

## Machine Id JOHN DEERE 6120E 1P06120EKP5251753 Component Diesel Engine Fluid JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL) RECOMMENDATION

RECOMMENDATION	Teet		Mathad	Limit/Alan	Cumant	Llisterut	L listom ()
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0213955		
	Sample Date		Client Info		20 Jun 2024		
	Machine Age	hrs	Client Info		687		
	Oil Age	hrs	Client Info		687		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR The copper level is abnormal. All other metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m		22		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>5	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>31	8		
	Lead	ppm	ASTM D5185m	>26	8		
	Copper	ppm	ASTM D5185m	>26	🔺 131		
	Tin	ppm	ASTM D5185m	>4	2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>22	8		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	1		
	Fuel	%	ASTM D3524	>2.1	0.1		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	8.9		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>31	4		
	Boron	ppm	ASTM D5185m		140		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		6		
	Molybdenum	ppm	ASTM D5185m		253		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m		830		
	Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m		836 1543		
	Calcium	ppm	ASTM D5185m		1543		
	Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m		1543 849		
	Calcium	ppm	ASTM D5185m		1543		

Oxidation

Visc @ 100°C cSt

18.9

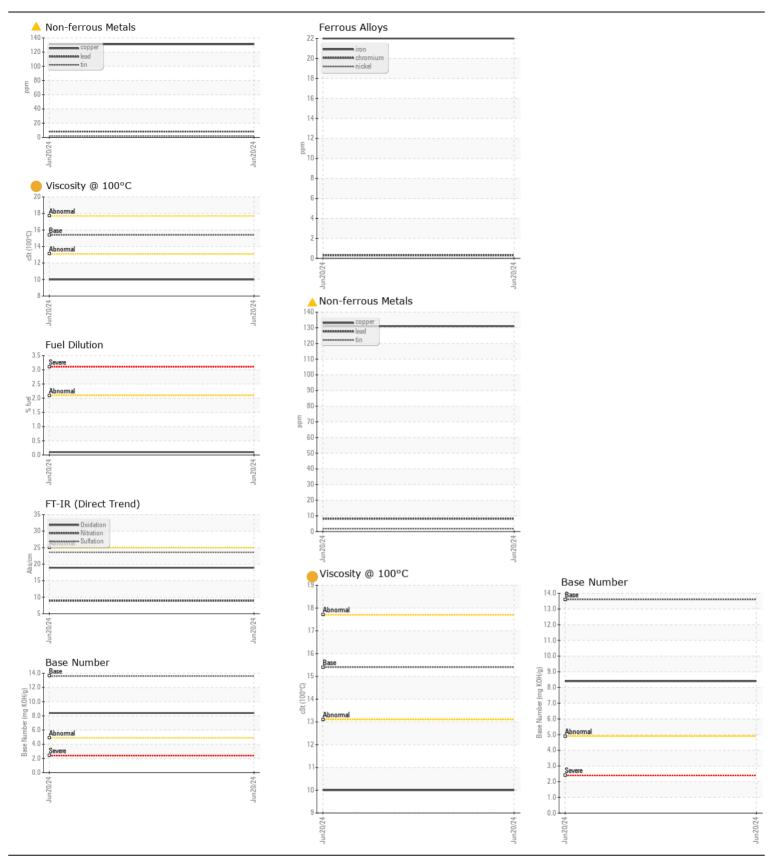
8.4

10.0

Abs/.1mm \*ASTM D7414 >25

ASTM D445 15.4

Base Number (BN) mg KOH/g ASTM D2896 13.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - GREENVILLE** Sample No. : JR0213955 Received 3604 HIGHWAY 264 E : 24 Jun 2024 Lab Number : 06218008 Tested GREENVILLE, NC : 27 Jun 2024 : 27 Jun 2024 - Jonathan Hester US 27834-5800 Unique Number : 11096205 Diagnosed Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN) Contact: GREENVILLE SHOP Certificate L2367 christopher.martin@jamesriverequipment.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. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)