WEAR CONTAMINATION FLUID CONDITION

NORMAL

ABNORMAL

NORMAL

Machine Id **98021** 

Component
Gasoline Engine

GASOLINE ENGINE OIL SAE 5W30 (--- GAL)

DECOMMENDATION.							
RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		SBP0001991		
	Sample Date		Client Info		09 May 2024		
	Machine Age	mls	Client Info		197200		
	Oil Age	mls	Client Info		7500		
	Filter Age	mls	Client Info		7500		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>150	144		
WEAT	Chromium	ppm	ASTM D5185m		3		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		2		
	Titanium	ppm	ASTM D5185m		2		
	Silver	ppm	ASTM D5185m	>2	- <1		
	Aluminum	ppm	ASTM D5185m		8		
	Lead	ppm	ASTM D5185m		32		
	Copper	ppm	ASTM D5185m		11		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		28		
There is a light concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil.	Potassium	ppm	ASTM D5185m		3		
	Fuel		WC Method		<1.0		
	Water	%	ASTM D6304		<b>△</b> 0.272		
	ppm Water	ppm	ASTM D6304	>2000	<u>^</u> 2720		
	Glycol	%	*ASTM D2982		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624		14.2		
	Sulfation	Abs/.1mm	*ASTM D7415		24.9		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	▲ MODER		
	Sand/Dirt	scalar	*Visual *Visual	NONE	NONE NORML		
	Appearance Odor	scalar scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	▲ 0.2%		
<u></u>			v isuai		0.2 /6		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>400	45		
	Boron	ppm	ASTM D5185m	75	23		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m	5	0		
	Molybdenum	ppm	ASTM D5185m	100	254		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m	12	451		
	Calcium	ppm	ASTM D5185m	2100	1455		
	Phosphorus	ppm	ASTM D5185m	650	736		
	Zinc	ppm	ASTM D5185m	850	904		
	Sulfur	ppm	ASTM D5185m	2500	2565		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	23.7		
	Base Number (BN)	mg KOH/g	ASTM D2896		3.1		
	Visc @ 100°C	cSt	ASTM D445	10.9	10.0		





Certificate L2367

Laboratory Sample No.

: SBP0001991 Lab Number : 06193271

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 28 May 2024 : 31 May 2024

**Tested** Unique Number : 11050023 Diagnosed

: 31 May 2024 - Jonathan Hester

US Contact: Service Manager

Sapp Bros. Fleet - Lincoln Location

Test Package : FLEET ( Additional Tests: Glycol, KF ) 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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F: