

Machine Id **312000** Component **Diesel Engine** Fluid **AC DELCO 10W30 MOTOR OIL (--- GAL)**

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		GFL0110961		
	Sample Date		Client Info		19 Apr 2024		
	Machine Age	mls	Client Info		37808		
	Oil Age	mls	Client Info		10000		
	Filter Age	mls	Client Info		10000		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		20		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		13		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		7		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Ciliaan		ACTM DE10Em	. 05	10		
CONTAMINATION	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		12 3		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method				
				>5	<1.0 NEG		
	Water		WC Method WC Method	>0.2	NEG		
	Glycol Soot %	%	*ASTM D7844	. 0	0.3		
	Nitration	Abs/cm	*ASTM D7644	>3 >20	10.5		
	Sulfation	Abs/.1mm	*ASTM D7624		19.7		
	Silt	scalar	*Visual	NONE	NONE		
	Debris		*Visual	NONE	NONE		
	Sand/Dirt	scalar			NONE		
		scalar	*Visual *Visual	NONE NORML	NORML		
	Appearance Odor	scalar scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		99		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		40		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		704		
	Calcium	ppm	ASTM D5185m		1478		
	Phosphorus	ppm	ASTM D5185m		723		
	Zinc	ppm	ASTM D5185m		814		
	Sulfur	ppm	ASTM D5185m		3225		
	Oxidation	Abs/.1mm	*ASTM D5105111	>25	16.0		
	Base Number (BN)		ASTM D7414 ASTM D2896		7.9		
		ing NOTI/g	A01101D2030	5.0	1.5		

Visc @ 100°C cSt

ASTM D445 10.5

12.3



Sample No. Received 3947 US 131 N : GFL0110961 : 24 Apr 2024 Lab Number : 06158770 Tested : 25 Apr 2024 Kalkaska, MI Unique Number : 10994193 Diagnosed : 25 Apr 2024 - Wes Davis US 49646-8428 Test Package : FLEET Contact: MITCH HERSHBERGER Certificate L2367 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. T: (231)624-0848 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Submitted By: Mitch Hershberger Page 2 of 2