

OIL ANALYSIS REPORT

10688C AUTOCAR ACX

Natural Gas Engine Fluid PETRO CANADA DURON SHP 15W40 (28 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Requested Resample.)

Wear

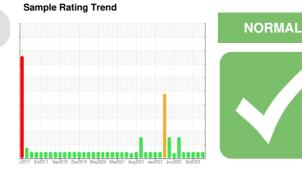
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

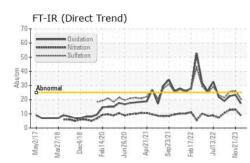
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

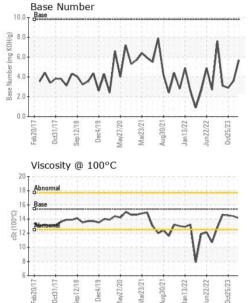


SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0117529	GFL0094754	GFL0094673
Sample Date		Client Info		04 Jun 2024	21 Nov 2023	25 Oct 2023
Machine Age	hrs	Client Info		18834	17979	17774
Oil Age	hrs	Client Info		855	205	1209
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	13	17	16
Chromium	ppm	ASTM D5185m	>4	<1	1	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	1
Lead	ppm	ASTM D5185m	>30	6	4	3
Copper	ppm	ASTM D5185m	>35	2	2	2
Tin	ppm	ASTM D5185m	>4	1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 0	current 32	history1 10	history2 8
	ppm ppm					
Boron		ASTM D5185m	0	32	10	8
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	32 8	10 0	8
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	32 8 53	10 0 57	8 0 54
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	32 8 53 1	10 0 57 <1	8 0 54 0
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	32 8 53 1 692	10 0 57 <1 642	8 0 54 0 552
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	32 8 53 1 692 1389	10 0 57 <1 642 1787	8 0 54 0 552 1556
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 1150	32 8 53 1 692 1389 717	10 0 57 <1 642 1787 843	8 0 54 0 552 1556 739
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	0 0 60 0 1010 1070 1150 1270	32 8 53 1 692 1389 717 953	10 0 57 <1 642 1787 843 1069	8 0 54 0 552 1556 739 933
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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 >+100	32 8 53 1 692 1389 717 953 2569 current 19	10 0 57 <1 642 1787 843 1069 2533 history1 12	8 0 54 0 552 1556 739 933 2579 history2 15
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 >+100	32 8 53 1 692 1389 717 953 2569 current	10 0 57 <1 642 1787 843 1069 2533 history1	8 0 54 0 552 1556 739 933 2579 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 0 1010 1070 1150 1270 2060 limit/base >+100	32 8 53 1 692 1389 717 953 2569 current 19	10 0 57 <1 642 1787 843 1069 2533 history1 12	8 0 54 0 552 1556 739 933 2579 history2 15
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 ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >+100	32 8 53 1 692 1389 717 953 2569 current 19 <1	10 0 57 <1 642 1787 843 1069 2533 history1 12 9	8 0 54 0 552 1556 739 933 2579 history2 15 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >+100	32 8 53 1 692 1389 717 953 2569 current 19 <1 5	10 0 57 <1 642 1787 843 1069 2533 history1 12 9 1	8 0 54 0 552 1556 739 933 2579 history2 15 3 2 2
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 60 0 1010 1070 1150 1270 2060 2060 >+100 >20 imit/base	32 8 53 1 692 1389 717 953 2569 current 19 <1 5 current	10 0 57 <1 642 1787 843 1069 2533 history1 12 9 1 1 <i>h</i> istory1	8 0 54 0 552 1556 739 933 2579 history2 15 3 2 2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 2060 >+100 >20 imit/base	32 8 53 1 692 1389 717 953 2569 current 19 <1 5 current 0.1	10 0 57 <1 642 1787 843 1069 2533 history1 12 9 1 12 9 1 1 <i>history1</i> 0.1	8 0 54 0 552 1556 739 933 2579 history2 15 3 2 2 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	0 0 0 1010 1070 1150 1270 2060 2060 >+100 >20 imit/base >20	32 8 53 1 692 1389 717 953 2569 current 19 <1 5 current 0.1 8.8	10 0 57 <1 642 1787 843 1069 2533 history1 12 9 1 12 9 1 1 12 9 1 1 12 9 1	8 0 54 0 552 1556 739 933 2579 history2 15 3 2 2 history2 0 12.8
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 >20 Imit/base >20 S	32 8 53 1 692 1389 717 953 2569 <u>current</u> 19 <1 5 <u>current</u> 0.1 8.8 20.5	10 0 57 <1 642 1787 843 1069 2533 history1 12 9 1 1 2 9 1 1 0.1 13.0 26.2	8 0 54 0 552 1556 739 933 2579 history2 15 3 2 2 history2 0 12.8 25.7



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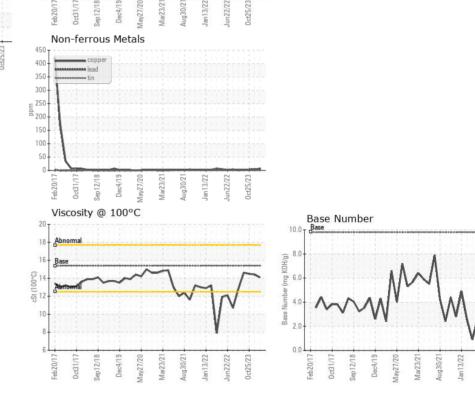


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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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	15.4	14.1	14.4	14.5
GRAPHS						
Ferrous Alloys						
60 iron 1		1995-0220				
50 - neeseeseese chromium						
40-		·····				
30-		Land Land				
1		1				
20						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 001 - Raleigh(CNG) Sample No. : GFL0117529 Received : 06 Jun 2024 3741 Conquest Drive Lab Number : 06201301 Tested : 07 Jun 2024 Garner, NC US 27529 Unique Number : 11063424 Diagnosed : 09 Jun 2024 - Don Baldridge Test Package : FLEET Contact: Craig Johnson Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. craig.johnson@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)662-7100 F: (919)662-7130

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

Submitted By: aka Keith - Ronald Gregory

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