James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 160G 1FF160GXELF058026
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Bearing wear is indicated.

CONTAMINATION

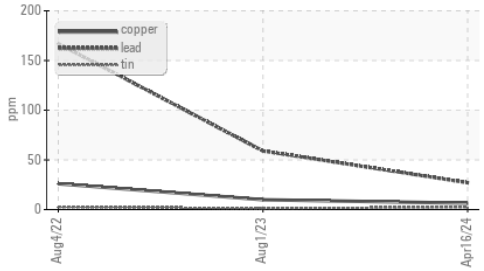
There is no indication of any contamination in the oil.

FLUID CONDITION

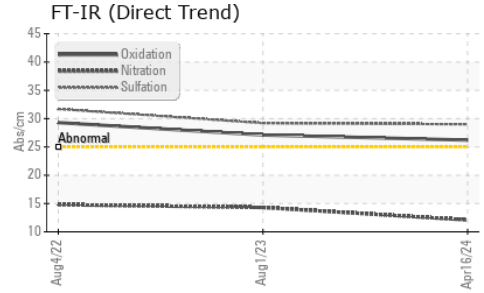
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0206283	JR0178998	JR0134083
Sample Date		Client Info		16 Apr 2024	01 Aug 2023	04 Aug 2022
Machine Age	hrs	Client Info		3999	3115	1799
Oil Age	hrs	Client Info		884	1799	500
Filter Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	47	▲ 60	▲ 69
Chromium	ppm	ASTM D5185m	>11	2	2	2
Nickel	ppm	ASTM D5185m	>5	3	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	7	6	8
Lead	ppm	ASTM D5185m	>26	▲ 27	▲ 59	▲ 167
Copper	ppm	ASTM D5185m	>26	6	10	▲ 26
Tin	ppm	ASTM D5185m	>4	2	1	2
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	15	15	11
Potassium	ppm	ASTM D5185m	>20	3	2	0
Fuel		WC Method	>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	0.6	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	12.1	14.3	14.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.0	29.2	31.7
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	>216	5	6	6
Boron	ppm	ASTM D5185m	250	43	18	28
Barium	ppm	ASTM D5185m	10	<1	0	<1
Molybdenum	ppm	ASTM D5185m	100	262	182	182
Manganese	ppm	ASTM D5185m		2	1	3
Magnesium	ppm	ASTM D5185m	450	843	971	876
Calcium	ppm	ASTM D5185m	3000	1484	1730	1708
Phosphorus	ppm	ASTM D5185m	1150	983	1076	1049
Zinc	ppm	ASTM D5185m	1350	1105	1424	1275
Sulfur	ppm	ASTM D5185m	4250	3257	3549	3011
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.2	27.1	29.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	6.5	9.6
Visc @ 100°C	cSt	ASTM D445	14.4	13.3	14.7	15.3

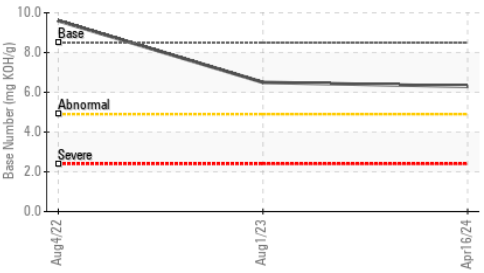
Non-ferrous Metals



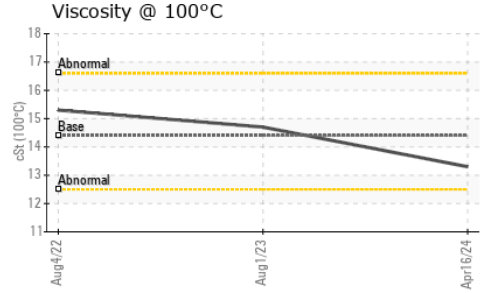
FT-IR (Direct Trend)



