TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 2955 JD 2955
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (3 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The iron level is abnormal. All other component wear rates are normal.

CONTAMINATION

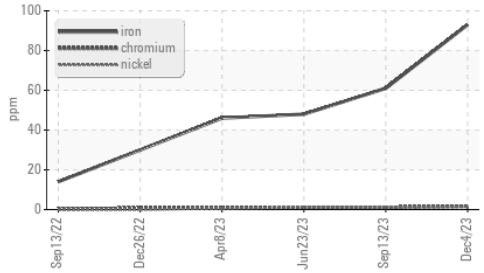
There is no indication of any contamination in the oil.

FLUID CONDITION

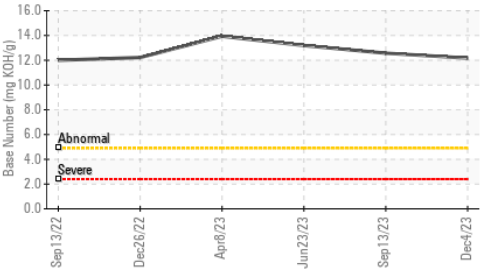
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06031826	TR05957165	TR05887549
Sample Date		Client Info		04 Dec 2023	13 Sep 2023	23 Jun 2023
Machine Age	hrs	Client Info		18000	17930	17800
Oil Age	hrs	Client Info		700	600	450
Filter Age	hrs	Client Info		700	600	450
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	▲ 93	61	48
Chromium	ppm	ASTM D5185m	>11	2	1	1
Nickel	ppm	ASTM D5185m	>5	1	1	1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	<1	4
Lead	ppm	ASTM D5185m	>26	1	2	<1
Copper	ppm	ASTM D5185m	>26	2	2	3
Tin	ppm	ASTM D5185m	>4	1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	10	8	7
Potassium	ppm	ASTM D5185m	>20	4	4	3
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	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	15.6	14.0	13.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	25.1	24.3
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
Sodium	ppm	ASTM D5185m	>31	2	3	3
Boron	ppm	ASTM D5185m		12	8	12
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		133	132	124
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		24	25	23
Calcium	ppm	ASTM D5185m		4381	4691	4569
Phosphorus	ppm	ASTM D5185m		982	981	968
Zinc	ppm	ASTM D5185m		1198	1204	1192
Sulfur	ppm	ASTM D5185m		4275	5031	5345
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	18.9	18.8
Base Number (BN)	mg KOH/g	ASTM D2896		12.17	12.57	13.19
Visc @ 100°C	cSt	ASTM D445		15.4	15.2	15.0

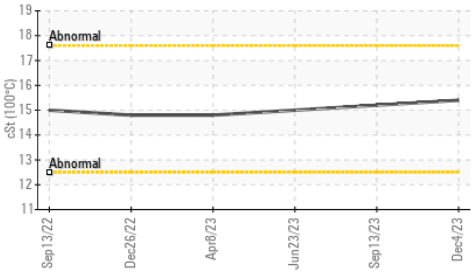
Ferrous Alloys



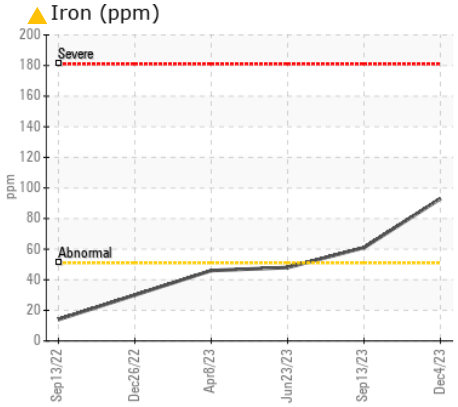
Base Number



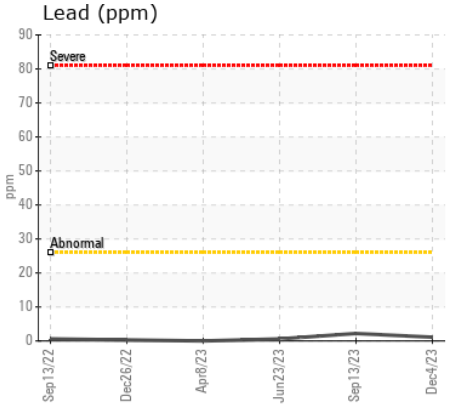
Viscosity @ 100°C



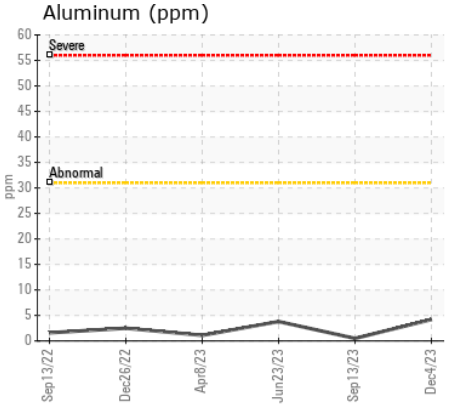
Iron (ppm)



