



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**JOHN DEERE 9560R JOHNDEERE9560R**

Component  
**Front Diesel Engine**

Fluid  
**TRC PRO-SPEC IV XP SYN BLEND 15W40 (60 LTR)**

## RECOMMENDATION

We advise that you monitor for an abnormal oil pressure drop and noise. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02416219	---	---
Sample Date		Client Info		15 Apr 2021	---	---
Machine Age	hrs	Client Info		3609	---	---
Oil Age	hrs	Client Info		995	---	---
Filter Age	hrs	Client Info		995	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---

## WEAR

Lead ppm levels are severe. Tin and iron ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated. Bearing wear is indicated. Slide bearing wear is indicated.

PQ		ASTM D8184*	>50	0	---	---
Iron	ppm	ASTM D5185(m)	>51	▲ 69	---	---
Chromium	ppm	ASTM D5185(m)	>11	2	---	---
Nickel	ppm	ASTM D5185(m)	>5	1	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>31	6	---	---
Lead	ppm	ASTM D5185(m)	>26	▲ 150	---	---
Copper	ppm	ASTM D5185(m)	>26	110	---	---
Tin	ppm	ASTM D5185(m)	>4	▲ 6	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

## CONTAMINATION

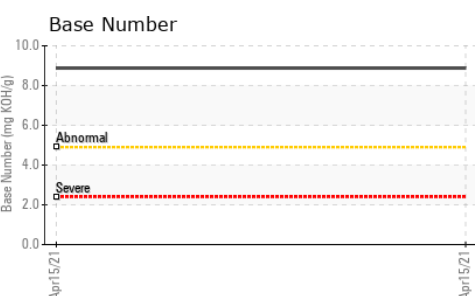
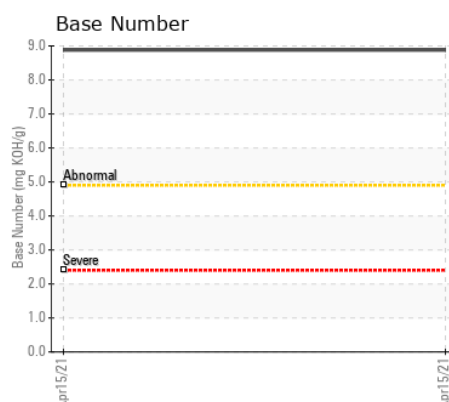
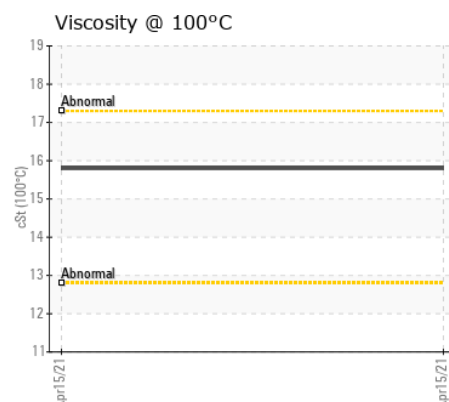
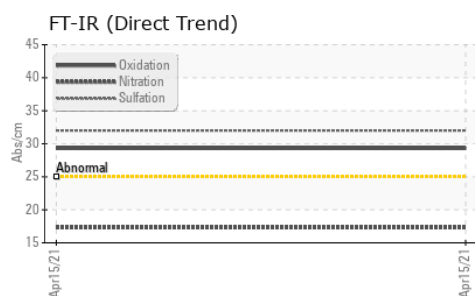
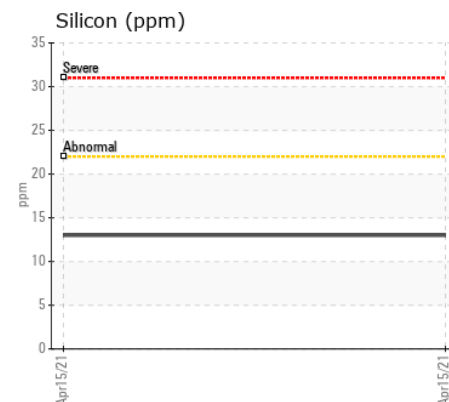
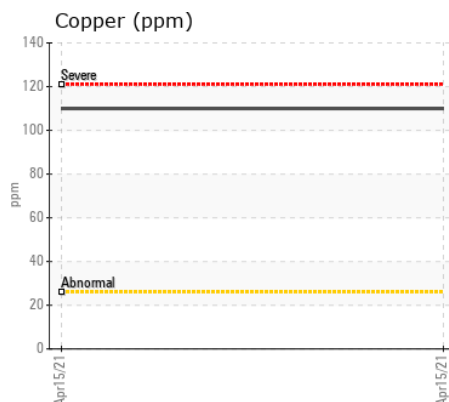
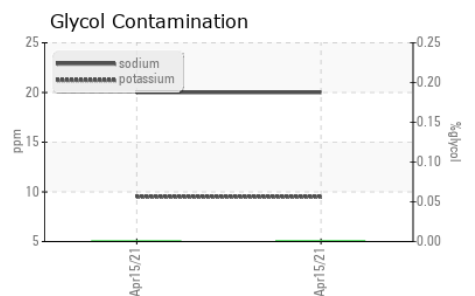
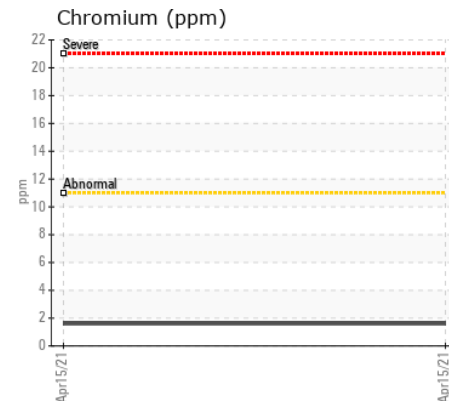
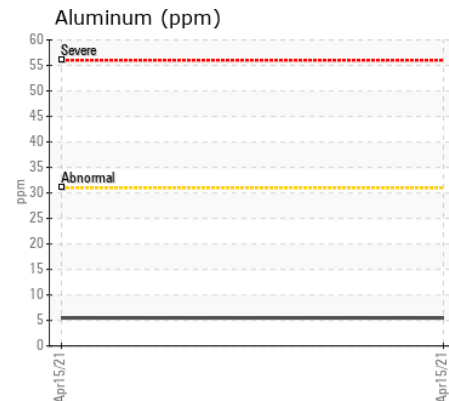
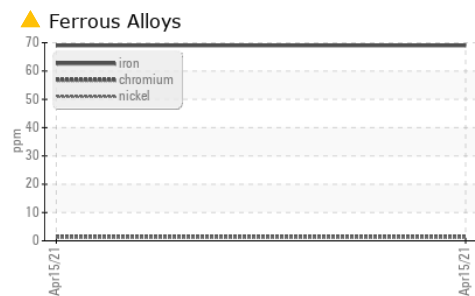
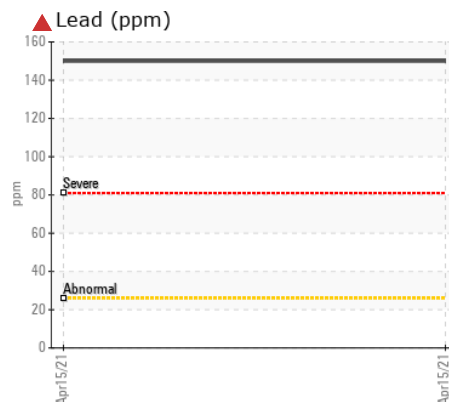