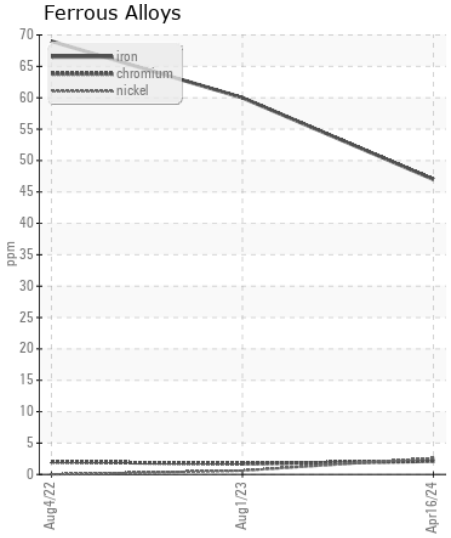
Base Number



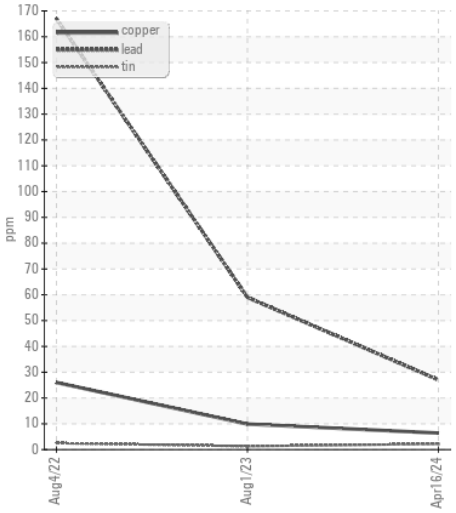
Viscosity @ 100°C



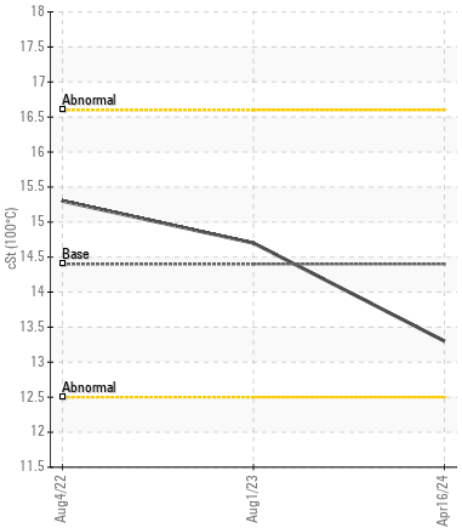
Ferrous Alloys



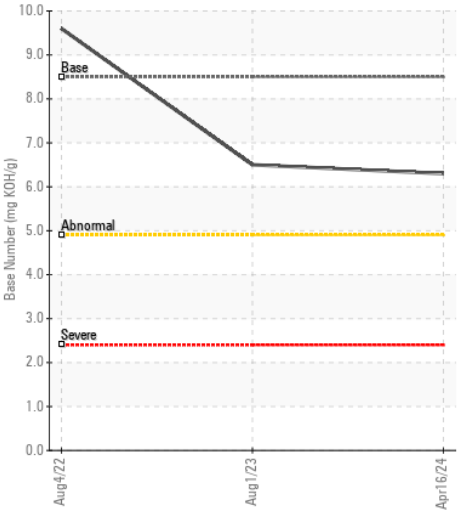
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0206283
Lab Number : 06152897
Unique Number : 10982975
Test Package : CONST (Additional Tests: TBN)

Received : 18 Apr 2024
Tested : 19 Apr 2024
Diagnosed : 22 Apr 2024 - Sean Felton

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)

JRE - CHARLOTTE
9550 STATESVILLE ROAD
CHARLOTTE, NC
US 28269
Contact: CHARLOTTE SHOP
myoung@jamesriverequipment.com
T: (704)597-0211
F: (704)596-6198