

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Component **Natural Gas Engine**

Elui

PETRO CANADA DURON GEO LD 15W40 (30 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

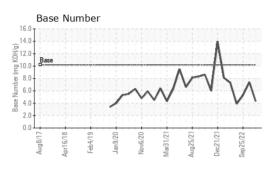
Fluid Condition

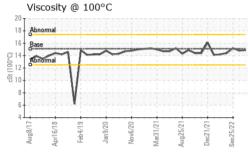
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2		
Sample Number		Client Info		GFL0090104	GFL0081021	GFL0058576		
Sample Date		Client Info		03 Oct 2023	21 Sep 2023	25 Sep 2022		
Machine Age	mls	Client Info		15385	15297	13302		
Oil Age	mls	Client Info		600	600	0		
Oil Changed		Client Info		Changed	Changed	N/A		
Sample Status				NORMAL	NORMAL	NORMAL		
WEAR METAL	S	method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	12	7	14		
Chromium	ppm	ASTM D5185m	>4	3	<1	2		
Nickel	ppm	ASTM D5185m	>2	<1	<1	0		
Titanium	ppm	ASTM D5185m		<1	0	0		
Silver	ppm	ASTM D5185m	>3	0	0	0		
Aluminum	ppm	ASTM D5185m	>9	2	1	3		
Lead	ppm	ASTM D5185m	>30	1	<1	<1		
Copper	ppm	ASTM D5185m	>35	<1	<1	<1		
Tin	ppm	ASTM D5185m	>4	0	<1	<1		
Vanadium	ppm	ASTM D5185m		0	0	0		
Cadmium	ppm	ASTM D5185m		0	0	0		
ADDITIVES		method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	4	12	8		
Barium	ppm	ASTM D5185m	5	0	0	0		
Molybdenum	ppm	ASTM D5185m	50	52	57	58		
Manganese	ppm	ASTM D5185m	0	<1	<1	<1		
Magnesium	ppm	ASTM D5185m	560	798	693	496		
Calcium	ppm	ASTM D5185m	1510	1471	1550	1605		
Phosphorus	ppm	ASTM D5185m	780	720	906	693		
Zinc	ppm	ASTM D5185m	870	1008	1099	950		
Sulfur	ppm	ASTM D5185m	2040	2357	2957	2760		
CONTAMINAN	ITS	method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	7	4	6		
Sodium	ppm	ASTM D5185m		7	3	13		
Potassium	ppm	ASTM D5185m	>20	<1	2	2		
INFRA-RED		method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0	0	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	12.1	7.7	11.7		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	18.8	24.0		
FLUID DEGRA	DATION	method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	15.6	20.2		
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.3	7.4	5.3		
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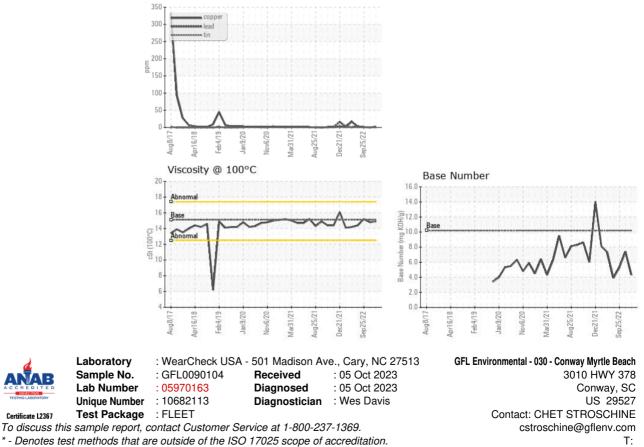
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.9	14.8	15.2
GRAPHS						

Ferrous Alloys Feb4/19 pr16/18 1an9/20 Aug8/1

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Non-ferrous Metals



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)



Submitted By: CHET STROSCHINE

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