

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 4605M

Component Diesel Engine

Fluid PETRO CANADA DURON SHP 15W40 (5 GAL)

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.

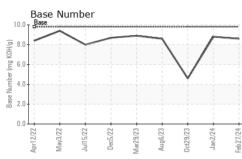
Fluid Condition

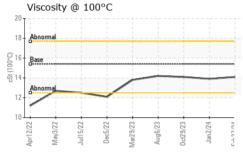
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0115051	GFL0106651	GFL0097669
Sample Date		Client Info		27 Feb 2024	02 Jan 2024	29 Oct 2023
Machine Age	hrs	Client Info		20686	20270	19725
Oil Age	hrs	Client Info		416	545	647
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	10	6	13
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	0	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	nnm	ASTM D5185m		•	0	0
Caumum	ppm	ASTIVI DSTOSIII		0	0	0
ADDITIVES	ppin	method	limit/base	current	0 history1	history2
	ppm		limit/base		-	-
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 4	history1 2	history2 3
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0 0 60	current 4 0	history1 2 0	history2 3 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 4 0 56	history1 2 0 55	history2 3 0 54
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	current 4 0 56 <1	history1 2 0 55 0	history2 3 0 54 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	current 4 0 56 <1 954	history1 2 0 55 0 933	history2 3 0 54 <1 913
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	Current 4 0 56 <1 954 982	history1 2 0 55 0 933 1064	history2 3 0 54 <1 913 1055
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	Current 4 0 56 <1 954 982 1108	history1 2 0 555 0 933 1064 965	history2 3 0 54 <1 913 1055 1021
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	current 4 0 56 <1 954 982 1108 1316	history1 2 0 55 0 933 1064 965 1305	history2 3 0 54 <1 913 1055 1021 1273
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	Current 4 0 56 <1 954 982 1108 1316 3259	history1 2 0 55 0 933 1064 965 1305 3002 history1 2	history2 3 0 54 <1 913 1055 1021 1273 2991 history2 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	Current 4 0 56 <1 954 982 1108 1316 3259 Current	history1 2 0 55 0 933 1064 965 1305 3002 history1	history2 3 0 54 <1 913 1055 1021 1273 2991 history2
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OIL ANALYSIS REPORT





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chromium nickel ZZZC/EW Ion-ferrous Metals	Aug6/23	Feb27/24			
Ion-ferrous Metals	Aug6/23	Feb27/24			
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E2/67#W ZZ/SIIII ZZ/SIIII ZZ/E/4/W ZZ/E/4/W	Aug6/23	Feb27/24			
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copper lead tin	Aug(Oct29	Feb 2			
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Apr12/22

May3/22 Jul15/22 Dec5/22 Mar29/23

-eb27/24.

:04 Mar 2024

: 04 Mar 2024

: 04 Mar 2024 - Wes Davis



 Certificate 12367
 Test Package
 : FLEET

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

Dec5/22 -

Mar29/23

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Aug6/23

Received

Diagnosed

Tested

let29/23 Jan2/24

May3/22 Jul15/22

Apr12/22

: GFL0115051

Laboratory Sample No.

Lab Number : 06107133

Unique Number : 10910630

Aug6/23

GFL Environmental - 405 - Arbor Hills

eb27/24

Jan2/24

7400 Napier Rd

US 48168

T:

F:

NORTHVILLE, MI

Contact: John Nahal

jnahal@gflenv.com