

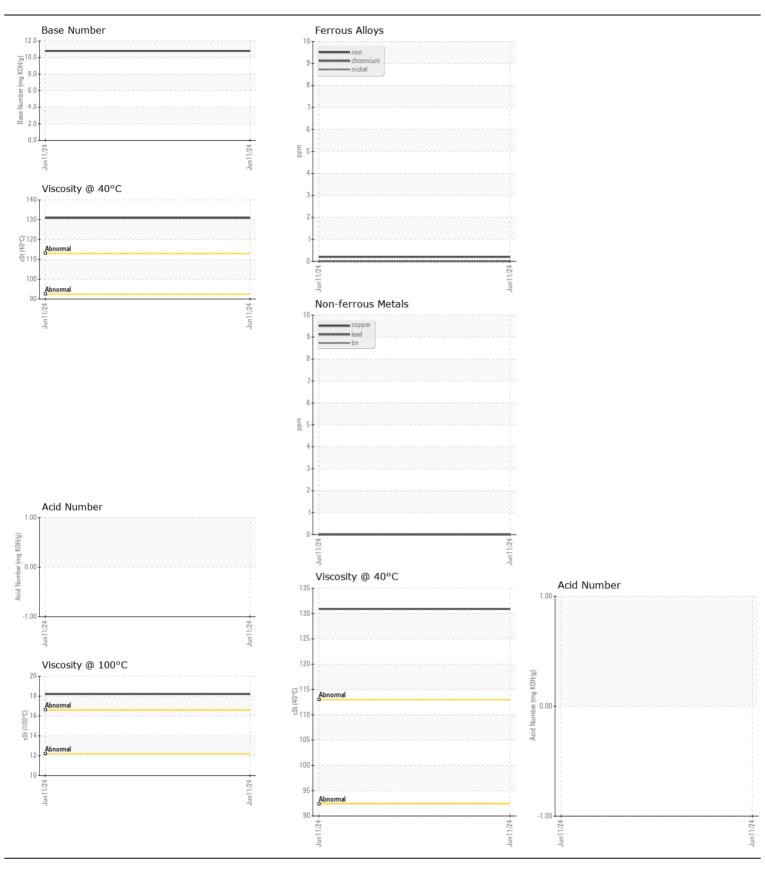
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

24F1104 BL-1410 Component New (Unused) Oil

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
This is a baseline read-out on the submitted sample. (Customer Sample Comment: RUN TBN)	Sample Number		Client Info		HPL0004710		
	Sample Date		Client Info		11 Jun 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	nnm	ACTM DE10Em		.4		
WEAR	Iron	ppm	ASTM D5185m		<1		
	Chromium	ppm	ASTM D5185m		0		
	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		0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		7		
	Potassium	ppm	ASTM D5185m	>20	0		
	Water		WC Method		NEG		
	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		4		
	Boron	ppm	ASTM D5185m		1		
	Barium	ppm	ASTM D5185m		<1 0		
	Molybdenum	ppm	ASTM D5185m		233		
	Manganese	ppm	ASTM D5185m		0		
	-		ASTM D5185m				
	Magnesium Calcium	ppm	ASTM D5185m		27 3470		
		ppm	ASTM D5185m				
	Phosphorus	ppm	ASTM D5185m		1047		
	Zinc	ppm			1217		
	Sulfur	ppm ma KOU/a	ASTM D5185m		22232		
	Base Number (BN)	mg KOH/g	ASTM D2896		10.78		
	Visc @ 40°C	cSt cSt	ASTM D445 ASTM D445		130.9 18.2		
	Visc @ 100°C						





Laboratory Unique Number: 11085133

Sample No. Lab Number : 06212269

: HPL0004710

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Jun 2024 **Tested** : 20 Jun 2024

Diagnosed

: 20 Jun 2024 - Jonathan Hester

HIGH PERFORMANCE LUBRICANTS LLC

500 S SPRUCE ST MANTENO, IL US 60950

Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: DAVID WARD sampledata@hplubricants.com T: (815)468-3535

* - 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)

F: x: Submitted By: DAVID WARD