



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Area
[HARREN FARMS]
 Machine Id
JOHN DEERE 755K 1T0755KXKEE256736
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0140286	JR0149671	JR0095382
Sample Date		Client Info		10 May 2023	25 Oct 2022	11 Aug 2021
Machine Age	hrs	Client Info		7051	7033	5480
Oil Age	hrs	Client Info		20	1553	0
Filter Age	hrs	Client Info		20	0	0
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				ABNORMAL	SEVERE	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	25	▲ 108	24
Chromium	ppm	ASTM D5185m	>11	<1	● 5	<1
Nickel	ppm	ASTM D5185m	>5	4	▲ 15	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	1
Aluminum	ppm	ASTM D5185m	>31	4	● 7	2
Lead	ppm	ASTM D5185m	>26	1	▲ 12	<1
Copper	ppm	ASTM D5185m	>26	11	▲ 88	6
Tin	ppm	ASTM D5185m	>4	1	▲ 9	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

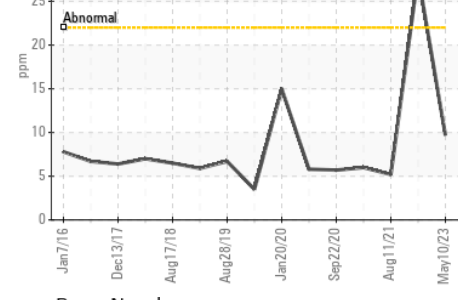
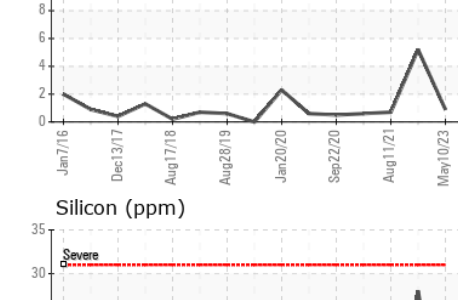
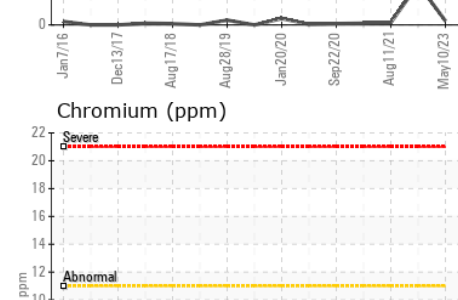
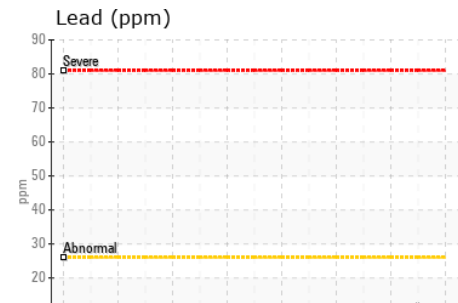
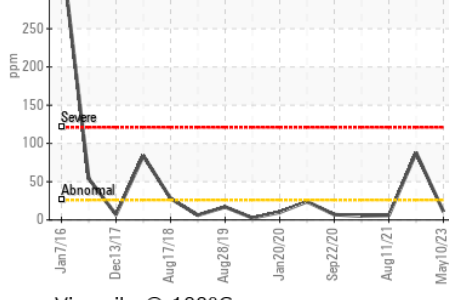
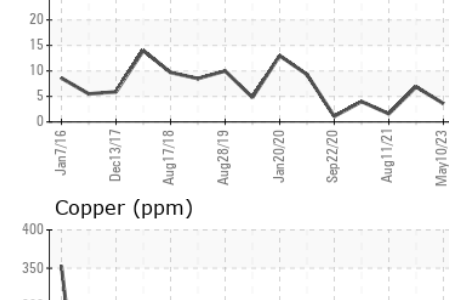
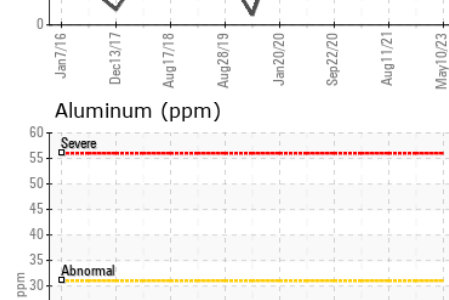
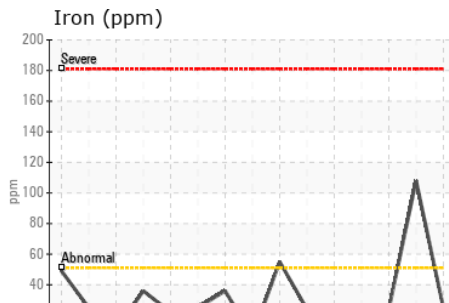
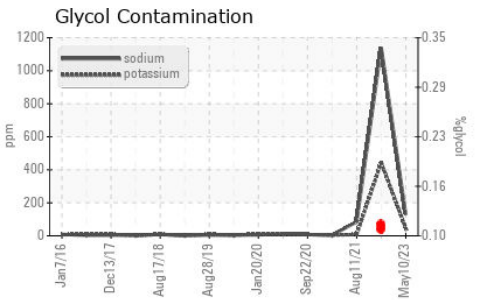
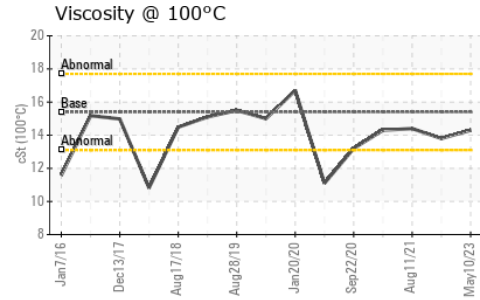
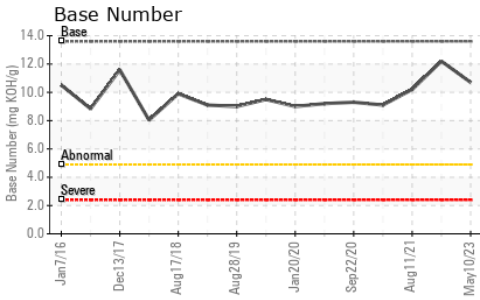
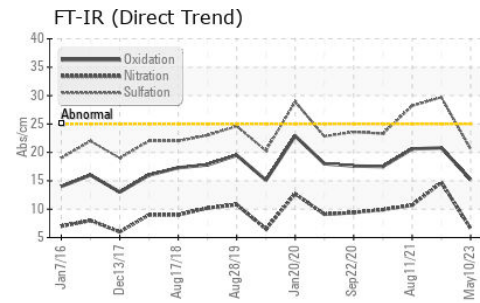
Sodium and/or potassium levels remain high.

