

WEAR NORMAL CONTAMINATION MARGINAL FLUID CONDITION NORMAL

Machine Id 801074 Component Diesel Engine

PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

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.

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All component wear rates are normal.

RECOMMENDATION

CONTAMINATION

FLUID CONDITION

Light fuel dilution occurring. Test for glycol is negative. No other contaminants were detected in the oil.

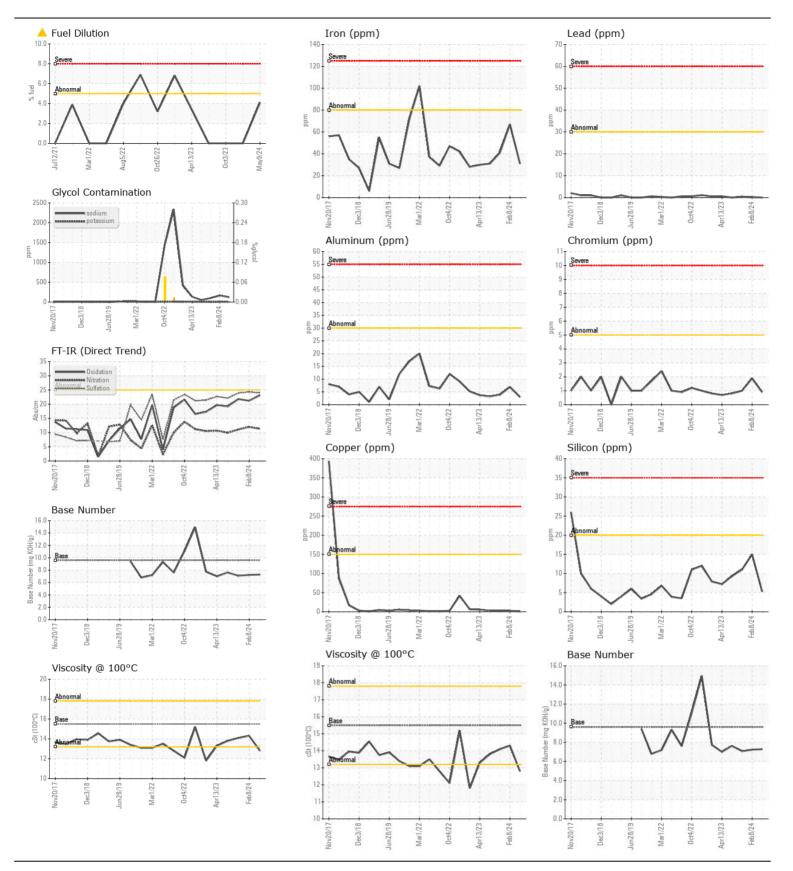
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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117340	GFL0099612	GFL0091556
Sample Date		Client Info		09 May 2024	08 Feb 2024	03 Oct 2023
Machine Age	hrs	Client Info		14933	14258	13517
Oil Age	hrs	Client Info		680	802	600
Filter Age	hrs	Client Info		680	802	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				MARGINAL	ATTENTION	NORMAL
Iron	ppm	ASTM D5185(m)	>80	31	67	41
Chromium	ppm	ASTM D5185(m)	>5	<1	2	1
Nickel	ppm	ASTM D5185(m)	>2	<1	1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>30	3	7	4
Lead	ppm	ASTM D5185(m)	>30	0	<1	<1
Copper	ppm	ASTM D5185(m)	>150	1	2	2
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Silicon	ppm	ASTM D5185(m)	>20	5	15	11
Potassium	ppm	ASTM D5185(m)	>20	2	3	1
Fuel	%	ASTM D7593*	>5	4 .1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	0.0	0.0
Soot %	%	ASTM D7844*	>3	0.6	0.9	0.7
Nitration	Abs/cm	ASTM D7624*	>20	11.3	12.0	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.0	24.3	23.9
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		121	163	101
Boron	ppm	ASTM D5185(m)	1	2	2	2
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	58	63	63
Manganese	ppm	ASTM D5185(m)	1	<1	<1	0
Magnesium	ppm	ASTM D5185(m)	1010	827	909	932
Calcium	ppm	ASTM D5185(m)	1070	990	1039	1024
Phosphorus	ppm	ASTM D5185(m)	1150	855	926	909
Zinc	ppm	ASTM D5185(m)	1270	1049	1140	1172
Sulfur	ppm	ASTM D5185(m)	2060	2079	2377	2302
Oxidation	Abs/.1mm	ASTM D7414*	>25	23.1	21.2	21.8
Base Number (BN)	mg KOH/g	ASTM D2896*	9.6	7.28	7.23	7.08
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	12.8	14.3	14.1

The BN result indicates that there is suitable alkalinity remaining in the

oil. The condition of the oil is suitable for further service.

Submitted By: GFL Calgary



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County CALA Sample No. : GFL0117340 Received : 16 May 2024 220 Carmek Blvd : 02635984 Lab Number Tested : 17 May 2024 Rocky View County, AB ISO 17025:2017 Accredited : 17 May 2024 - Wes Davis CA T1X 1X1 Unique Number : 5785146 Diagnosed Laboratory Test Package : MOB 2 (Additional Tests: FuelDilution, Glycol, PercentFuel) Contact: GFL Calgary To discuss this sample report, contact Customer Service at 1-800-268-2131. calgarymaintenance@gflenv.com Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: (403)369-6163 Validity of results and interpretation are based on the sample and information as supplied.

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