



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE W004X2X007769

Component
Gasoline Engine

Fluid
{not provided} (750 mL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

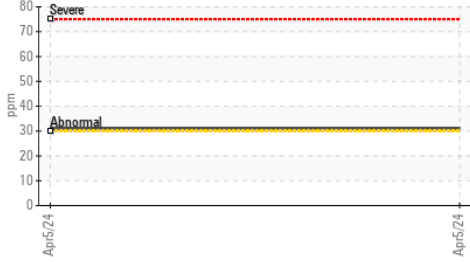
There is a moderate concentration of dirt present in the oil.

FLUID CONDITION

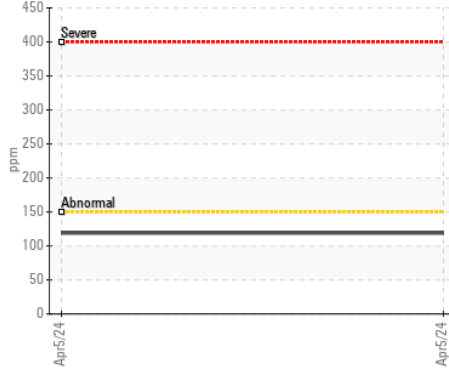
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02629206	---	---
Sample Date		Client Info		05 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185(m)	>150	119	---	---
Chromium	ppm	ASTM D5185(m)	>20	5	---	---
Nickel	ppm	ASTM D5185(m)	>5	<1	---	---
Titanium	ppm	ASTM D5185(m)		<1	---	---
Silver	ppm	ASTM D5185(m)	>2	0	---	---
Aluminum	ppm	ASTM D5185(m)	>40	13	---	---
Lead	ppm	ASTM D5185(m)	>50	<1	---	---
Copper	ppm	ASTM D5185(m)	>155	10	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Silicon	ppm	ASTM D5185(m)	>30	▲ 31	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Fuel		WC Method	>4.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	6.8	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	16.9	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Sodium	ppm	ASTM D5185(m)	>400	9	---	---
Boron	ppm	ASTM D5185(m)		188	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		74	---	---
Manganese	ppm	ASTM D5185(m)		1	---	---
Magnesium	ppm	ASTM D5185(m)		551	---	---
Calcium	ppm	ASTM D5185(m)		2112	---	---
Phosphorus	ppm	ASTM D5185(m)		798	---	---
Zinc	ppm	ASTM D5185(m)		923	---	---
Sulfur	ppm	ASTM D5185(m)		2708	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	10.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		11.41	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		9.9	---	---

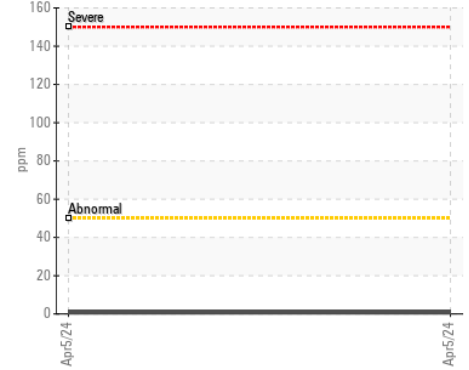
▲ Silicon (ppm)



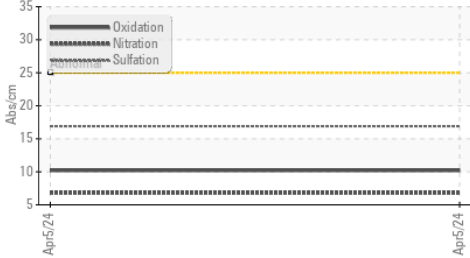
Iron (ppm)



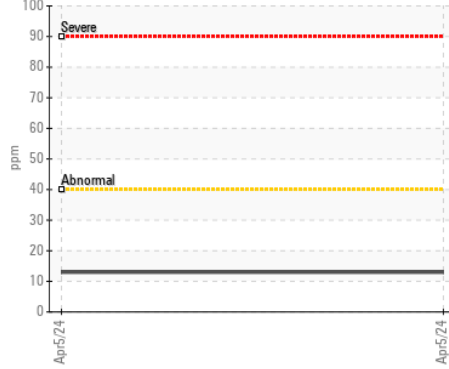
Lead (ppm)



