WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ATTENTION

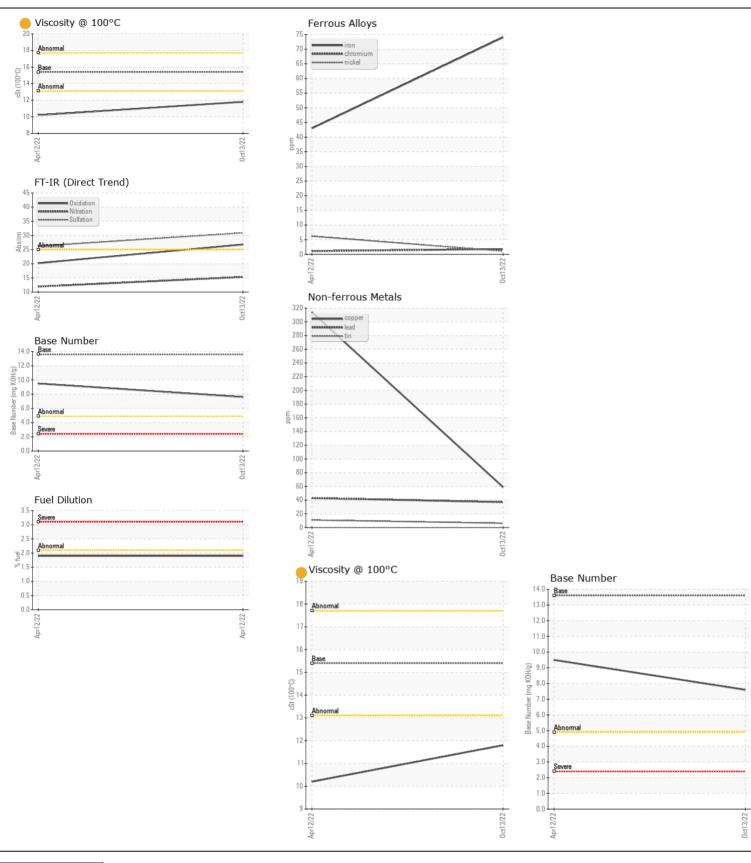
BEALETON [05W36256]

JOHN DEERE 944K M02-0913 1DW944KXKML703638

Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (46 GAL)

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
	Sample Number	2 0.01	Client Info		JR0146448	JR0123219	
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		13 Oct 2022	12 Apr 2022	
	Machine Age	hrs	Client Info		1626	500	
	Oil Age	hrs	Client Info		1126	500	
	Filter Age	hrs	Client Info		1126	500	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ATTENTION	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m	>51	74	43	
	Chromium	ppm	ASTM D5185m	>11	2	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		1	6	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>31	11	5	
	Lead	ppm	ASTM D5185m		37	43	
	Copper	ppm	ASTM D5185m		59	<u>→</u> 314	
	Tin	ppm	ASTM D5185m		6	11	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
			v isuai	NONE			
ONTAMINATION	Silicon	ppm	ASTM D5185m	>22	7	10	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	29	5	
	Fuel	%	ASTM D3524	>2.1	<1.0	1.9	
	Water		WC Method	>0.21	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	1.4	0.7	
	Nitration	Abs/cm	*ASTM D7624	>20	15.3	11.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	30.9	26.2	
	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	>0.21	NEG	NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m	>31	5	7	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		15	57	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		151	219	
	Manganese	ppm	ASTM D5185m		4	7	
	Magnesium	ppm	ASTM D5185m		798	823	
	Calcium	ppm	ASTM D5185m		1502	1485	
	Phosphorus	ppm	ASTM D5185m		898	949	
	Zinc	ppm	ASTM D5185m		1147	1159	
	Sulfur	ppm	ASTM D5185m		3253	2293	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	26.8	20.2	
	Base Number (BN)				7.6	9.5	
		my Romy	, TO LIVI DE000	10.0		0.0	







Laboratory Sample No. Unique Number : 10176985

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0146448 Lab Number : 05667415

Received **Tested** Diagnosed

: 14 Oct 2022 : 17 Oct 2022

: 17 Oct 2022 - Jonathan Hester

US 22514 Contact: BRYAN MORRIS bmorris@luckstone.com T: (804)400-3630

LUCK STONE - MILFORD

19380 RICHMOND TURNPIKE

Test Package : CONST (Additional Tests: FuelDilution, TBN) 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)

F: x:

MILFORD, VA