

JOHN DEERE 52 (S/N X044682)

Diesel Engine

MOBIL 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. We recommend an early resample to monitor this condition.	Sample Number		Client Info		JR0167012		
	Sample Date		Client Info		01 Jul 2024		
	Machine Age	hrs	Client Info		7906		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed	1113	Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
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WEAR Cylinder, crank, or cam shaft wear is indicated.	Iron	ppm	ASTM D5185m	>51	A 205		
	Chromium	ppm	ASTM D5185m	>11	3		
	Nickel	ppm	ASTM D5185m	>5	2		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>31	5		
	Lead	ppm	ASTM D5185m		18		
	Copper	ppm	ASTM D5185m	>26	6		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	12		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1		
	Fuel		WC Method	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	1.5		
	Nitration	Abs/cm	*ASTM D7624	>20	10.8		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.21	NEG		
	C a alliu una			110	0		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	3		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m		56		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		86		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		918		
	Calcium	ppm	ASTM D5185m		1513		
	Phosphorus	ppm	ASTM D5185m		1101		
	Zinc	ppm	ASTM D5185m		1332		
	Sulfur	ppm	ASTM D5185m	05	3875		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3		

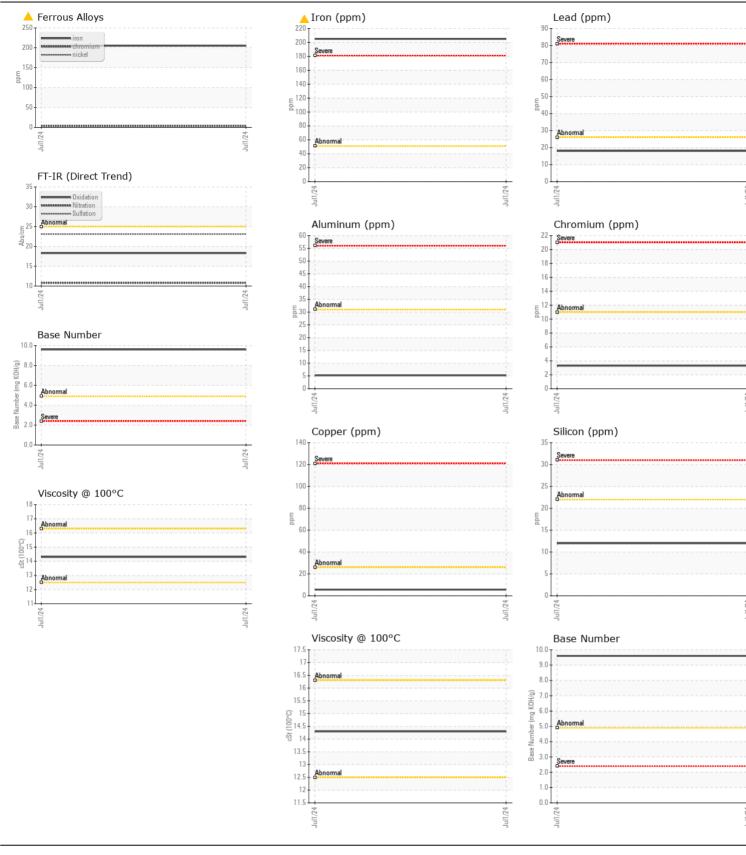
Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

9.6

14.3



HALEY CHISHOLM AND MORRIS INC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : JR0167012 Received 3316 EARLYSVILLE RD : 11 Jul 2024 Lab Number : 06234246 Tested EARLYSVILLE, VA : 12 Jul 2024 Unique Number : 11123080 Diagnosed : 14 Jul 2024 - Don Baldridge US 22936 Test Package : MOBCE (Additional Tests: TBN) Contact: H SAWYER Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. HSAWYERHCM@GMAIL.COM * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (434)996-2189 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)