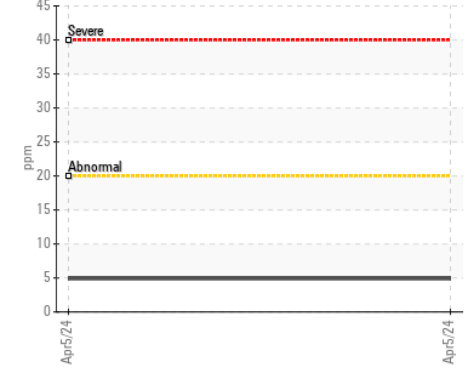
FT-IR (Direct Trend)



Aluminum (ppm)



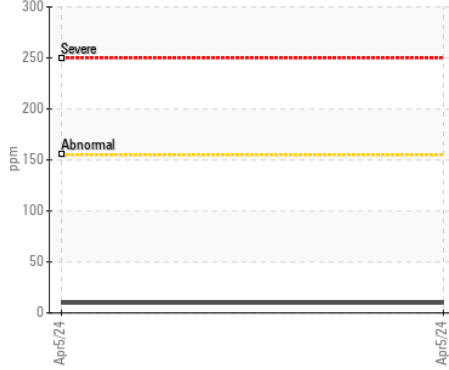
Chromium (ppm)



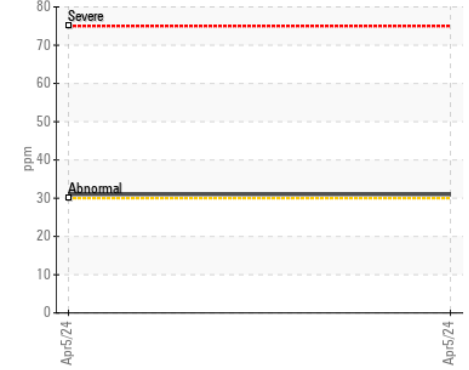
Base Number



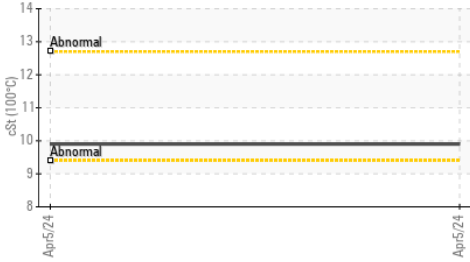
Copper (ppm)



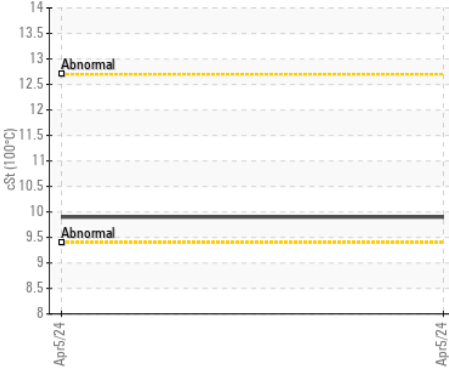
▲ Silicon (ppm)



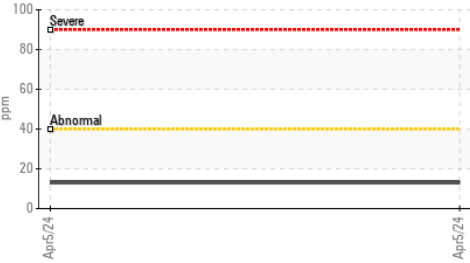
Viscosity @ 100°C



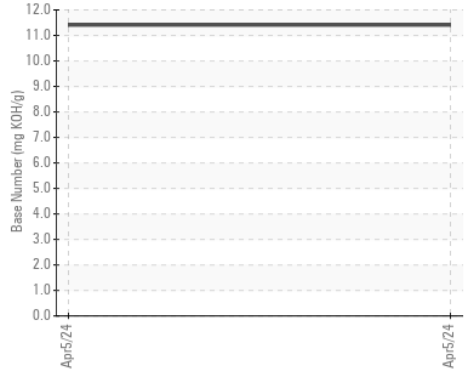
Viscosity @ 100°C



Aluminum (ppm)



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02629206 **Received** : 16 Apr 2024
Lab Number : 02629206 **Tested** : 18 Apr 2024
Unique Number : 5762338 **Diagnosed** : 18 Apr 2024 - Kevin Marson
Test Package : MOB 2

VALLEY VIEW COLONY
 BOX 99
 TORRINGTON, AB
 CA T0M 2B0
 Contact: David Stahl
 vvmech@airenet.com
 T: (403)631-3875
 F: (403)631-3875

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)