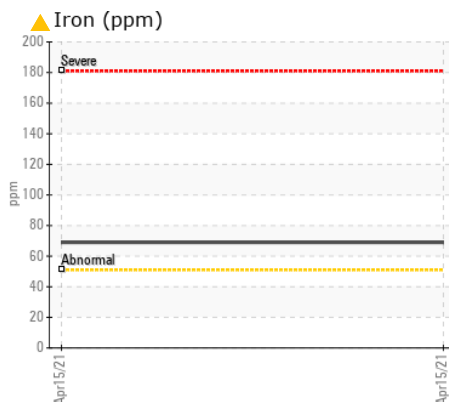
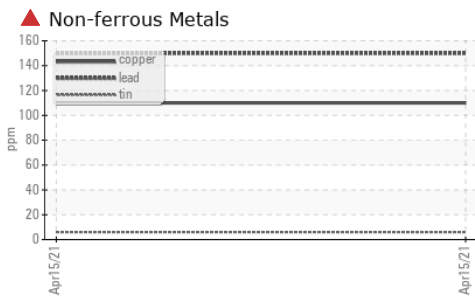
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>22	13	---	---
Potassium	ppm	ASTM D5185(m)	>20	10	---	---
Fuel		WC Method	>2.1	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol	%	ASTM D7922*		0.0	---	---
Soot %	%	ASTM D7844*	>3	0.8	---	---
Nitration	Abs/cm	ASTM D7624*	>20	17.3	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	32.0	---	---
Emulsified Water	scalar	Visual*	>0.21	NEG	---	---

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)	>31	20	---	---
Boron	ppm	ASTM D5185(m)		2	---	---
Barium	ppm	ASTM D5185(m)		<1	---	---
Molybdenum	ppm	ASTM D5185(m)		30	---	---
Manganese	ppm	ASTM D5185(m)		1	---	---
Magnesium	ppm	ASTM D5185(m)		641	---	---
Calcium	ppm	ASTM D5185(m)		2758	---	---
Phosphorus	ppm	ASTM D5185(m)		1074	---	---
Zinc	ppm	ASTM D5185(m)		1377	---	---
Sulfur	ppm	ASTM D5185(m)		3131	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	29.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		8.88	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		15.8	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : TR02416219  
**Lab Number** : **02416219**  
**Unique Number** : 5211704  
**Test Package** : MOB 2 ( Additional Tests: Glycol, PQ )  
**Received** : 21 Apr 2021  
**Tested** : 21 Apr 2021  
**Diagnosed** : 21 Apr 2021 - Kevin Marson

**ROSETOWN FARMING**  
 BOX 1509  
 ROSETOWN, SK  
 CA S0L 2V0  
 Contact: Aaron Wipf

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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