

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

Machine Id

24F1903 DL-206

New (Unused) Oil

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number				HPL0005296		
Sample Date		Client Info		19 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		
Iron	nnm	ACTM DE105m		0		
			NONE			
Yellow Metal	scalar	*Visual	NONE	NONE		
			00			
	ppm		>20			
			NIONIE			
			INUNIVIL			
Sodium	ppm	ASTM D5185m		1		
Boron	ppm			0		
	ppm					
	ppm			0		
Manganese	ppm	ASTM D5185m		0		
	ppm	ASTM D5185m		0		
Magnesium						
Calcium	ppm	ASTM D5185m		<1		
Calcium Phosphorus	ppm	ASTM D5185m		349		
Calcium Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m		349 0		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		349 0 26907		
Calcium Phosphorus Zinc Sulfur Acid Number (AN)	ppm ppm ppm ppm mg KOH/g	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D8045		349 0 26907 1.54		
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		349 0 26907		
	Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status  Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal  Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	Sample Number Sample Date Machine Age hrs Oil Age hrs Filter Age hrs Oil Changed Filter Changed Sample Status  Iron ppm Chromium ppm Nickel ppm Titanium ppm Silver ppm Aluminum ppm Lead ppm Copper ppm Tin ppm Vanadium ppm White Metal scalar Yellow Metal scalar Silicon ppm Potassium ppm Water Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Sodium ppm Boron ppm Barium ppm	Sample Number Sample Date Client Info Client Info Machine Age Dil Age Client Info Oil Age Client Info Client Info Cilent Info Client Info Sample Status  Iron  ppm ASTM D5185m Chromium ppm ASTM D5185m Nickel ppm ASTM D5185m Titanium ppm ASTM D5185m Aluminum ppm ASTM D5185m Lead ppm ASTM D5185m Copper ppm ASTM D5185m Vanadium ppm ASTM D5185m Valual Yellow Metal Scalar *Visual Silicon ppm ASTM D5185m Vater WC Method Silt Scalar *Visual Debris Scalar *Visual Appearance scalar *Visual Appearance scalar *Visual Appearance scalar *Visual Appearance scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual  Appearance Scalar *Visual	Sample Number Sample Date Machine Age Machine Age Nrs Client Info Oil Changed Filter Changed Sample Status  Iron Chromium Nickel Ppm ASTM D5185m Nickel Ppm ASTM D5185m Aluminum Ppm ASTM D5185m Lead Ppm ASTM D5185m Copper Ppm ASTM D5185m  Lead Ppm ASTM D5185m  Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m Vanadium Ppm ASTM D5185m NONE  Silicon Potassium Potassium Ppm ASTM D5185m Potassium Ppm ASTM D5185m Potassium Ppm ASTM D5185m Potassium Ppm ASTM D5185m NONE  Silit Scalar Visual NONE Sand/Dirt Scalar Visual NONE Sand/Dirt Scalar Visual NONE Appearance Scalar Visual NONE Appearance Scalar Visual NORML Appearance Scalar Scalar Visual NORML Appearance Scalar Scalar Visual NORML Appearance Scalar Scala	Sample Number         Client Info         HPL0005296           Sample Date         Client Info         19 Jun 2024           Machine Age         hrs         Client Info         0           Oil Age         hrs         Client Info         0           Filter Age         hrs         Client Info         Not Changd           Filter Changed         Client Info         N/A           Sample Status         NORMAL           Iron         ppm         ASTM D5185m         0           Chromium         ppm         ASTM D5185m         0           Nickel         ppm         ASTM D5185m         0           Nickel         ppm         ASTM D5185m         0           Silver         ppm         ASTM D5185m         0           Aluminum         ppm         ASTM D5185m         0           Copper         ppm         ASTM D5185m         0           Copper         ppm         ASTM D5185m         0           Vanadium         ppm         ASTM D5185m         0           Vanadium         ppm         ASTM D5185m         0           Vanadium         ppm         ASTM D5185m         >20         1           White Metal	Sample Number         Client Info         HPL0005296            Sample Date         Client Info         19 Jun 2024            Machine Age         hrs         Client Info         0            Oil Age         hrs         Client Info         0            Filter Age         hrs         Client Info         Not Changd            Oil Changed         Client Info         Not Changd            Filter Changed         Client Info         N/A            Sample Status         NORMAL            Iron         ppm         ASTM D5185m         0            Chromium         ppm         ASTM D5185m         0            Nickel         ppm         ASTM D5185m         0            Nickel         ppm         ASTM D5185m         0            Silver         ppm         ASTM D5185m         0            Aluminum         ppm         ASTM D5185m         0            Lead         ppm         ASTM D5185m         0            Tin         ppm         ASTM D5185m         0





Report Id: HIGMAN [WUSCAR] 06220241 (Generated: 06/30/2024 16:54:09) Rev: 1

Laboratory Sample No.

Lab Number : 06220241

: HPL0005296

Unique Number : 11098438 Diagnosed

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 25 Jun 2024 **Tested** : 27 Jun 2024

: 27 Jun 2024 - Jonathan Hester

HIGH PERFORMANCE LUBRICANTS LLC 500 S SPRUCE ST

MANTENO, IL US 60950 Contact: DAVID WARD

Test Package : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI ) Certificate L2367 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.

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

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

Submitted By: DAVID WARD

F: x: