

Machine Id

Navistar 8424012 Component Diesel Engine

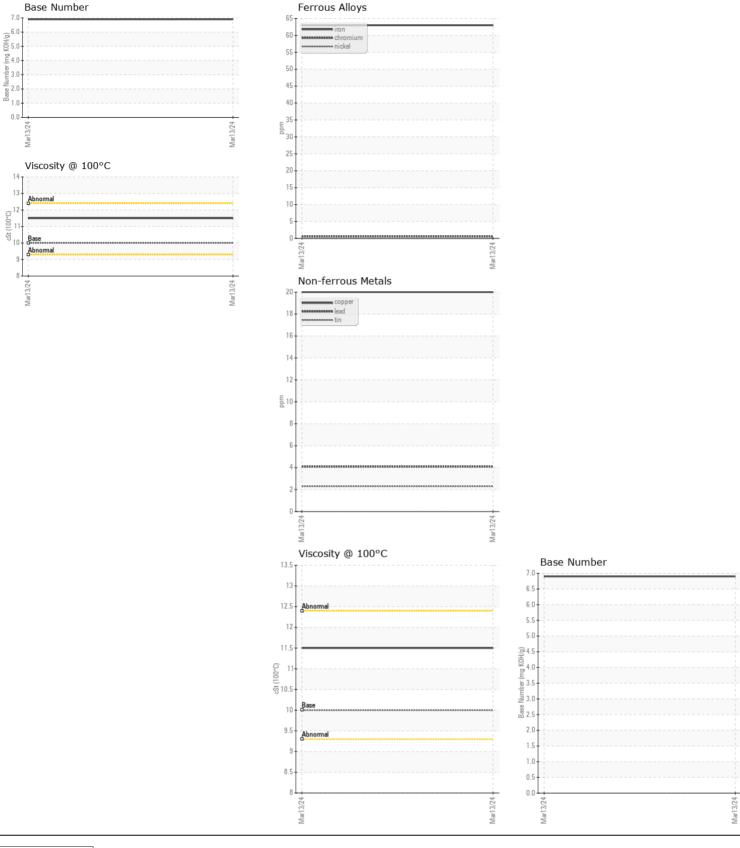
MOBIL 1 SAE 10W30 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		IL0030998		
	Sample Date		Client Info		13 Mar 2024		
	Machine Age	mls	Client Info		25369		
	Oil Age	mls	Client Info		25369		
	Filter Age	mls	Client Info		25369		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	63		
Metal levels are typical for a components first oil change.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	26		
	Lead	ppm	ASTM D5185m	>40	4		
	Copper	ppm	ASTM D5185m	>330	20		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	38		
	Potassium	ppm	ASTM D5185m		65		
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Fuel	le le	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.4		
	Nitration	Abs/cm	*ASTM D7624		8.4		
	Sulfation	Abs/.1mm	*ASTM D7415		20.9		
	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		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4		
	Boron	ppm	ASTM D5185m		53		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		4		
	Molybdenum	ppm	ASTM D5185m		62		
	Manganese	ppm	ASTM D5185m		5		
	Magnesium	ppm	ASTM D5185m		479		
	Calcium	ppm	ASTM D5185m		1910		
	Phosphorus	ppm	ASTM D5185m		1054		
	Zinc	ppm	ASTM D5185m		1321		
	Sulfur	ppm	ASTM D5185m		3736		
	Oxidation	Abs/.1mm	*ASTM D310311	>25	17.4		
	Base Number (BN)		ASTM D2896	- 20	6.9		
		ng tong	10TH D2030	10	0.0		

Visc @ 100°C cSt

ASTM D445 10

11.5





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: DAVID JOHNS - IDEATLGA