hrs	Client Info		4648	2943	2562
Oil Age	hrs	Client Info		581	0	0
Filter Age	hrs	Client Info		581	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	16	11	20
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	2	1	3
Titanium	ppm	ASTM D5185m		7	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>31	8	5	5
Lead	ppm	ASTM D5185m	>26	3	3	7
Copper	ppm	ASTM D5185m	>26	8	6	7
Tin	ppm	ASTM D5185m	>4	2	2	3
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	9	9	6
Potassium	ppm	ASTM D5185m	>20	4	0	<1
Fuel	%	ASTM D3524	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.6	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	22.8	23.5
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	4	<1	4
Boron	ppm	ASTM D5185m	0	18	172	56
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	60	74	223	203
Manganese	ppm	ASTM D5185m	0	1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	764	748	823
Calcium	ppm	ASTM D5185m	1070	1233	1383	1316
Phosphorus	ppm	ASTM D5185m	1150	935	842	812
Zinc	ppm	ASTM D5185m	1270	1152	987	991
Sulfur	ppm	ASTM D5185m	2060	3029	3402	2539
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	16.7	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.6	9.5	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	11.5	11.7	11.9

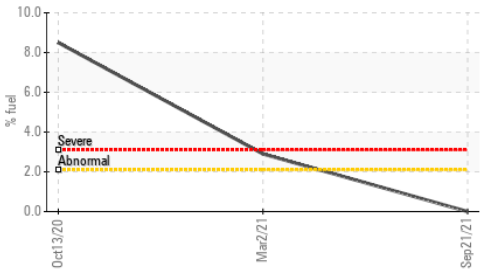
FT-IR (Direct Trend)



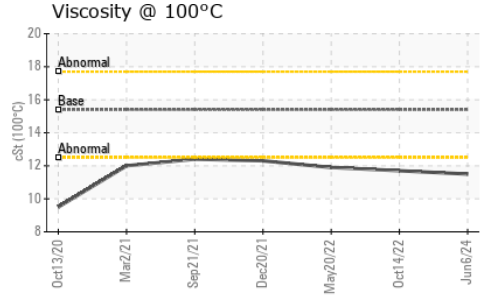
Base Number



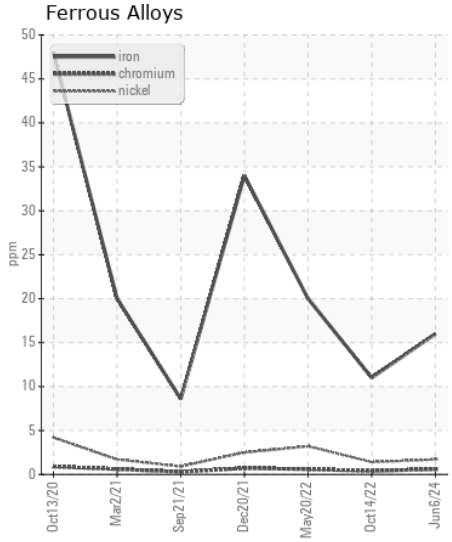
Fuel Dilution



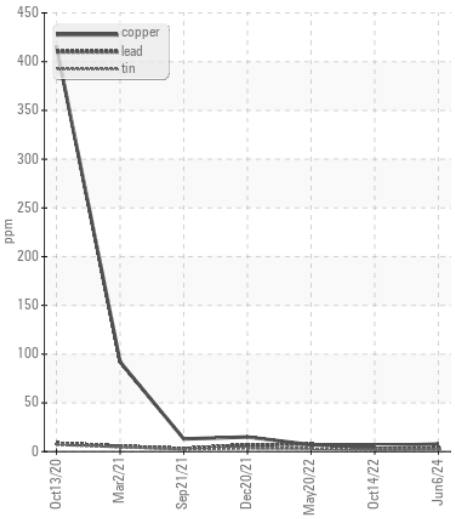
Viscosity @ 100°C



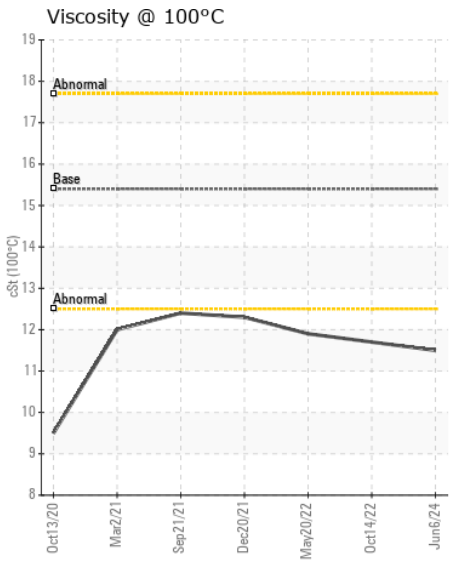
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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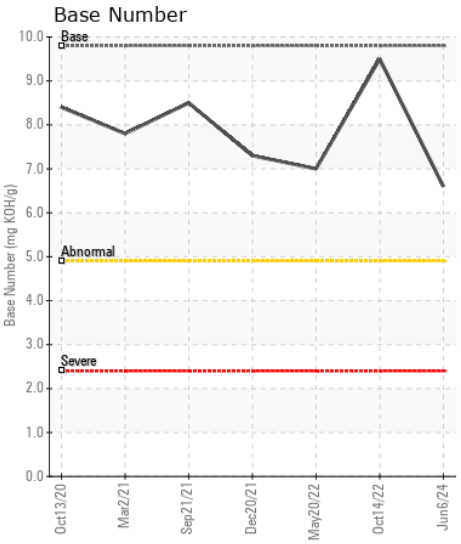

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0193307 **Received** : 24 Jun 2024
Lab Number : 06217869 **Tested** : 25 Jun 2024
Unique Number : 11096066 **Diagnosed** : 25 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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