

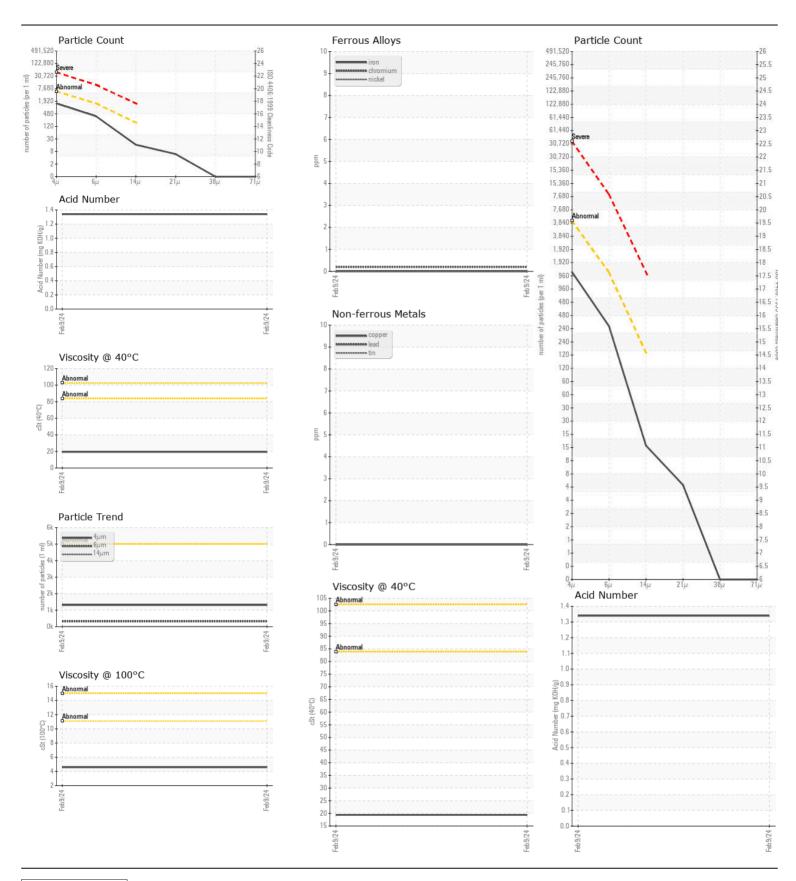
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

24B0803 DL-9204

New (Unused) Oil

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
	Sample Number		Client Info		HPL0000917		
This is a baseline read-out on the submitted sample.	Sample Date		Client Info		09 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				NORMAL		
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		ASTM D5185m		1		
	Lead	ppm	ASTM D5185m		0		
		ppm	ASTM D5185m		0		
	Copper Tin	ppm	ASTM D5185m				
		ppm			0		
	Vanadium White Metal	ppm	ASTM D5185m	NONE	0 NONE		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		2		
	Potassium	ppm	ASTM D5185m	>20	<1		
	Water		WC Method		NEG		
	Particles >4μm		ASTM D7647	>5000	1313		
	Particles >6μm		ASTM D7647	>1300	319		
	Particles >14μm		ASTM D7647	>160	14		
	Particles >21µm		ASTM D7647	>40	5		
	Particles >38µm		ASTM D7647	>10	0		
	Particles >71µm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/15/11		
	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				NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m		0		
		ppm			0		
	Boron Barium	ppm	ASTM D5185m ASTM D5185m		8		
	Molybdenum	ppm	ASTM D5185m				
	•	ppm			0		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		1		
	Calcium	ppm	ASTM D5185m		4		
	Phosphorus	ppm	ASTM D5185m		318		
	Zinc	ppm	ASTM D5185m		8		
	Sulfur	ppm	ASTM D5185m		22648		
	Acid Number (AN)	mg KOH/g	ASTM D8045		1.34		
	Visc @ 40°C	cSt	ASTM D445		19.4		
	Visc @ 100°C	cSt	ASTM D445		4.59		
	Viscosity Index (VI)	Caala	ASTM D2270		160		





Certificate L2367

Report Id: HIGMAN [WUSCAR] 06087853 (Generated: 02/22/2024 17:53:47) Rev: 1

Laboratory Sample No. Unique Number: 10875298

: HPL0000917 Lab Number : 06087853

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Feb 2024 **Tested** 

: 15 Feb 2024 : 15 Feb 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

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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