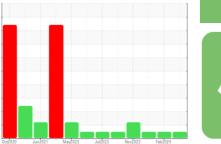


OIL ANALYSIS REPORT

SAMPLE INFORMATION method

Sample Rating Trend



NORMAL

Machine Id

523003-703

PETRO CANADA DURON SHP 15W40 (--- LTR)

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.

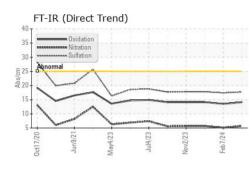
Fluid Condition

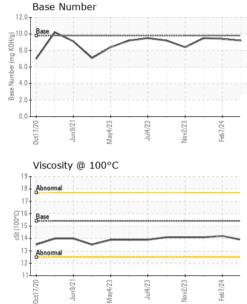
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM		method	limit/base	current	nistory i	nistory2
Sample Number		Client Info		GFL0077745	GFL0103868	GFL0085082
Sample Date		Client Info		16 Apr 2024	07 Feb 2024	10 Nov 2023
Machine Age	hrs	Client Info		20087	19910	609211
Oil Age	hrs	Client Info		0	0	568983
Oil Changed		Client Info		Changed	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL
-						
CONTAMINAT	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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
						5
Iron	ppm	ASTM D5185m	>120	5	11	
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm		>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm		>20	2	2	1
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm		>330	4	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 6	history1 6	history2 4
	ppm ppm		0			
Boron Barium		ASTM D5185m	0	6	6	4
Boron	ppm	ASTM D5185m ASTM D5185m	0 0 60	6 <1	6 0	4 <1
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	6 <1 59	6 0 57	4 <1 60
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	6 <1 59 <1	6 0 57 <1	4 <1 60 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	6 <1 59 <1 919	6 0 57 <1 978	4 <1 60 0 892
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	6 <1 59 <1 919 1107	6 0 57 <1 978 1037 1073	4 <1 60 0 892 992
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	6 <1 59 <1 919 1107 1019	6 0 57 <1 978 1037	4 <1 60 0 892 992 955
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	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	6 <1 59 <1 919 1107 1019 1240 3231	6 0 57 <1 978 1037 1073 1250 3220	4 <1 60 0 892 992 955 1178 3434
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	0 0 60 1010 1070 1150 1270 2060	6 <1 59 <1 919 1107 1019 1240 3231 current	6 0 57 <1 978 1037 1073 1250 3220 history1	4 <1 60 0 892 992 955 1178 3434 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060	6 <1 59 <1 919 1107 1019 1240 3231 current 4	6 0 57 <1 978 1037 1073 1250 3220 history1 5	4 <1 60 0 892 992 955 1178 3434 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 limit/base	6 <1 59 <1 919 1107 1019 1240 3231 current 4 7	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3	4 <1 60 0 892 992 955 1178 3434 history2 4 9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060	6 <1 59 <1 919 1107 1019 1240 3231 current 4	6 0 57 <1 978 1037 1073 1250 3220 history1 5	4 <1 60 0 892 992 955 1178 3434 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 limit/base	6 <1 59 <1 919 1107 1019 1240 3231 current 4 7	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3	4 <1 60 0 892 992 955 1178 3434 history2 4 9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >25	6 <1 59 <1 919 1107 1019 1240 3231 current 4 7 17	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 3 5	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 Imit/base >25 -20 Imit/base	6 <1 59 <1 919 1107 1019 1240 3231 current 4 7 17 17 current	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 5 5 history1	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 Imit/base >25 >20 Imit/base	6 <1 59 <1 919 1107 1019 1240 3231 current 4 7 17 20 .1	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 3 5 history1 0.1	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28 history2 0.1
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	0 0 0 1010 1070 1150 1270 2060 imit/base >25 imit/base >4 >20	6 <1 59 <1 919 1107 1019 1240 3231 <i>current</i> 4 7 17 <i>current</i> 0.1 5.7	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 3 5 history1 0.1 5.1	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28 history2 0.1 5.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	0 0 0 1010 1070 1150 2260 225 220 220 imit/base >20 20 30 imit/base	6 <1 59 <1 919 1107 1019 1240 3231 <i>current</i> 4 7 17 <i>current</i> 0.1 5.7 17.7	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 3 5 history1 0.1 5.1 17.4 history1	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28 history2 0.1 5.7 17.8 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 D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >25 imit/base >4 >20	6 <1 59 <1 919 1107 1019 1240 3231 <i>current</i> 4 7 17 <i>current</i> 0.1 5.7 17.7	6 0 57 <1 978 1037 1073 1250 3220 history1 5 3 5 5 history1 0.1 5.1 17.4	4 <1 60 0 892 992 955 1178 3434 history2 4 9 28 history2 0.1 5.7 17.8



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	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	>0.2	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	15.4	13.9	14.2	14.1

GRAPHS Ferrous Alloys

19

18

17

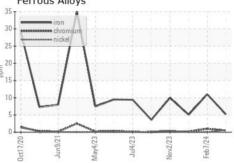
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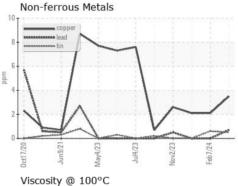
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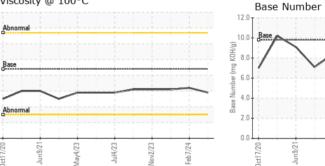
13

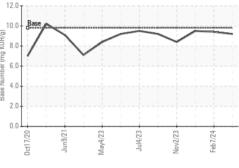
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Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 654 - Richmond Hauling Sample No. : GFL0077745 11800 Lewis Road Received : 22 Apr 2024 Lab Number : 06156607 Tested : 23 Apr 2024 Chester, VA US 23831 Unique Number : 10992030 Diagnosed : 23 Apr 2024 - Wes Davis Test Package : FLEET Contact: Jimmy Mayes Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jmayes@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)

Submitted By: TECHNICIAN ACCOUNT