

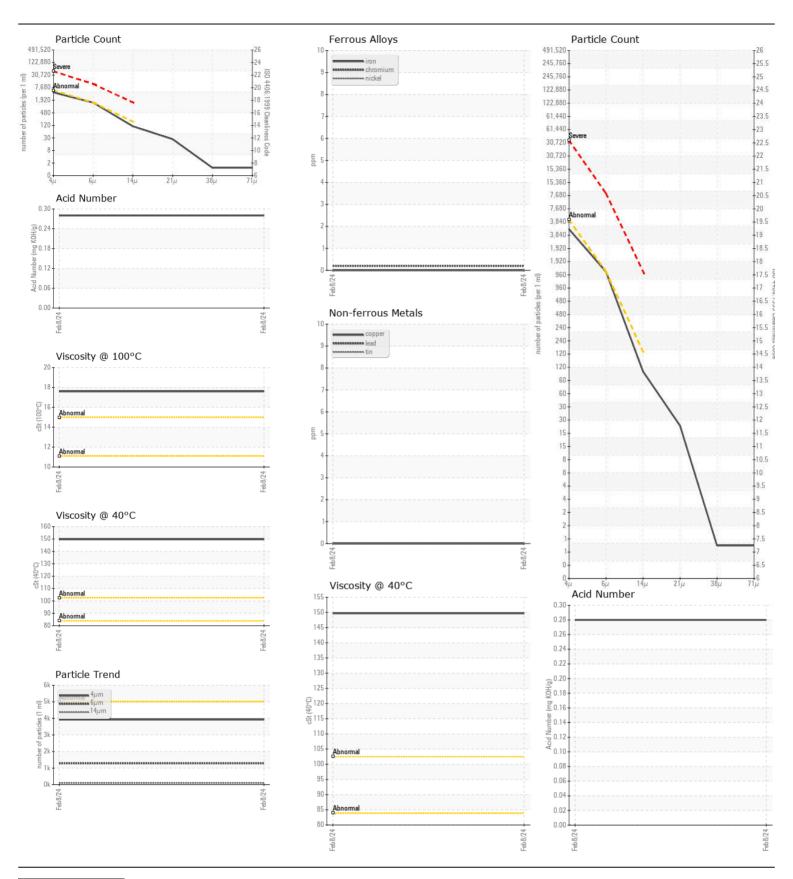
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

24B0705 CYLL-005

Component New (Unused) Oil

ECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
	Sample Number		Client Info		HPL0000953		
This is a baseline read-out on the submitted sample.	Sample Date		Client Info		08 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		ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		1		
		ppm	ASTM D5185m		0		
	Lead	ppm					
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	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	3924		
	Particles >6μm		ASTM D7647	>1300	1289		
	Particles >14μm		ASTM D7647	>160	95		
	Particles >21µm		ASTM D7647	>40	23		
	Particles >38µm		ASTM D7647	>10	1		
	Particles >71µm		ASTM D7647	>3	1		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/14		
	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	scalar	*Visual		NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m		<1		
	Boron	ppm ppm	ASTM D5185m		0		
	Barium	ppm	ASTM D5185m		8		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		287		
	Calcium		ASTM D5185m				
		ppm			164		
	Phosphorus	ppm	ASTM D5185m		24		
	Zinc	ppm	ASTM D5185m		5		
	Sulfur	ppm	ASTM D5185m		15678		
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.28		
	Visc @ 40°C	cSt	ASTM D445		149.7		
	Visc @ 100°C	cSt	ASTM D445		17.6		
	Viscosity Index (VI)	0 1 -	ASTM D2270		129		





Certificate L2367

Laboratory Unique Number : 10875293

Sample No. Lab Number : 06087848

: HPL0000953

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

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

: 13 Feb 2024 **Tested** : 15 Feb 2024 Diagnosed

: 15 Feb 2024 - Jonathan Hester Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

HIGH PERFORMANCE LUBRICANTS LLC 500 S SPRUCE ST MANTENO, IL

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Submitted By: DAVID WARD

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

US 60950