**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ABNORMAL ABNORMAL** 

Machine Id Component

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We recommend that you change the oil at the next available stoppage or outage. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.	Sample Number	JOIVI	Client Info	LIHIVAUII	MW05981750	MW05862889	MW0582378
	Sample Date		Client Info		16 Oct 2023	01 Jun 2023	18 Apr 202
	Machine Age	hrs	Client Info		22405	21976	21210
	Oil Age	hrs	Client Info		429	866	606
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ABNORMAL	ABNORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	<b>&gt;</b> 75	5	8	8
WEAT	Chromium	ppm	ASTM D5185m		<1	0	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		2	0	0
	Lead	ppm	ASTM D5185m		9	<u> </u>	15
	Copper	ppm	ASTM D5185m	>80	2	2	3
	Tin	ppm	ASTM D5185m	>14	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	5	6	5
OONTAMINATION	Potassium	ppm	ASTM D5185m		2	<1	1
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Fuel	%	ASTM D3524	>4.0	<u>^</u> 6.2	▲ 5.0	<u>^</u> 5.4
	Water	,,,	WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.1	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	6.5	8.5	7.6
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	25.5	24.2
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>75	0	<1	<1
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 oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m		400	269	300
	Barium	ppm	ASTM D5185m		10	0	0
	Molybdenum	ppm	ASTM D5185m		90	93	96
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm	ASTM D5185m		400	500	483
		ppm	ASTM D5185m		1399	1673	1472
	Calcium					= 4.0	740
	Phosphorus	ppm	ASTM D5185m	760	831	719	718
	Phosphorus Zinc		ASTM D5185m	830	982	887	865
	Phosphorus Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m	830 2770	982 2960	887 3012	865 2302
	Phosphorus Zinc Sulfur Oxidation	ppm ppm ppm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7414	830 2770 >25	982 2960 18.8	887 3012 23.8	865 2302 22.1
	Phosphorus Zinc Sulfur	ppm ppm ppm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7414	830 2770 >25	982 2960	887 3012	865 2302

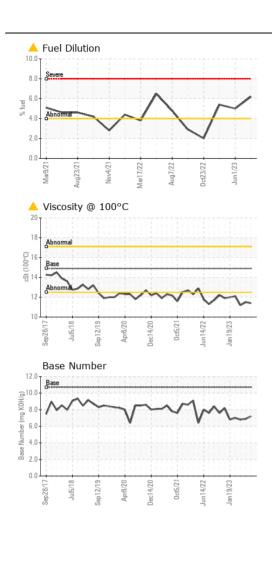
Visc @ 100°C cSt

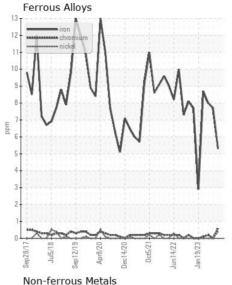
ASTM D445 14.9

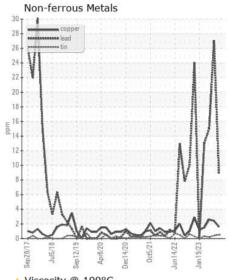
<u>11.5</u>

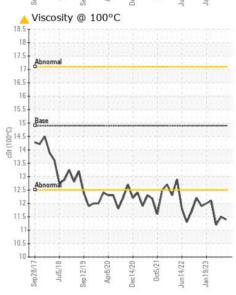
**11.4** 

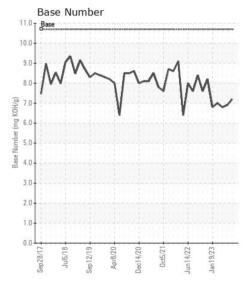
<u>▲</u> 11.2













Certificate L2367

Laboratory Sample No.

Lab Number : 05981750 Unique Number : 10699045

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : MW05981750 : 17 Oct 2023 Received **Tested** 

: 18 Oct 2023 : 18 Oct 2023 - Wes Davis Diagnosed

Test Package : MAR 2 ( Additional Tests: PercentFuel ) 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)

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