Silicon	ppm	ASTM D5185m	>22	10	▲ 28	5
Potassium	ppm	ASTM D5185m	>20	▲ 46	▲ 444	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	▲ 0.12	NEG
Soot %	%	*ASTM D7844	>3	0.2	1.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.6	14.7	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.6	29.7	28.2
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

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m	>31	▲ 129	● 1139	● 85
Boron	ppm	ASTM D5185m		299	131	218
Barium	ppm	ASTM D5185m		3	0	<1
Molybdenum	ppm	ASTM D5185m		284	279	278
Manganese	ppm	ASTM D5185m		<1	2	<1
Magnesium	ppm	ASTM D5185m		860	648	851
Calcium	ppm	ASTM D5185m		1509	1372	1525
Phosphorus	ppm	ASTM D5185m		995	782	880
Zinc	ppm	ASTM D5185m		1151	1124	1074
Sulfur	ppm	ASTM D5185m		3242	3273	2463
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	20.8	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	10.7	12.2	10.2
Visc @ 100°C	cSt	ASTM D445	15.4	14.3	13.8	14.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0140286 **Received** : 15 May 2023
Lab Number : 05846929 **Tested** : 17 May 2023
Unique Number : 10471036 **Diagnosed** : 17 May 2023 - Jonathan Hester
Test Package : MOBCE (Additional Tests: TBN)

JRE - EDINBURG
 601 NORTH MAIN ST
 WOODSTOCK, VA
 US 22664
 Contact: MIKE SECHLER
 MSECHLER@JAMESRIVEREQUIPMENT.COM
 T:
 F:

Certificate L2367
 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)