WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

Machine Id

131881008

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0576619		
	Sample Date		Client Info		30 Oct 2023		
	Machine Age	hrs	Client Info		0		
	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	<1		
	Chromium	ppm	ASTM D5185m	>20	0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	3		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m	>330	0		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		7		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		0		
	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.2		
	Sulfation	Abs/.1mm	*ASTM D7415		17.3		
	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	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	1		
	Boron	ppm	ASTM D5185m	250	93		
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	10	0		
	Molybdenum	ppm	ASTM D5185m	100	84		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	450	106		
	Calcium	ppm	ASTM D5185m		2073		
	Phosphorus	ppm	ASTM D5185m		1060		
	Zinc	ppm	ASTM D5185m		1235		
	Sulfur	ppm	ASTM D5185m		4214		
	Oxidation	Abs/.1mm	*ASTM D7414		13.0		
	Base Number (BN)		ASTM D2896		9.60		
	Visc @ 40°C	cSt	ASTM D445		105		
	Visc @ 100°C	cSt	ASTM D445		13.9		
	Viscosity Index (VI)	Scale	ASTM D2270	126	133		





Certificate L2367

Laboratory Sample No.

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

: WC0576619 Lab Number : 06010283 Unique Number : 10749427

Test Package : MOB 2 (Additional Tests: KV40, VI)

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.

: 17 Nov 2023 - Wes Davis Diagnosed

Tested

Received

: 16 Nov 2023

: 17 Nov 2023

F: (704)895-4801 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

HIAB USA - MIDATLANTIC 18627 STARCREEK DR CORNELIUS, NC

US 28031 Contact: SWANN MCCLURE

swann.mcclure@cargotec.com T: (704)896-9089