WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL



Machine Id
813065
Component
Diesel Engine

CERTIFIED SPECTRA XTREME	15W40 CK	4 (GAL)				
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.	Sample Number		Client Info	2	GFL0105879		
	Sample Date		Client Info		30 May 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>80	24		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>5	0		
	Nickel	ppm	ASTM D5185(m)	>2	0		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>30	7		
	Lead	ppm	ASTM D5185(m)	>30	1		
	Copper	ppm	ASTM D5185(m)		4		
	Tin	ppm	ASTM D5185(m)	>5	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	White Metal	scalar	Visual*	NONE	VLITE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	4		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)		3		
	Fuel	%	ASTM D7593*	>5	0.2		
	Water	70	WC Method		NEG		
	Glycol		WC Method	7 0.2	NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	5.9		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	33.0		
	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 Viscosity of sample indicates oil is within SAE 20 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.	Sodium	ppm	ASTM D5185(m)		6		
	Boron	ppm	ASTM D5185(m)		130		
	Barium	ppm	ASTM D5185(m)		<1		
	Molybdenum	ppm	ASTM D5185(m)		9 79		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		266		
	Calcium	ppm	ASTM D5185(m)		423		
	Phosphorus	ppm	ASTM D5185(m)		642		
	Zinc	ppm	ASTM D5185(m)		347		
	Sulfur	ppm	ASTM D5185(m)		<u> </u>		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	32.5		
	1" 0 10000	0.	AOTH DECEM	1.0			

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CALA ISO 17025:2017 Accredited Laboratory

Laboratory

Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : GFL0105879 Lab Number : 02639061

Unique Number : 5788223

Received : 31 May 2024 **Tested** Diagnosed

: 04 Jun 2024

: 04 Jun 2024 - Kevin Marson

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, VISUAL)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

GFL Environmental - 348

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