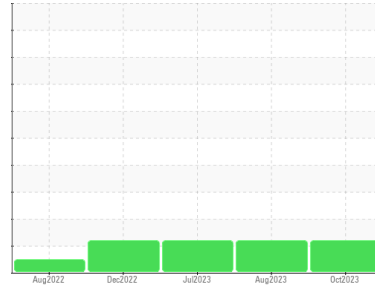


Machine Id
JOHN DEERE 9460R 1RW9460RECP002291
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (--- QTS)



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0081018	PCA0081017	PCA0081019
Sample Date	Client Info	09 Oct 2023	30 Aug 2023	28 Jul 2023
Machine Age	hrs	13932	13676	13423
Oil Age	hrs	256	253	258
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	10	11	17
Chromium	ppm ASTM D5185m >20	0	<1	<1
Nickel	ppm ASTM D5185m >4	0	0	0
Titanium	ppm ASTM D5185m	0	<1	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >20	1	<1	2
Lead	ppm ASTM D5185m >40	1	2	2
Copper	ppm ASTM D5185m >330	4	7	14
Tin	ppm ASTM D5185m >15	<1	<1	1
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	2	0	4
Barium	ppm ASTM D5185m	<1	0	0
Molybdenum	ppm ASTM D5185m	56	54	65
Manganese	ppm ASTM D5185m	<1	<1	<1
Magnesium	ppm ASTM D5185m	912	919	1029
Calcium	ppm ASTM D5185m	968	1022	1143
Phosphorus	ppm ASTM D5185m	1011	961	1124
Zinc	ppm ASTM D5185m	1194	1178	1358
Sulfur	ppm ASTM D5185m	2904	3476	3964

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	4	3	7
Sodium	ppm ASTM D5185m	2	2	3
Potassium	ppm ASTM D5185m >20	0	<1	<1
Fuel	% ASTM D3524 >5	▲ 4.2	▲ 5.0	▲ 3.7

INFRA-RED

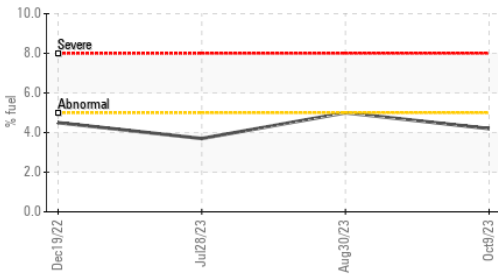
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.6	0.6	0.5
Nitration	Abs/cm *ASTM D7624 >20	7.1	6.9	6.9
Sulfation	Abs/.1mm *ASTM D7415 >30	19.4	19.6	19.3

FLUID DEGRADATION

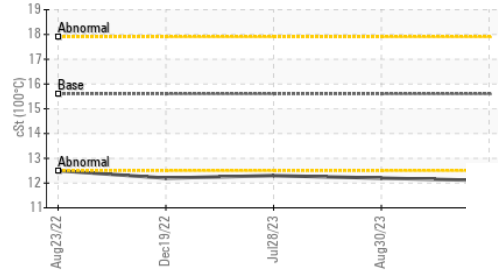
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	15.7	15.5	15.6
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.06	10.59	10.62

