

WEAR NORMAL CONTAMINATION MARGINAL FLUID CONDITION NORMAL

Machine Id **7825** Component **Diesel Engine** Fluid **PETRO CANADA DURON SHP 10W30 (--- LTR)**

RECOMMENDATION	
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The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

14			7
	1	-/-	1

All component wear rates are normal.

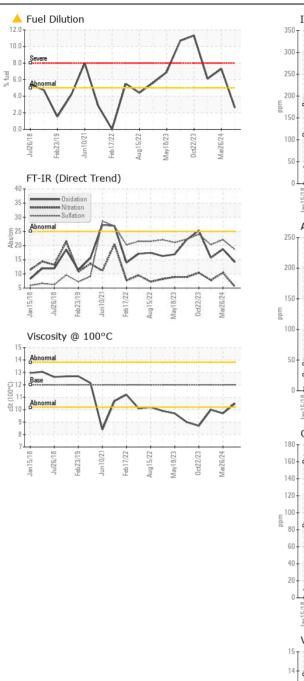
CONTAMINATION

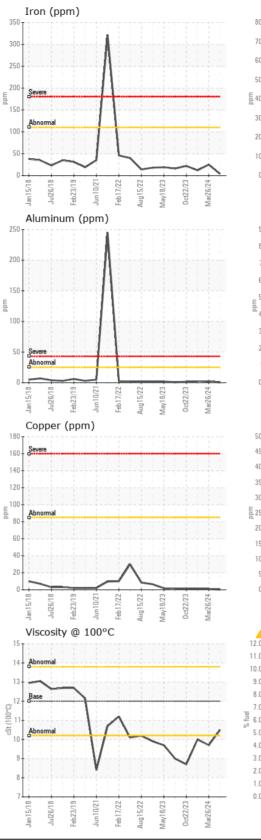
Light fuel dilution occurring. No other contaminants were detected in the oil.

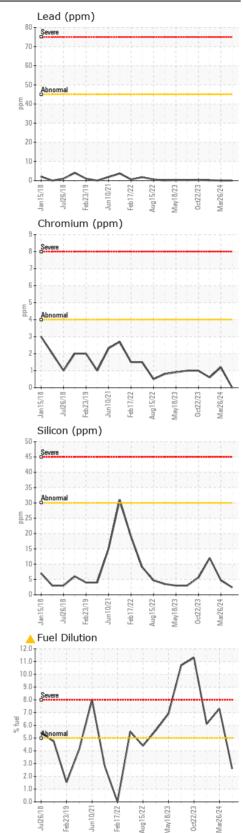
FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112497	GFL0112542	GFL0101707
Sample Date		Client Info		13 May 2024	26 Mar 2024	20 Nov 2023
Machine Age	hrs	Client Info		2659	0	21371
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				MARGINAL	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>110	4	25	12
Chromium	ppm	ASTM D5185(m)	>4	0	1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<1	2	1
Lead	ppm	ASTM D5185(m)	>45	0	0	<1
Copper	ppm	ASTM D5185(m)	>85	<1	1	1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>30	2	5	12
Potassium	ppm	ASTM D5185(m)	>20	0	<1	<1
Fuel	%	ASTM D3103(III) ASTM D7593*	>5	2.6	<1▲ 7.3	6.1
Water	/0	WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method	20.L	NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.8	0.4
Nitration	Abs/cm	ASTM D7624*	>20	5.5	10.4	7.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	22.1	20.3
Silt	scalar	Visual*	NONE	NONE		20.0
Debris	scalar	Visual*	NONE	VLITE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor		10000				
	scalar	Visual*	NORMI	NORML	NORMI	NORMI
Emulsified Water	scalar scalar	Visual* Visual*	NORML >0.2	NORML NEG	NORML NEG	NORML NEG
Emulsified Water		Visual*				NEG
Emulsified Water Sodium	scalar ppm	Visual* ASTM D5185(m)	>0.2	NEG 1	NEG 6	NEG 18
Emulsified Water Sodium Boron	scalar ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m)	>0.2 2	NEG 1 2	NEG 6 2	NEG 18 4
Emulsified Water Sodium Boron Barium	scalar ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0	NEG 1 2 0	NEG 6 2 0	18 4 0
Emulsified Water Sodium Boron Barium Molybdenum	scalar ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50	NEG 1 2 0 52	NEG 6 2 0 55	NEG 18 4 0 54
Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0	NEG 1 2 0 52 0	NEG 6 2 0 55 0	NEG 18 4 0 54 0
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950	NEG 1 2 0 52 0 857	NEG 6 2 0 55 0 903	NEG 18 4 0 54 0 862
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar ppm ppm ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950 1050	NEG 1 2 0 52 0 857 927	NEG 6 2 0 555 0 903 991	NEG 18 4 0 54 0 862 941
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar ppm ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950 1050 995	NEG 1 2 0 52 0 857 927 881	NEG 6 2 0 55 0 903 991 904	NEG 18 4 0 54 0 862 941 899
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950 1050 995 1180	NEG 1 2 0 52 0 857 927 881 1036	NEG 6 2 0 55 0 903 991 904 1071	NEG 18 4 0 54 0 862 941 899 1064
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950 1050 995 1180 2600	NEG 1 2 0 52 0 857 927 881 1036 2307	NEG 6 2 0 55 0 903 991 904 1071 2225	NEG 18 4 0 54 0 862 941 899 1064 2316
Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>0.2 2 0 50 0 950 1050 995 1180	NEG 1 2 0 52 0 857 927 881 1036	NEG 6 2 0 55 0 903 991 904 1071	NEG 18 4 0 54 0 862 941 899 1064







Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW CALA Sample No. 8409 -15th Street NW : GFL0112497 Received : 23 May 2024 Edmonton, AB Lab Number : 02637106 Tested : 24 May 2024 ISO 17025:2017 Accredited Laboratory : 24 May 2024 - Wes Davis CA T6P 0B8 Unique Number : 5786268 Diagnosed Test Package : MOB 1 (Additional Tests: PercentFuel, Visual) Contact: Tim Greig To discuss this sample report, contact Customer Service at 1-800-268-2131. tgreig@gflenv.com T: (780)231-0521 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. F:

Submitted By: Brian Gagne Page 2 of 2