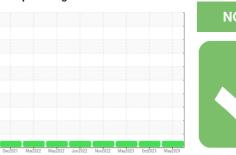


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id
831036
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (24 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

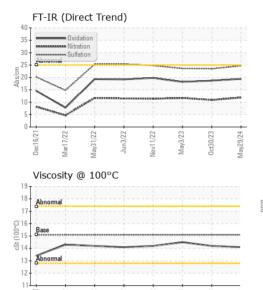
Fluid Condition

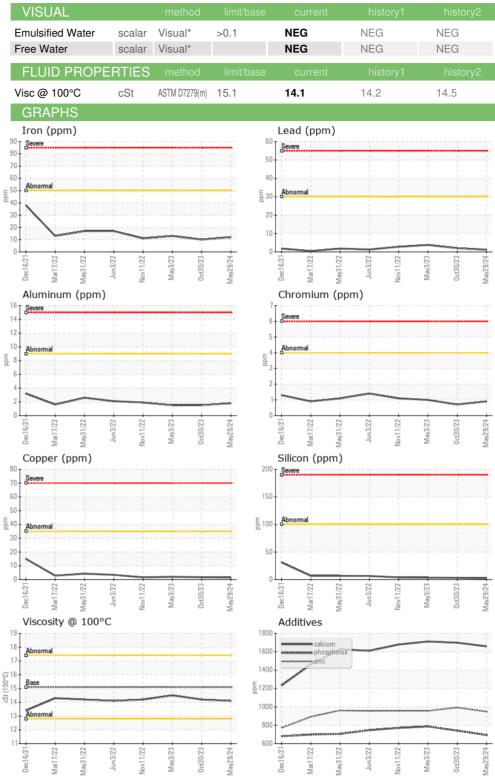
The condition of the oil is acceptable for the time in service.

CAMPLE INCO						
SAMPLE INFO	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0117122	GFL0097768	GFL0081571
Sample Date		Client Info		29 May 2024	30 Oct 2023	03 May 2023
Machine Age	hrs	Client Info		6430	5349	4323
Oil Age	hrs	Client Info		1200	1200	1200
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINA	ATION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR META	ALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	12	10	13
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	2	2	2
Lead	ppm	ASTM D5185(m)	>30	1	2	4
Copper	ppm	ASTM D5185(m)	>35	2	2	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
√anadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
		AOTH DELOC	50	8	13	11
Boron	ppm	ASTM D5185(m)	50	J	13	1.1
	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0	<1	0
Barium		. ,				
Barium Molybdenum	ppm	ASTM D5185(m)	5 50	0	<1	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 50	0 54	<1 61	0 60
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 50 0 560	0 54 <1	<1 61 0	0 60 <1
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 50 0 560	0 54 <1 599	<1 61 0 617	0 60 <1 571
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 50 0 560 1510	0 54 <1 599 1659	<1 61 0 617 1698	0 60 <1 571 1712
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694	<1 61 0 617 1698 741	0 60 <1 571 1712 787
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948	<1 61 0 617 1698 741 992	0 60 <1 571 1712 787 956
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948 2004 <1	<1 61 0 617 1698 741 992 2151	0 60 <1 571 1712 787 956 2138 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948 2004 <1	<1 61 0 617 1698 741 992 2151 <1	0 60 <1 571 1712 787 956 2138 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948 2004 <1	<1 61 0 617 1698 741 992 2151 <1 history1	0 60 <1 571 1712 787 956 2138 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium Potassium	ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948 2004 <1 current	<1 61 0 617 1698 741 992 2151 <1 history1	0 60 <1 571 1712 787 956 2138 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium	ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040	0 54 <1 599 1659 694 948 2004 <1 current 2 8	<1 61 0 617 1698 741 992 2151 <1 history1 3 8	0 60 <1 571 1712 787 956 2138 <1 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium Potassium	ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040 limit/base >+100 >20	0 54 <1 599 1659 694 948 2004 <1 current 2 8 <1	<1 61 0 617 1698 741 992 2151 <1 history1 3 8 0	0 60 <1 571 1712 787 956 2138 <1 history2 4 9
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185(m)	5 50 0 560 1510 780 870 2040 limit/base >+100 >20	0 54 <1 599 1659 694 948 2004 <1 current 2 8 <1	<1 61 0 617 1698 741 992 2151 <1 history1 3 8 0 history1	0 60 <1 571 1712 787 956 2138 <1 history2 4 9 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185(m) METHOD ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 50 0 560 1510 780 870 2040 limit/base >+100 >20	0 54 <1 599 1659 694 948 2004 <1 current 2 8 <1 current	<1 61 0 617 1698 741 992 2151 <1 history1 3 8 0 history1 0	0 60 <1 571 1712 787 956 2138 <1 history2 4 9 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINA Silicon Sodium Potassium	ppm	ASTM D5185(m) MASTM D5185(m) ASTM D7844* ASTM D7624* ASTM D7615*	5 50 0 560 1510 780 870 2040 limit/base >+100 >20 limit/base	0 54 <1 599 1659 694 948 2004 <1 current 2 8 <1 current 0 11.9	<1 61 0 617 1698 741 992 2151 <1 history1 3 8 0 history1 0 10.9	0 60 <1 571 1712 787 956 2138 <1 history2 4 9 <1 history2



OIL ANALYSIS REPORT







CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number : 02639072 Unique Number : 5788234

: GFL0117122

Test Package : MOB 1

To discuss this sample report, contact Customer Service at 1-800-268-2131.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 209 - Hamilton Received : 31 May 2024 **Tested** : 31 May 2024

Diagnosed

: 31 May 2024 - Wes Davis

Stoney Creek, ON **CA L8E 3X7** Contact: Fred Carleton fred.carleton@gflenv.com

T: (289)925-6693 F: (905)664-9008

560 Seaman Street

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.