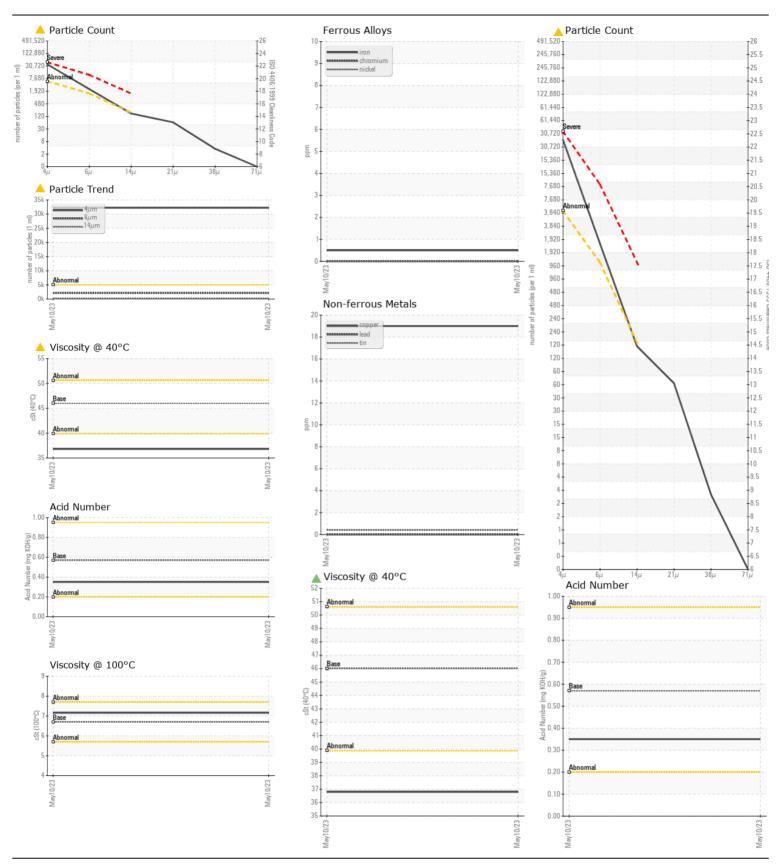
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL **ABNORMAL ATTENTION**

STELLAR 222252 - SUBURBAN PROPANE

Hydraulic System

AW HYDRAULIC OIL ISO 46 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0698822		
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		10 May 2023		
	Machine Age	yrs	Client Info		1		
	Oil Age	yrs	Client Info		1		
	Filter Age	yrs	Client Info		1		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
VEAR	Iron	ppm	ASTM D5185m	>20	<1		
	Chromium	ppm	ASTM D5185m	>10	0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m	>10	0		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		19		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m	>10	0		
	White Metal	scalar	*Visual	NONE	LIGHT		
	Yellow Metal	scalar	*Visual	NONE	NONE		
			AOTA DE LOS				
CONTAMINATION	Silicon	ppm	ASTM D5185m		<1		
There is a high amount of silt (particulates < 14 microns in size) present in the oil.	Potassium	ppm	ASTM D5185m		1		
	Water		WC Method		NEG		
	Particles >4µm		ASTM D7647		32210		
	Particles >6µm		ASTM D7647		<u> </u>		
	Particles >14μm		ASTM D7647		145		
	Particles >21μm		ASTM D7647		55		
	Particles >38μm		ASTM D7647		3		
	Particles >71μm		ASTM D7647	>3	0		
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>22/18/14</u>		
	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	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		0		
TOID TONDINION	Boron	ppm	ASTM D5185m	5	0		
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		1		
	Manganese	ppm	ASTM D5185m		- <1		
	Magnesium	ppm	ASTM D5185m	25	7		
	Calcium	ppm	ASTM D5185m		72		
	Phosphorus		ASTM D5185m		351		
	Zinc	ppm	ASTM D5165III		476		
		ppm					
	Sulfur	ppm	ASTM D5185m		1278		
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.35		
	Visc @ 40°C	cSt	ASTM D445		▲ 36.8		
	Visc @ 100°C	cSt	ASTM D445		7.16		
	Viscosity Index (VI)	Scale	ASTM D2270	97	161		





Certificate L2367

Laboratory Sample No.

Lab Number **Unique Number**

: WC0698822 : 05878832 : 10523935

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 20 Jun 2023 Diagnosed : 28 Jun 2023 Diagnostician : Jonathan Hester

Test Package : MOB 2 (Additional Tests: KV100, 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.

PORTSMOUTH, VA US 23707 Contact: THOMAS ASBELL

thomas.asbell@cargotec.com T: (757)558-4590

HIAB USA - PORTSMOUTH

3115 WATSON ST

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

F: x: