

# **OIL ANALYSIS REPORT**

#### Sample Rating Trend

# NORMAL



Component

**Natural Gas Engine** 

PETRO CANADA DURON GEO LD 15W40 (12 C

# DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

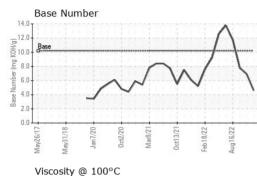
# Fluid Condition

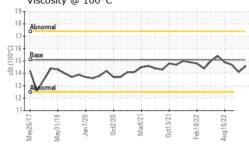
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

19 CAL						
SAMPLE INFORM		method	limit/base	Mar2021 Oct2021 Feb2022	hiotory1	biotory2
		Client Info	iiiiii/base	current	history1	history2 GFL0047985
Sample Number Sample Date		Client Info		GFL0098115 10 Nov 2023	GFL0083326	GFL0047985 15 Nov 2022
Machine Age	hrs	Client Info		7410	22 May 2023 7410	7410
Oil Age	hrs	Client Info		580	613	414
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ATTENTION
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WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	7	16	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium Silver	ppm	ASTM D5185m ASTM D5185m	>3	<1	<1 0	0
Aluminum	ppm ppm	ASTM D5185m	>3	<1 2	1	2
Lead	ppm	ASTM D5185m	>9	1	4	2
Copper	ppm	ASTM D5185m	>35	2	3	<1
Tin	ppm	ASTM D5185m	>4	- <1	3	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	10	24	20
Barium	ppm	ASTM D5185m	5	<1	0	2
Molybdenum	ppm	ASTM D5185m	50	52	53	69
Manganese	ppm	ASTM D5185m	0	<1	2	<1
Magnesium	ppm	ASTM D5185m	560	532	800	480
Calcium	ppm	ASTM D5185m	1510	1547	1345	1598
Phosphorus	ppm	ASTM D5185m	780	651	693	629
Zinc	ppm	ASTM D5185m	870	922	955	960
Sulfur	ppm	ASTM D5185m	2040	2337	2604	2715
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	17	49	12
Sodium	ppm	ASTM D5185m		5	22	<b>A</b> 745
Potassium	ppm	ASTM D5185m	>20	2	3	5
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.8	11.2	12.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	21.3	23.3
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.8	18.9	18.9

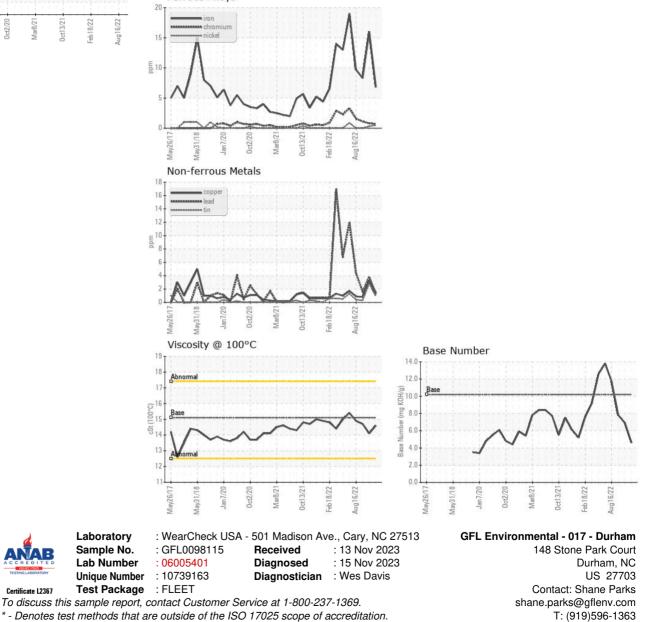


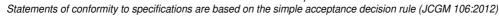
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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	14.6	14.1	14.7
GRAPHS						
Ferrous Alloys						





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