

WEAR CONTAMINATION **FLUID CONDITION**

NORMAL MARGINAL ABNORMAL

Machine Id

CARICON 531CB9R

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOCHINICIDATION TO	Sample Number	OOW	Client Info	LITTIU/AUTI	VKC0001247		
Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Date		Client Info		07 Jun 2024		
	Machine Age	hrs	Client Info		2019		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m		31		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	5		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m	>330	4		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTABINATION	0:11:		AOTM DEADE	05			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
Light fuel dilution occurring.	Potassium	ppm	ASTM D5185m		4		
	Fuel	%	ASTM D3524	>5	▲ 2.4		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	0	NEG		
	Soot %	% A b a /ava	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	9.5		
	Sulfation	Abs/.1mm	*ASTM D7415		20.6		
	Silt Debris	scalar	*Visual	NONE	NONE		
		scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE NORML		
	Appearance Odor	scalar scalar	*Visual	NORML NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
<u></u>	Liliuisilleu vvalei	Scalai	Visuai	>0.2			
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	5		
	Boron	ppm	ASTM D5185m	250	30		
The oil viscosity is lower than normal. The BN level is low.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		11		
	Manganese	ppm	ASTM D5185m		1		
	Magnesium	ppm	ASTM D5185m	450	103		
	Calcium	ppm	ASTM D5185m		1163		
	Phosphorus	ppm	ASTM D5185m	1150	563		
	Zinc	ppm	ASTM D5185m		△ 662		
	Sulfur	ppm	ASTM D5185m		2082		
	Oxidation	Abs/.1mm	*ASTM D7414		17.5		
	Base Number (BN)	mg KOH/q			△ 3.3		
	Visc @ 100°C	cSt	ASTM D445		▲ 5.4		





Certificate L2367

Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Lab Number : 06212858

: VKC0001247 Unique Number : 11085722

Received

: 17 Jun 2024 **Tested** Diagnosed

: 21 Jun 2024

: 21 Jun 2024 - Sean Felton Test Package: MOBCE (Additional Tests: FuelDilution, PercentFuel, TBN)

Contact: JUSTIN HAMILTON jhamilton@vankeppel.com T: (913)233-3882

GW VAN KEPPEL CO

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US 66110

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)

F: (913)281-4815