OIL ANALYSIS REPORT

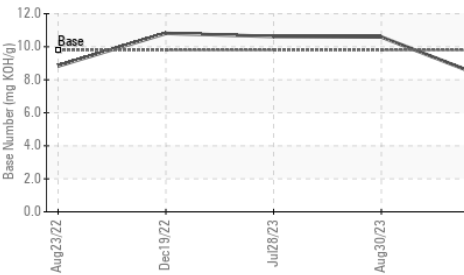
▲ Fuel Dilution



▲ Viscosity @ 100°C



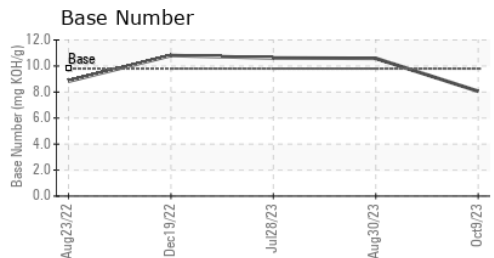
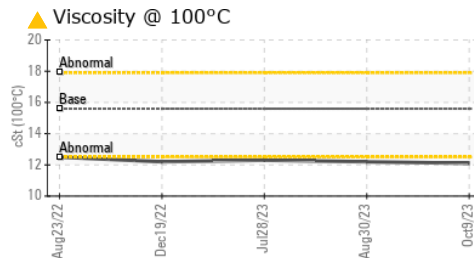
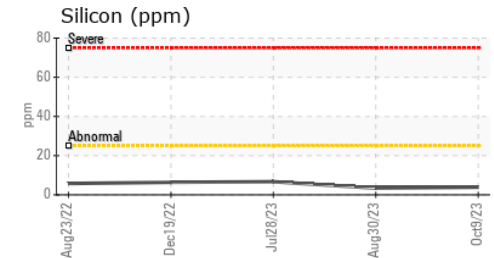
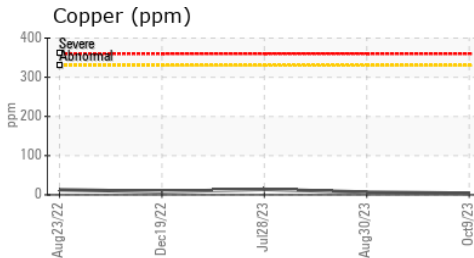
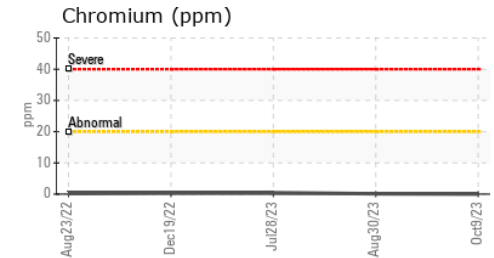
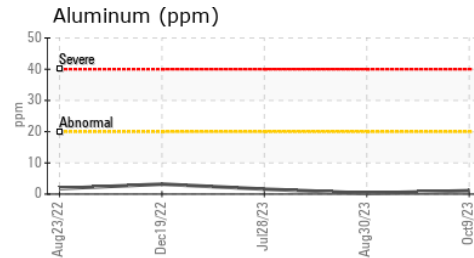
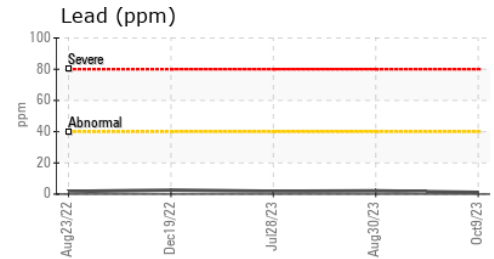
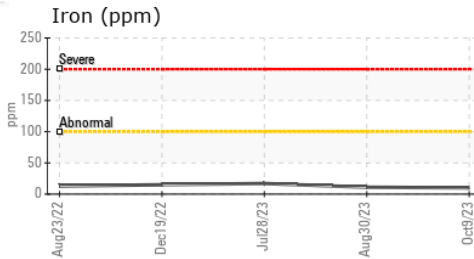
Base Number



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6 ▲ 12.1	▲ 12.2	▲ 12.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0081018 **Received** : 18 Oct 2023
Lab Number : 05982544 **Diagnosed** : 19 Oct 2023
Unique Number : 10699839 **Diagnostician** : Sean Felton
Test Package : MOB 2 (Additional Tests: PercentFuel)

VEENSTRA FARMING
 15861 SEXTON RD
 ESCALON, CA
 US 95320

Contact: DEREK VEENSTRA
 KEREKVEENSTRA@AOL.COM

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)

T:
F: