CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[W68716]
Machine Id
JOHN DEERE 410P 5477 (S/N 1DW410PALPFB06972)
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: W68716)

WEAR

All component wear rates are normal.

CONTAMINATION

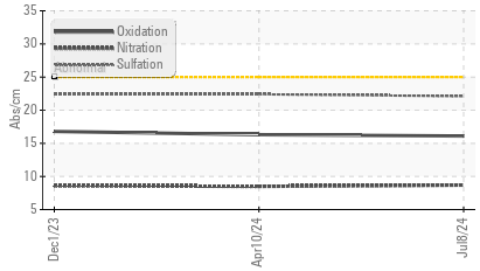
There is no indication of any contamination in the oil.

FLUID CONDITION

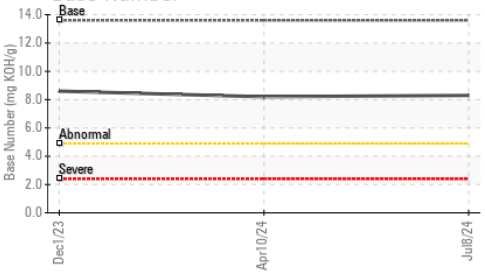
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0220186**	JR0206783	JR0192937
Sample Date		Client Info		**08 Jul 2024**	10 Apr 2024	01 Dec 2023
Machine Age	hrs	Client Info		**1516**	1051	558
Oil Age	hrs	Client Info		**465**	493	558
Filter Age	hrs	Client Info		**0**	0	558
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	**12**	15	23
Chromium	ppm	ASTM D5185m	>11	**0**	0	<1
Nickel	ppm	ASTM D5185m	>5	**0**	0	2
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	<1
Aluminum	ppm	ASTM D5185m	>31	**3**	5	6
Lead	ppm	ASTM D5185m	>26	**2**	5	11
Copper	ppm	ASTM D5185m	>26	**26**	▲ 96	▲ 443
Tin	ppm	ASTM D5185m	>4	**2**	4	10
Vanadium	ppm	ASTM D5185m		**0**	0	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	**5**	7	12
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	3
Fuel		WC Method	>2.1	**<1.0**	<1.0	0.4
Water		WC Method	>0.21	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.3**	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	**8.7**	8.5	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.1**	22.4	22.4
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	**5**	5	8
Boron	ppm	ASTM D5185m		**191**	216	184
Barium	ppm	ASTM D5185m		**<1**	<1	<1
Molybdenum	ppm	ASTM D5185m		**250**	235	223
Manganese	ppm	ASTM D5185m		**<1**	2	9
Magnesium	ppm	ASTM D5185m		**815**	788	817
Calcium	ppm	ASTM D5185m		**1465**	1441	1349
Phosphorus	ppm	ASTM D5185m		**917**	970	905
Zinc	ppm	ASTM D5185m		**1044**	1145	1146
Sulfur	ppm	ASTM D5185m		**3268**	3477	3017
Oxidation	Abs/.1mm	*ASTM D7414	>25	**16.1**	16.3	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	**8.3**	8.2	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	**12.8**	12.6	● 10.4

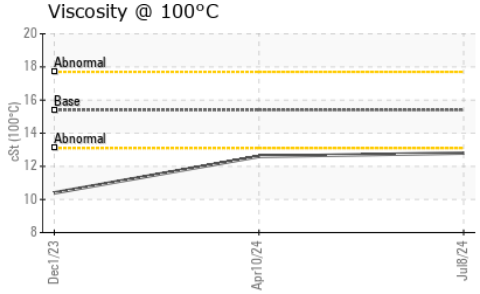
FT-IR (Direct Trend)



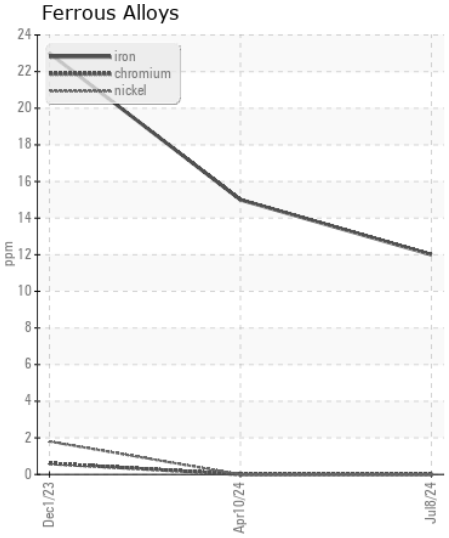
Base Number



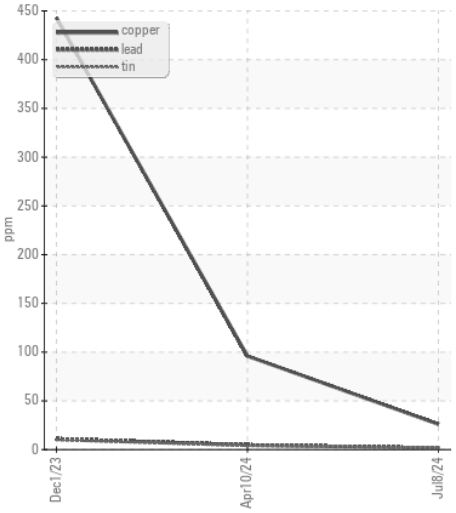
Viscosity @ 100°C



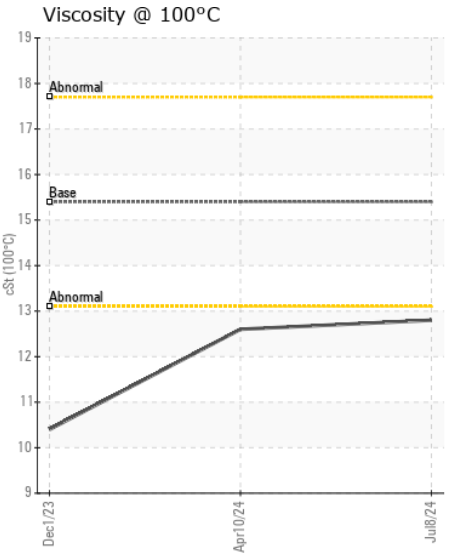
Ferrous Alloys



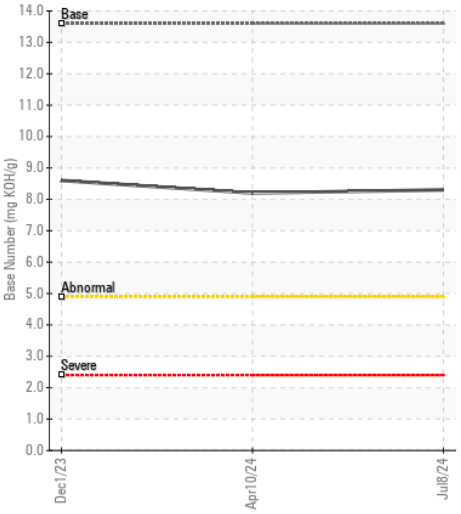
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0220186 **Received** : 15 Jul 2024
Lab Number : 06235669 **Tested** : 16 Jul 2024
Unique Number : 11124503 **Diagnosed** : 16 Jul 2024 - Don Baldridge
Test Package : CONST (Additional Tests: 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)

CK CONTRACTING
124-1 WOODING PL
KINGS MOUNTAIN, NC
US 28086
Contact: TAM WRIGHT
twright@ckcdllc.com
T: (704)730-9948
F: (704)730-9975