

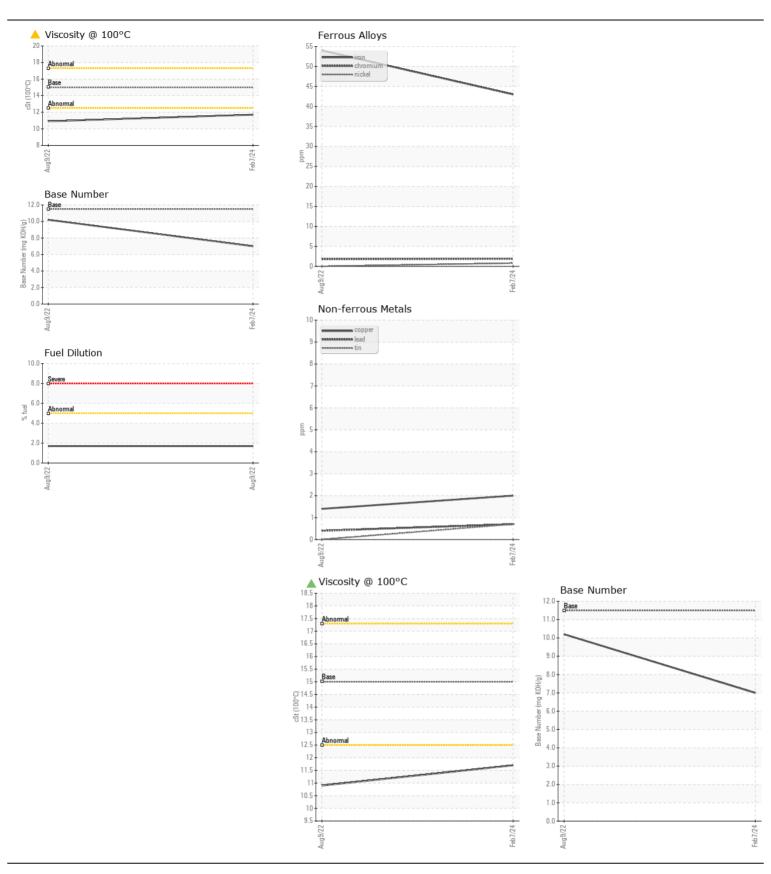
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL ABNORMAL ATTENTION

Machine Id **GEN-8 (S/N 8710275)**

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		TLY0002258	TLY0001184	
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		07 Feb 2024	09 Aug 2022	
	Machine Age	hrs	Client Info		7892	7156	
	Oil Age	hrs	Client Info		7156	500	
	Filter Age	hrs	Client Info		7156	500	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ATTENTION	
WEAR	Iron	ppm	ASTM D5185m	>100	43	54	
	Chromium	ppm	ASTM D5185m		2	2	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		- <1	0	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		4	4	
	Lead	ppm	ASTM D5185m		- <1	<1	
	Copper	ppm	ASTM D5185m	>330	2	1	
	Tin	ppm	ASTM D5185m	>15	<1	0	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	6	
	Potassium	ppm	ASTM D5185m		2	<1	
Moderate concentration of visible dirt/debris present in the oil.	Fuel	%	ASTM D3163111		<1.0	1.7	
	Water	70	WC Method		NEG	NEG	
	Glycol		WC Method	7U.L	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	9.7	11.1	
	Sulfation	Abs/.1mm	*ASTM D7415		19.6	23.2	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	▲ MODER	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Codium	nnm	ACTM DE10E		0	0	
PLUID CONDITION	Sodium Boron	ppm	ASTM D5185m		0 32	3	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.		ppm	ASTM D5185m			45 0	
	Barium	ppm	ASTM D5185m ASTM D5185m		13 50	0 44	
	Molybdenum	ppm	ASTM D5185m		50 1	<1 <1	
	Manganese Magnesium	ppm	ASTM D5185m		1 605	499	
	Calcium	ppm	ASTM D5185m		1548	499 1722	
	Phosphorus	ppm	ASTM D5185m		884	767	
	Zinc	ppm	ASTM D5165III		1033	941	
	Sulfur	ppm	ASTM D5185m		3132	2622	
	Oxidation	ppm Abs/.1mm	*ASTM D7414	>25	20.3	23.5	
	Base Number (BN)	mg KOH/g	ASTM D2896		7.0	10.2	
	Visc @ 100°C	cSt	ASTM D2696 ASTM D445		7.0 ▲ 11.7	10.2	







Certificate L2367

Laboratory Sample No.

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

Lab Number : 06086574 Unique Number : 10874019

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

: TLY0002258 Received : 12 Feb 2024 **Tested**

Diagnosed

: 13 Feb 2024 : 13 Feb 2024 - Don Baldridge

Test Package : CONST (Additional Tests: FuelDilution, TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369.

US 21136 Contact: LANCE TANCRAITOR Itancraitor@gainesandco.com T: (410)833-9833

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

GAINES & COMPANY

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