

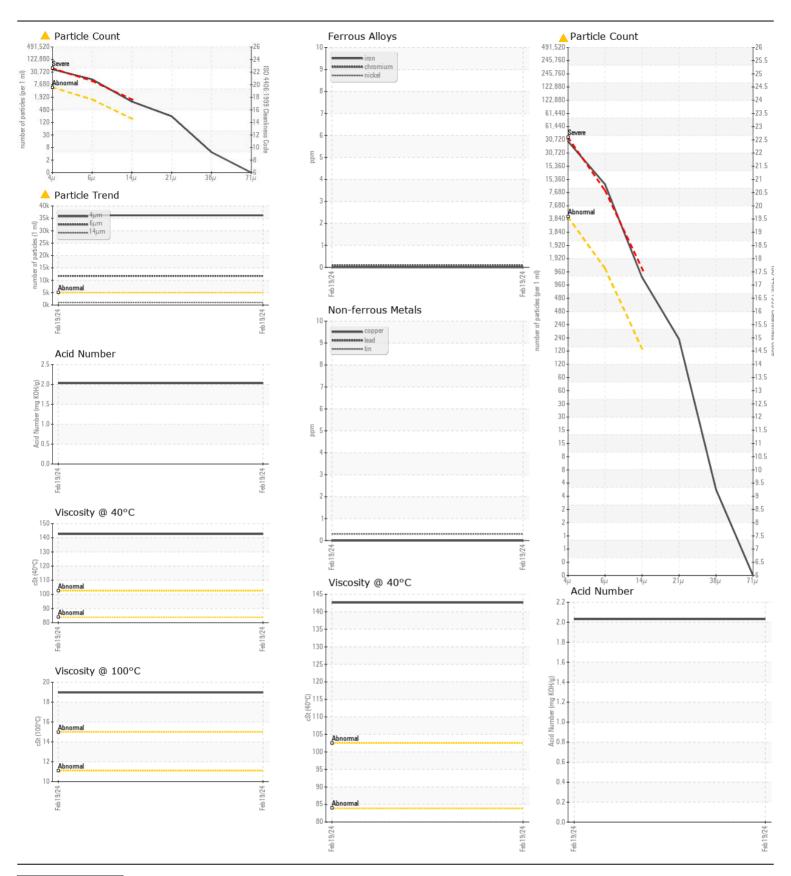
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL ABNORMAL NORMAL

24B1510 MATV-420

Component New (Unused) Oil

NOT GIVEN (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		HPL0000907		
This is a baseline read-out on the submitted sample.	Sample Date		Client Info		19 Feb 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m		0		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		5		
ONTAMINATION	Potassium	ppm	ASTM D5185m	>20	1		
There is a high amount of particulates present in the oil.	Water	ppiii	WC Method	/ 20	NEG		
	Particles >4µm		ASTM D7647	>5000	<u> </u>		
	Particles >6µm		ASTM D7647		<u>▲</u> 11743		
	Particles >14µm		ASTM D7647		▲ 1033		
	Particles >21µm		ASTM D7647		<u> </u>		
	Particles >38µm		ASTM D7647		4		
	Particles >71µm		ASTM D7647		0		
	Oil Cleanliness		ISO 4406 (c)		<u>^</u> 22/21/17		
	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		NEG		
FLUID CONDITION	O		ACTM DE10Ess				
	Sodium	ppm	ASTM D5185m		0		
	Boron	ppm	ASTM D5185m		0		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		24		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		11		
	Calcium	ppm	ASTM D5185m		1676		
	Phosphorus	ppm	ASTM D5185m		1056		
	Zinc	ppm	ASTM D5185m		1242		
	Sulfur	ppm	ASTM D5185m		7190		
	Acid Number (AN)	mg KOH/g	ASTM D8045		2.03		
	Visc @ 40°C	cSt	ASTM D445		142.6		
	Visc @ 100°C	cSt	ASTM D445		18.96		
	Viscosity Index (VI)	Scale	ASTM D2270		150		





Certificate L2367

Laboratory Sample No. Unique Number : 10901642

Lab Number : 06103412

: HPL0000907

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 Feb 2024

Tested : 04 Mar 2024 : 04 Mar 2024 - Jonathan Hester Diagnosed Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

HIGH PERFORMANCE LUBRICANTS LLC 500 S SPRUCE ST MANTENO, IL

US 60950 Contact: DAVID WARD sampledata@hplubricants.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: (815)468-3535 F: x:

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