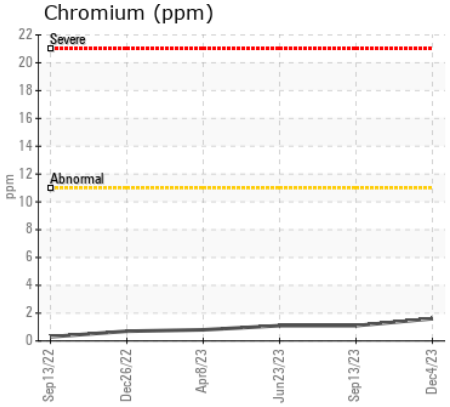
Lead (ppm)



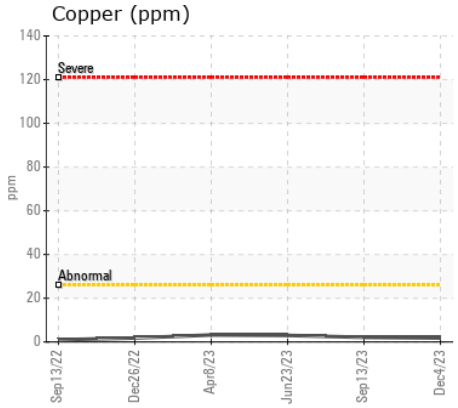
Aluminum (ppm)



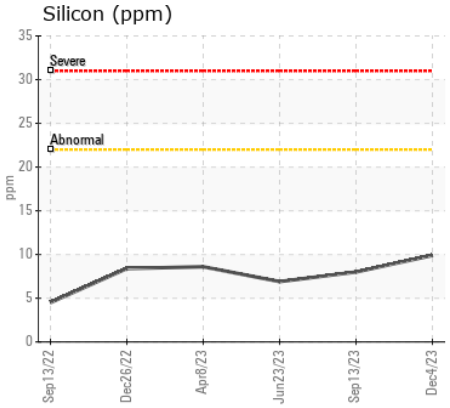
Chromium (ppm)



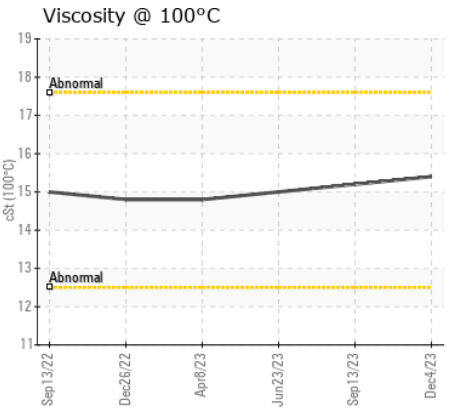
Copper (ppm)



Silicon (ppm)



Viscosity @ 100°C



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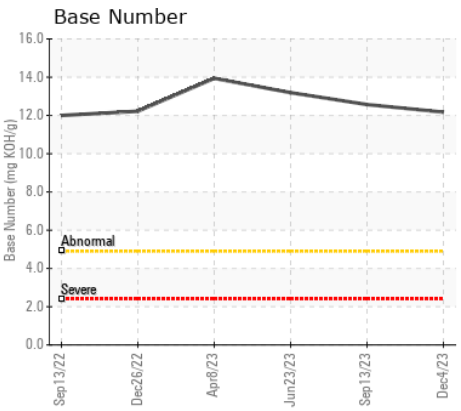

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06031826
Lab Number : 06031826
Unique Number : 10781617
Test Package : MOB 2

Received : 11 Dec 2023
Tested : 15 Dec 2023
Diagnosed : 15 Dec 2023 - Jonathan Hester

Certificate L2367

SPRAGUE RANCH
6907 ROUTE 14
BROOKFIELD, VT
US 05036
Contact: SCOTT BURRELL

To discuss this sample report, contact Customer Service at 1-800-827-0711.
** - 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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