

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (P633829) 3760C Component Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (40 QTS)

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.

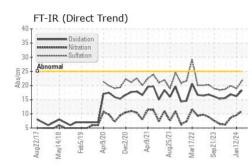
Fluid Condition

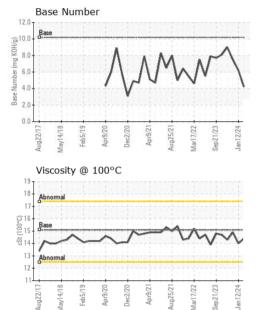
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

,						
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0101763	GFL0101774	GFL0090069
Sample Date		Client Info		08 Apr 2024	12 Jan 2024	02 Nov 2023
Machine Age	hrs	Client Info		15997	15433	14985
Oil Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>50	14	10	15
Chromium	ppm	ASTM D5185m	>4	2	1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	2
Lead	ppm	ASTM D5185m	>30	1	<1	0
Copper	ppm	ASTM D5185m	>35	<1	0	<1
Tin	ppm	ASTM D5185m	>4	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	50	9	22	22
Boron	ppm ppm					
Boron Barium		ASTM D5185m	50	9	22	22
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m	50 5	9 0	22 0	22 0
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50	9 0 56	22 0 48	22 0 48
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0	9 0 56 1	22 0 48 <1	22 0 48 <1
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560	9 0 56 1 571	22 0 48 <1 560	22 0 48 <1 534
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510	9 0 56 1 571 1680	22 0 48 <1 560 1481	22 0 48 <1 534 1482
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780	9 0 56 1 571 1680 694	22 0 48 <1 560 1481 783	22 0 48 <1 534 1482 718
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870	9 0 56 1 571 1680 694 1004	22 0 48 <1 560 1481 783 936	22 0 48 <1 534 1482 718 881
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870 2040	9 0 56 1 571 1680 694 1004 2624	22 0 48 <1 560 1481 783 936 2415	22 0 48 <1 534 1482 718 881 2200
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 50 00 560 1510 780 870 2040	9 0 56 1 571 1680 694 1004 2624 current	22 0 48 <1 560 1481 783 936 2415 history1	22 0 48 <1 534 1482 718 881 2200 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 50 00 560 1510 780 870 2040	9 0 56 1 571 1680 694 1004 2624 <u>current</u> 6	22 0 48 <1 560 1481 783 936 2415 history1 5	22 0 48 <1 534 1482 718 881 2200 history2 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	50 5 50 0 560 1510 780 870 2040 limit/base >+100	9 0 56 1 571 1680 694 1004 2624 <u>current</u> 6 7	22 0 48 <1 560 1481 783 936 2415 history1 5 4	22 0 48 <1 534 1482 718 881 2200 history2 8 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 50 0 560 1510 780 870 2040 limit/base >+100	9 0 56 1 571 1680 694 1004 2624 <u>current</u> 6 7 2	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2	22 0 48 <1 534 1482 718 881 2200 history2 8 6 6 11
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870 2040 2040 >+100 >20 >20 imit/base	9 0 56 1 571 1680 694 1004 2624 <u>current</u> 6 7 2 2	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2 2 history1	22 0 48 <1 534 1482 718 881 2200 history2 8 6 11 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 5 50 0 560 1510 780 870 2040 2040 >+100 >20 >20 imit/base	9 0 56 1 571 1680 694 1004 2624 <u>current</u> 6 7 2 2 <u>current</u> 0	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2 2 history1 0	22 0 48 <1 534 1482 718 881 2200 history2 8 6 11 1 history2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 50 00 560 1510 780 870 2040 imit/base >+100 20 imit/base	9 0 56 1 571 680 694 1004 2624 <u>current</u> 6 7 2 2 <u>current</u> 0 11.0 21.6	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2 2 history1 0 9.5	22 0 48 <1 534 1482 718 881 2200 history2 8 6 11 history2 0 8.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	50 50 560 1510 780 870 2040 imit/base >+100 220 imit/base >20 30	9 0 56 1 571 1680 694 1004 2624 <i>current</i> 6 7 2 <i>current</i> 0 11.0 21.6	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2 2 history1 0 9.5 18.9	22 0 48 <1 534 1482 718 881 2200 history2 8 6 11 history2 0 8.7 19.9 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	50 50 50 150 1510 780 870 2040 imit/base >20 imit/base >20 imit/base	9 0 56 1 571 680 694 1004 2624 <u>current</u> 6 7 2 2 <u>current</u> 0 11.0 21.6	22 0 48 <1 560 1481 783 936 2415 history1 5 4 2 2 history1 0 9.5 18.9 history1	22 0 48 <1 534 1482 718 881 2200 history2 8 6 11 history2 0 8.7 19.9



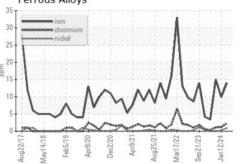
OIL ANALYSIS REPORT

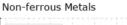




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	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	14.4	14.0	14.9
GRAPHS						

Ferrous Alloys



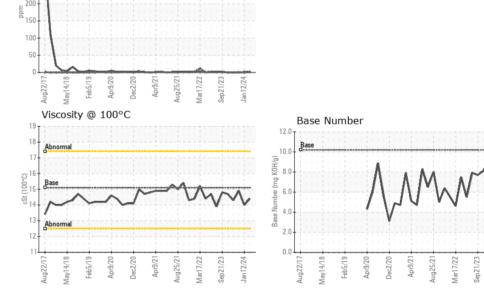


lead

350

300

250 200



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 030 - Conway Myrtle Beach Sample No. : GFL0101763 Received : 10 Apr 2024 3010 HWY 378 Lab Number : 06144085 Tested : 11 Apr 2024 Conway, SC US 29527 Unique Number : 10968893 Diagnosed : 11 Apr 2024 - Wes Davis Test Package : FLEET Contact: ARCILIO RUEZ Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. aruiz@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: GFL030 [WUSCAR] 06144085 (Generated: 04/11/2024 08:51:27) Rev: 1

Submitted By: TECHNICIAN ACCOUNT

Page 2 of 2

Jan 12/24