**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL NORMAL** NORMAL

Machine Id 834007

Component Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0092117	GFL0084656	
	Sample Date		Client Info		10 Jan 2024	02 Nov 2023	
	Machine Age	hrs	Client Info		1795	0	
	Oil Age	hrs	Client Info		600	0	
	Filter Age	hrs	Client Info		600	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>50	14	17	
	Chromium	ppm	ASTM D5185m	>4	<1	<1	
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m	>2	<1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>9	6	9	
	Lead	ppm	ASTM D5185m	>30	1	<1	
	Copper	ppm	ASTM D5185m	>35	2	3	
	Tin	ppm	ASTM D5185m	>4	1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	> 100	5	8	
CONTAMINATION	Potassium	ppm	ASTM D5185m		22	37	
There is no indication of any contamination in the oil.	Water	ррпп	WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	<b>70.1</b>	0	0	
	Nitration	Abs/cm	*ASTM D7624	>20	10.9	10.9	
	Sulfation	Abs/.1mm	*ASTM D7415		21.7	22.9	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.1	NEG	NEG	
FLUID CONDITION  The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium		ASTM D5185m			6	
	Boron	ppm	ASTM D5185m	E0	8 9	6 8	
		ppm		_	_	_	
	Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m		0 52	0 55	
	Manganese	ppm	ASTM D5185m		<1	2	
	Magnesium	ppm	ASTM D5185m		526	682	
	Calcium	ppm	ASTM D5185m		1525	1562	
	Phosphorus	ppm	ASTM D5185m		743	724	
	Zinc	ppm	ASTM D5185m		942	1080	
	Sulfur	ppm	ASTM D5185m		2336	2629	
	Canar				18.2	19.3	
	Oxidation	Ahs/ 1mm	"AS IMID/414				
	Oxidation Base Number (BN)	Abs/.1mm ma KOH/a	*ASTM D7414 ASTM D2896				
	Oxidation  Base Number (BN)  Visc @ 100°C			10.2	4.1	3.9 14.8	







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** 

: 10831958 Test Package : FLEET To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0092117 Recieved : 16 Jan 2024 : 16 Jan 2024 : 06060576 Diagnosed

: Wes Davis

Diagnostician

GFL Environmental - 856 - Houston South 8515 Highway 6 South Houston, TX US 77083

Contact: Apolinar Zacarias pzacariascano@gflenv.com T:

\* - 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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