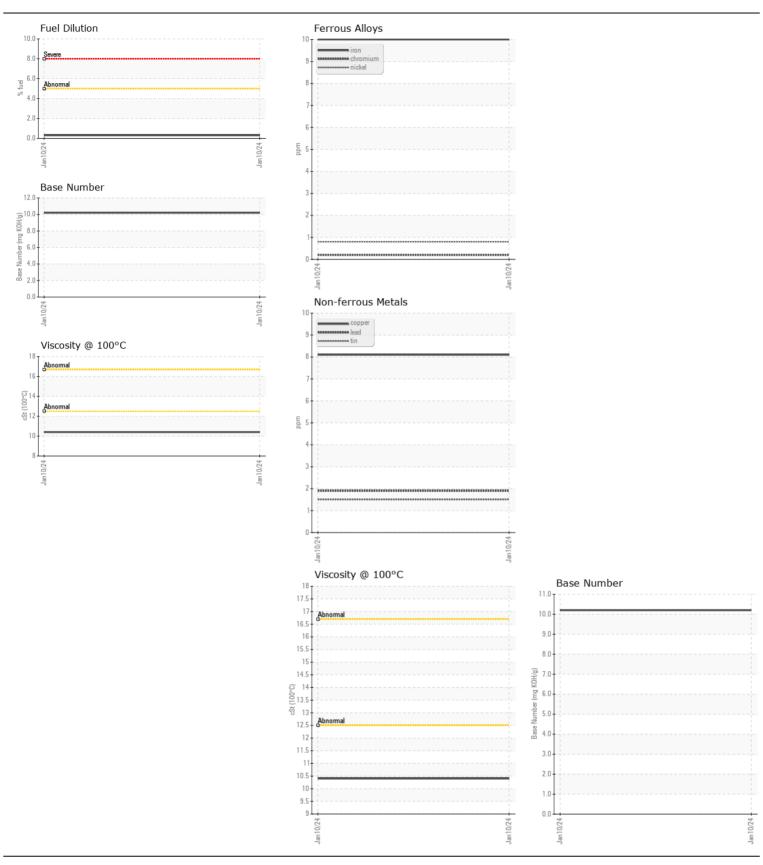
WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL NORMAL

HAMM HC 120i WGH0H252HHAA00557

Diesel Engine							
not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		JR0194481		
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		10 Jan 2024		
	Machine Age	hrs	Client Info		53		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	10		
WEAR	Chromium	ppm	ASTM D5185m		<1		
Metal levels are typical for a new component breaking in.	Nickel		ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	>4	0		
	Silver	ppm	ASTM D5185m	. 2	0		
		ppm	ASTM D5185m				
	Aluminum	ppm			9		
	Lead	ppm	ASTM D5185m ASTM D5185m		2		
	Copper Tin	ppm			8		
		ppm	ASTM D5185m	>15	2		
	Vanadium White Metal	ppm	ASTM D5185m	NONE	<1 NONE		
		scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	9		
SOTTAIMINATION	Potassium	ppm	ASTM D5185m		0		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3		
	Water		WC Method		NEG		
	Glycol		WC Method	7 0.2	NEG		
	Soot %	%	*ASTM D7844	\3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.9		
	Sulfation	Abs/.1mm	*ASTM D7415		20.2		
	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			>0.2	NEG		
		Scalai	Visuai	70.2			
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0		
	Boron	ppm	ASTM D5185m		257		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		248		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m		823		
	Calcium	ppm	ASTM D5185m		1325		
	Phosphorus	ppm	ASTM D5185m		909		
	Zinc	ppm	ASTM D5185m		1092		
	Sulfur	ppm	ASTM D5185m		3308		
				OF	16.0		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0		
	Oxidation Base Number (BN)		ASTM D7414 ASTM D2896	>25	10.2		







Laboratory Sample No. Lab Number **Unique Number**

: 06057919 : 10829301

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : JR0194481 Recieved : 11 Jan 2024 Diagnosed : 15 Jan 2024 Diagnostician : Jonathan Hester

Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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