WEAR CONTAMINATION FLUID CONDITION

NORMAL

MARGINAL

ABNORMAL

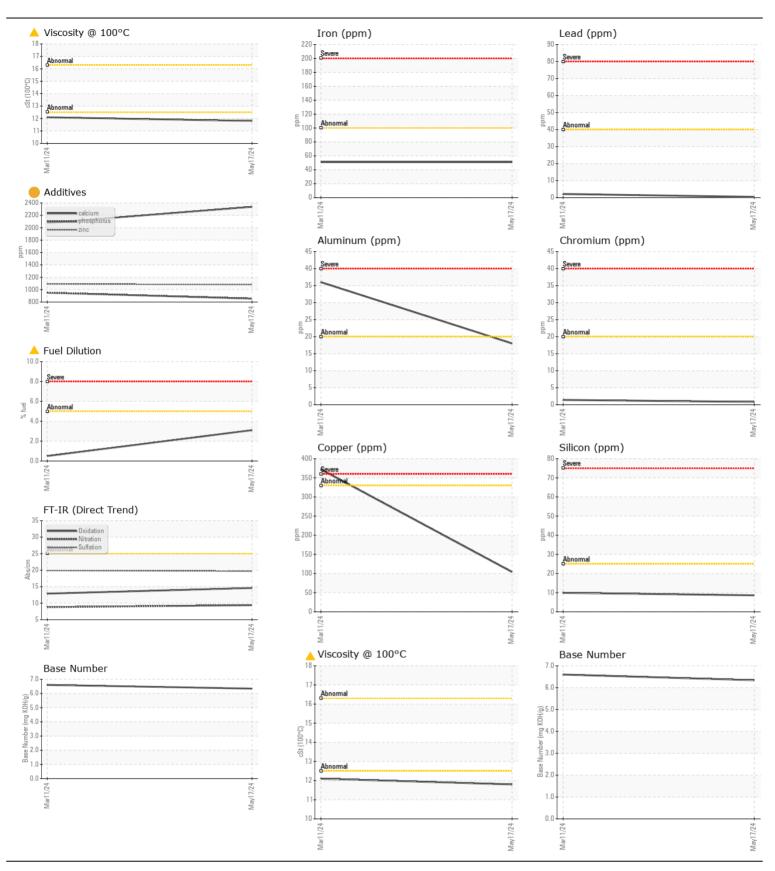
Machine Id

## **METSO 2.11 SCREEN**

Component

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		LP0001915	LP0001191	
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		17 May 2024	11 Mar 2024	
	Machine Age	hrs	Client Info		2885	2638	
	Oil Age	hrs	Client Info		247	250	
	Filter Age	hrs	Client Info		247	250	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ABNORMAL	
VEAR	Iron	ppm	ASTM D5185m	<b>&gt;100</b>	51	51	
WEAIT	Chromium	ppm	ASTM D5185m		<1	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m	7	<1	<1	
	Silver	ppm	ASTM D5185m	<b>\3</b>	0	<1	
	Aluminum	ppm	ASTM D5185m		18	<u> </u>	
	Lead	ppm	ASTM D5185m		<1	2	
	Copper	ppm	ASTM D5185m		104	<u>△</u> 372	
	Tin	ppm	ASTM D5185m		0	2	
	Vanadium	ppm	ASTM D5185m		<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		9	10	
Light fuel dilution occurring.	Potassium	ppm	ASTM D5185m		2	5	
	Fuel	%	ASTM D3524	>5	▲ 3.1	0.5	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	21	WC Method	•	NEG	NEG	
	Soot %	%	*ASTM D7844		0.9	0.6	
	Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.8	
	Sulfation	Abs/.1mm	*ASTM D7415		19.7	19.9	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar scalar	*Visual *Visual	NORML >0.2	NORML NEG	NORML NEG	
		Scalai	VISUAI	>0.2		NEG	
LUID CONDITION	Sodium	ppm	ASTM D5185m		5	8	
The DN yearst indicates that there is exitable all all all all all and a second at the second and a	Boron	ppm	ASTM D5185m		5	6	
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m		10	17	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		<u> </u>	167	
	Calcium	ppm	ASTM D5185m		<b>2338</b>	2076	
	Phosphorus	ppm	ASTM D5185m		855	951	
	Zinc	ppm	ASTM D5185m		1082	1091	
	Sulfur	ppm	ASTM D5185m		3620	3835	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	12.9	
	Base Number (BN)				6.34	6.60	





Laboratory Sample No.

: LP0001915 Lab Number : 06210898 Unique Number : 11083762

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed Test Package : MOB 2 ( Additional Tests: FuelDilution, PercentFuel )

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

: 19 Jun 2024 - Wes Davis

: 14 Jun 2024

: 19 Jun 2024

\* - 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)

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